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#### **ABSTRACT**

*Market Intelligence (MI) is knowledge based management system which may be defined as a process primarily based on market information collected over period of time. An analysis based on past information helps to take decision about the future. Market integration and Price Transmission, the two important components of Market Intelligence are discussed in this study. The prevailing large difference between wholesale and retail price of Mustard oil in the important markets in the country indicated towards delayed or lack of information flow and not following the market efficiency criterion. The study of Vertical and horizontal Cointegration between wholesale and retail price of Mustard oil in the selected markets of Delhi, Kanpur and Kolkata was carried out. The two statistical tests i.e Trace test and Eigen value statistics indicated that there existed cointegrating vectors and cointegrating equations which confirms a long run relationship in the mustard oil markets under study. The value of error correction coefficient  $\gamma$  was observed to be relatively higher (the speed of price adjustment) in Delhi and followed by Kolkata and Kanpur markets. The value of long run multiplier suggest that the equilibrium between wholesale and retail price of Mustard oil in Delhi market takes minimum time of 1.13 months, Kolkata 1.57 months and Kanpur market takes 1.52 months to attain the equilibrium level between wholesale and retail prices.*

#### **KEYWORDS**

Cointegration; Error Correction Coefficient; Market intelligence; Price transmission.

#### **INTRODUCTION**

**M**arket information is needed by farmers in planning production and marketing, and is equally required by other market participants in arriving at optimal trading decisions. The dissemination of complete and accurate marketing information is the key to achieving both operational and pricing efficiency in the marketing system. There are several areas of agricultural marketing with which farmers need to be fully familiarized in order to improve price realization. Agricultural marketing is witnessing major changes owing to liberalization and globalization of markets. In this context agriculture has to be market driven, more cost effective, competitive, innovative and responsive to high tech and Information Technology (IT) applications. Market Intelligence (MI) is knowledge based management system which may be defined as a process primarily based on market information collected over period of time. An analysis based on past information helps to take decision about the future. MI synthesizes information from many diverse sources to form greater insights. MI requires sophisticated understanding of strategic trade goals and to widen trade opportunities.

#### **REVIEW OF LITERATURE**

The spatial transmission of price shocks play, for example, a very important role in theories associated with exchange rate determination and market integration. Much of this literature has been concerned with the "law of one price" or, at an aggregate level, with "purchasing power parity. Dornbush (1987), Ardeni (1989), Baffes (1991), Gardner and Brooks (1994), Blauch (1997), Tkacz (2001), Baffes and Ajwad (2001), Goodwin and Piggot (2001), Jamaleh (2002), Brooks and Melyukina (2004). The literature analysing vertical price linkages has concentrated on evaluations of the links between farm, wholesale and retail prices. The vertical price relationships have featured prominently in recent studies as commodity markets have become more highly concentrated at each level and integrated across levels. Vertical price relationships are typically characterised by the magnitude, speed and nature of the adjustments through the supply chain to market shocks that are generated at different levels of the marketing process. Recent research has recognized more complex aspects of price transmission relationships and explored the extent to which price adjustments may be asymmetric. These studies typically distinguish between positive and negative price shocks. Peltzman (2000) argues that asymmetric price transmission is the rule, rather than the exception, and concludes that, since asymmetric price transmission is prevalent in the majority of producer and consumer markets, standard economic theory that does not account for this situation must be incorrect. Meyer and von Cramon-Taubadel (2004) observe that a possible implication of asymmetric price transmission is that consumers are not benefiting from a price reduction at the producers' level, or producers might not benefit from a price increase at the retail level. Thus, under asymmetric price transmission, the distribution of welfare effects across levels and among agents following shocks to a market will be altered relative to the case of symmetric price transmission. Ball and Mankiw (1994) note that in the presence of inflation and nominal input price shocks the use of menu costs by agents may lead to more resistance to lower prices than to increase them. Bailey and Brorsen (1989) also pointed out that asymmetries in price adjustments may be caused by asymmetries in the underlying costs of adjustments. Alternatively, retailers selling perishable goods might be reluctant to raise prices in line with an increase in farm-level prices given the risk that they will be left with unsold spoiled product. Heien (1980) argued that changing prices is more costly for products with a long shelf life as these costs include loss of goodwill. Blinder (1994) and Blinder et al. (1998) found that merchants often believed themselves to be disciplined by a fear of being "out of line" with their market competitors when costs rose; implying asymmetric responses to cost increases and decreases. Gardner (1975) pointed out that, in addition to other causes, farm-to-retail price asymmetries might be the result of government intervention to support producer prices. Kinnucan and Forker (1987) argued that government policies may lead to asymmetric price adjustments if agents believe that price movements in one direction may be more likely to trigger government intervention than movements in another direction: the government may be more likely to intervene if market shocks lower producer prices than if producer prices increase. The authors estimated price transmission for dairy products in the United States and showed that transmission elasticities for rising farm prices were larger than corresponding elasticities associated with falling farm prices, depending on the dairy product. Serra and Goodwin (2003) studied price transmission in the Spanish dairy sector and argued that scarcity of milk, to some extent created by the quota system,

may lead to a situation in which processors compete to increase both their access to milk quota and their retail market share, but may not pass the resulting farm level price increase fully to the retail level. Von Cramon-Taubadel and Loy (1996) use an ECM to study spatial asymmetric price transmission on world wheat markets. Scholnick (1996) also uses an ECM to test for asymmetric adjustment of interest rates, while Borenstein *et al.* (1997) employ an ECM specification where the error correction terms are not segmented. Von Cramon-Taubadel (1998) estimated price transmission in German pork markets using ECM. Balke *et al.* (1998) and Frost and Bowden (1999) also employ variants of the asymmetric ECM. FAO (2003) provides a review of the application of time series techniques (co-integration, ECMs) in testing market integration and price transmission for a number of cash and food crop markets in developing countries. Capps and Sherwell (2005) analysed the behaviour of spatial tests of asymmetric price transmission according to the conventional Houck approach (so-called pre-cointegration method) and to the von Cramon-Taubadel and Loy ECM approach. Meyer and von Cramon-Taubadel (2004) argue that as the cointegration and the ECMs are based on the idea of a long run equilibrium, which disallows individual prices from drifting apart in long-term disequilibrium, it is only possible to consider asymmetry with respect to the speed of price transmission, not the magnitude. In addition, the presence of asymmetries may invalidate the standard tests, such as the Dickey and Fuller test of stationarity or the Johansen test for cointegration

**IMPORTANCE OF STUDY**

The MI provides diversified avenues to examine the market behaviour of agricultural commodities to facilitate all the stake holders. Market integration and Price Transmission, the two important components of Market Intelligence are chosen for discussion in this study. The issue of market integration has become an important area of empirical research in development economics. Many developing economies have been implementing structural adjustment and market reform programme/s. An important component of such programme/s is the liberalization of commodity markets. It has been argued that such liberalization is required for achieving allocative efficiency and long-term growth in agriculture. It has also been argued that freeing domestic and external trade in food grains from government intervention, while maintaining its role in price stabilization, yields positive welfare benefits. However, unless food markets are spatially integrated, producers and consumers will not realize the gains from liberalization: the correct price signals will not be transmitted through the marketing channels, farmers will not be able to specialize according to long-term comparative advantage and the gains from trade will not be realized. Spatial market integration refers to a situation in which the prices of a commodity in spatially separated markets move together and price signals and information are transmitted smoothly. Spatial market performance may be evaluated in terms of a relationship between the prices of spatially separated markets, and spatial price behavior in regional markets may be used as a measure of overall market performance. Price is the primary mechanism by which various levels of the market are linked. The extent of adjustment and speed with which shocks are transmitted among producer, wholesale, and retail market prices is an important factor reflecting the actions of market participants at different levels. The transmission of changes in the producer price to changes in the consumer price depends, however, greatly on the type of product. The products which are perishable in nature and undergo minimal processing such as vegetables, fruit, and fresh milk, are expected to have a relatively quick price transmission mechanism. Products that however undergo a certain level of processing and are not as perishable as fresh produce are expected to have a slower price transmission mechanism. This is particularly noticeable for commodities such as foodgrains and oils that can be stored relatively easily and are traded on the futures market, where processors can hedge against large price fluctuations. It is due to storability and hedging strategies that various time lags exist between changes in commodity prices and consumer prices.

**MAIN OBJECTIVES OF THE STUDY**

1. To examine the extent of market integration and
2. To estimate Error Correction Coefficients of price transmission.

**HYPOTHESIS**

The study based on following hypothesis:

1. The time series price data used in the study has unit roots or non-stationary
2. The spatial markets are cointegrated in the long run
3. There exists asymmetry in price transmission from wholesale to retail trade.

**DATA & METHODOLOGY**

The time series data on Wholesale and Retail price of Mustard oil for the important markets of Delhi, Kolkata and Kanpur for the period of January 2001 to February 2012 has been analysed in this study.

**THE STATIONARY TEST**

The stationary of the data series is evaluated by Dickey-Fuller (DF), Augmented Dickey-Fuller (ADF), and Phillips-Perron (PP) tests.

**JOHANSEN'S COINTEGRATION TESTS**

Cointegration of prices between two markets can be studied after establishing the order of integration for the price series. The prices are subjected pair wise to linear regression.

$$Y_t = \beta_1 + \beta_2 X_t + u_t \tag{1}$$

Where  $Y_t$  &  $X_t$  = price series &  $u_t$  = error term.

The residuals ( $u_t$ ) of the equation (1) are subjected to DF or ADF test. The test statistic is compared to the critical values provided by Engle and Granger (1987). If the residuals are stationary, then the series are co integrated or otherwise. Engle and Granger (1987) pointed out that a linear combination of two or more non-stationary series may be stationary. If such a stationary linear combination exists, the non-stationary time series are said to be cointegrated. The stationary linear combination is called the cointegrating equation and may be interpreted as a long-run equilibrium relationship among the variables. The purpose of the cointegration test is to determine whether a group of non-stationary series is cointegrated or not. As explained below, the presence of a cointegrating relation forms the basis of the Vector Error Correction (VEC) specification. Vector Auto Regressive (VAR) based cointegration tests using the methodology developed in Johansen (1991, 1995) has been used in this study.

Consider a VAR of order p:

$$Y_t = A_1 Y_{t-1} + \dots + A_p Y_{t-p} + B X_t + \epsilon_t \tag{2}$$

Where  $Y_t$  is a k-vector of non-stationary I(1) variables,  $X_t$  is a d-vector of deterministic variables, and  $\epsilon_t$  is a vector of innovations. We may rewrite this VAR as,

$$\Delta Y_t = \Pi Y_{t-1} + \sum_{i=0}^{p-1} \Gamma_i \Delta Y_{t-i} + B X_t + \epsilon_t \tag{3}$$

Where:

$$\Pi = \sum_{i=1}^p A_i - I, \quad \Gamma_i = \sum_{j=i+1}^p A_j \tag{4}$$



Granger's representation theorem asserts that if the coefficient matrix  $\Pi$  has reduced rank  $r < k$ , then there exist  $k \times r$  matrices  $\alpha$  and  $\beta$  each with rank  $r$  such that  $\Pi = \alpha\beta'$  and  $\beta' y_t$  is  $I(0)$ .  $r$  is the number of cointegrating relations (the cointegrating rank) and each column of  $\beta$  is the cointegrating vector. The elements of  $\alpha$  are known as the adjustment parameters in the VEC model. Johansen's method is to estimate the  $\Pi$  matrix from an unrestricted VAR and to test whether we can reject the restrictions implied by the reduced rank of  $\Pi$ .

**NUMBER OF COINTEGRATING RELATIONS**

The first test statistic ( $\lambda$ trace) tests whether the number of distinct cointegrating vectors is less than or equal to  $r$ . The second test statistic ( $\lambda$ max) tests the null that the number of cointegrating vectors is  $r$  against an  $r+1$ . Johansen and Juselius (1990) provided the critical values of these statistics. The trace statistic tests the null hypothesis of ' $r$ ' cointegrating relations against the alternative of ' $k$ ' cointegrating relations, where ' $k$ ' is the number of endogenous variables, for  $r = 0, 1, \dots, k - 1$ . The alternative of ' $k$ ' cointegrating relations corresponds to the case where none of the series has a unit root and a stationary VAR may be specified in terms of the levels of all of the series. The trace statistic for the null hypothesis of ' $r$ ' cointegrating relations is computed as:

$$LR_{tr}(r|k) = -T \sum_{i=r+1}^k \log(1 - \lambda_i) \binom{n}{r} \dots\dots\dots (5)$$

Where  $\lambda_i$  is the  $i$ -th largest eigenvalue of the  $\Pi$  matrix. The maximum eigenvalue statistics which tests the null hypothesis of ' $r$ ' cointegrating relations against the alternative of ' $r + 1$ ' cointegrating relations. This test statistic is computed as:

$$LR_{max}(r|r+1) = -T \log(1 - \lambda_{r+1}) = LR_{tr}(r|k) - LR_{tr}(r+1|k) \dots\dots\dots (6)$$

for  $r = 0, 1, \dots, k - 1$ .

**GENERALIZED ERROR CORRECTION MODEL**

This derivation of the error correction model starts with the assumption that both  $Y$  and  $X$  are integrated and demonstrates that the error correction model captures the equilibrium casual movements between these two co-integrated process. The starting point for the ECM is the Autoregressive Distributed Lag (ADL) model (Luke Keele and Suzanna De Boef 2004). The ADL model is often seen in the following bivariate form:

$$Y_t = \alpha_0 + \alpha_1 Y_{t-1} + \beta_0 X_t + \beta_1 X_{t-1} + \epsilon_t \dots\dots\dots (1)$$

It generalizes to an ADL ( $p, q$ ) where  $p$  refers to the number of lags of  $Y$  and  $q$  refers to the number of lags of  $X$  included in the model. Given that the ADL (1,1) has a lagged dependent variable on the right side, it should be consistently estimated by OLS and has a stationarity condition, that is  $Y_t$  must be stationary (Davidson and MacKinnon 1993).

The information about error correction is readily available if a set of linear transformations are applied to the ADL model. Consider an ADL(1,1) model:

$$Y_t = \alpha_0 + \alpha_1 Y_{t-1} + \beta_0 X_t + \beta_1 X_{t-1} + \epsilon_t \dots\dots\dots (2)$$

First, we take the first difference of  $Y$  to produce:

$$\Delta Y_t = \alpha_0 + (\alpha_1 - 1)Y_{t-1} + \beta_0 X_t + \beta_1 X_{t-1} + \epsilon_t \dots\dots\dots (3)$$

Then add and subtract  $\beta_0 X_{t-1}$  from the right hand side:

$$\Delta Y_t = \alpha_0 + (\alpha_1 - 1)Y_{t-1} + \beta_0 \Delta X_t + (\beta_0 + \beta_1)X_{t-1} + \epsilon_t \dots\dots\dots (4)$$

And next add and subtract  $(\alpha_1 - 1)X_{t-1}$  from the right hand side and rewrite to produce the

**GENERALIZED ERROR CORRECTION MODEL (GECM)**

$$\Delta Y_t = \alpha_0 + \gamma(Y_{t-1} - X_{t-1}) + \lambda_1 \Delta X_t + \lambda_2 X_{t-1} + \epsilon_t \dots\dots\dots (5)$$

Where  $\gamma = (\alpha_1 - 1)$ ,  $\lambda_1 = \beta_0$  and  $\lambda_2 = \beta_1 + \beta_0 + \alpha_1 - 1$

The GECM directly tells us how quickly the system reacts to any disequilibrium, as  $\gamma$  the coefficient on the lag of  $Y$  is the error correction rate. In other words, the term  $(\alpha_1 - 1)$  can be interpreted as the speed at which  $Y$  adjusts to any discrepancy between  $Y$  and  $X$  in the previous period. The value of coefficient " $\gamma$ " must be negative since it is just  $(\alpha_1 - 1)$ . The term  $(Y_{t-1} - X_{t-1})$  is zero when  $X$  and  $Y$  are in equilibrium and measures the extent to which the long-run relationship is not satisfied. The short-run effects are represented by  $\lambda_1$  and  $\lambda_2 - \lambda_1 - \gamma$  in the GECM. We can derive the long run multiplier from the

GECM, assume the equilibrium relationship is given by  $y_t^* = k_1 x^*$ , where again  $k_1$  denotes the long run multiplier. The long-run effect of a change in  $X$  on  $Y$  is:

$$k_1 = - \frac{(\lambda_2 - \gamma)}{\gamma} \dots\dots\dots (6)$$

Or by substitution:

$$k_1 = - \frac{(\lambda_2 - \gamma)}{\gamma} = \frac{(\beta_1 + \beta_0 + \alpha - 1 - (\alpha_1 - 1))}{(\alpha_1 - 1)} = \frac{(\beta_1 + \beta_0)}{(1 - \alpha_1)} \dots\dots\dots (7)$$

**RESULTS AND DISCUSSION**

The concept of market integration and price transmission has important implications of economic welfare for both producer (farmer) and consumer. Price transmission conveys unbiased information on prices to the producers and facilitates efficient allocation of resources. Incomplete price transmission arising either due to trade and other policies, or due to transaction costs such as poor transport and communication infrastructure, results in a reduction in the price information available to economic agents. The incomplete price transmission creates biased incentives to farmers, which in turn leads to suboptimal decision-making and affects agricultural productivity. The policy reforms are implemented through intervention in the price channel (e.g. tariffs), a lack of integration along the marketing chain prevents reforms from reaching to the stakeholders and finally leading to an inequality in the distribution of incomes. Therefore efficiency and equity of price transmission of agricultural and food products remained an item of major concern to producers, consumers and food industry. Changes in farm and wholesale prices are either not fully, or they are more than fully transmitted to consumer prices. In this study Mustard oil has been selected to examine the nature and extent of market integration (both vertical and horizontal) across the important wholesale and retail markets across the country. The main focus is on analyzing the degree of association between the commodity prices among state level wholesale markets/retail and the speed at which price in one market adjusts to a shock in price in another market. The study of Table-1 revealed that there has been wide variation in the wholesale as well as retail price across the different markets. The standard deviation in the mean price level of Mustard oil during the period of January 2001 to February 2012 remained more than Rs.500/qlts. The high order of standard deviation points to extent of high volatility in Mustard oil prices. Further the large difference between wholesale and retail price level points towards delayed or lack of information flow. The study of the Table-1 finally revealed that Mustard oil markets in the country are distorted and not following the market efficiency criterion. The market data of wholesale and retail price when tested for stationarity, was found to have unit root as given in Table-2. Dickey Fuller (DF), Augmented Dickey Fuller (ADF) and Phillips Perron (PP) tests were applied to the logged series data. The data series became stationary at one differencing and now ready for further econometric analysis.

#### JOHANSEN'S COINTEGRATION TEST (1988)

The result of Vertical Cointegration between wholesale and retail price of Mustard oil in the selected markets of Delhi, Kolkata and Kanpur was carried out and the results are given in Table-3. In case of trace statistics cointegration " $r$ " denotes the number of cointegrating vectors. In this case, the number of cointegrating vectors can be at most one as there are only two series in each market. In all the cases trace statistics show that the null hypothesis of wholesale and retail prices are not cointegrated ( $r=0$ ) against the alternative of one or more cointegrating vectors ( $r>0$ ) is rejected. Next, the null hypothesis of  $r < 1$  against the alternative of two or more cointegrating vectors cannot be rejected at 5 percent significance level. The presence of single cointegrating vector in all cases shows that there exists long run relationship between two prices. Similarly Eigen value statistics rejects the null hypothesis of equal to or less than one cointegrating equation against the alternative hypothesis of one equation. The two statistical tests confirm the relationship in long run between wholesale and retail price of Mustard oil in the selected markets. The result of Horizontal Cointegration between wholesale price of Mustard oil in the markets of Delhi, Kanpur and Kolkata was carried out and the results are given in Table-4. The two statistical tests i.e Trace test and Eigen value statistics revealed the fact that there existed three cointegrating vectors and cointegrating equations which confirms long run relationship among the Mustard oil markets.

#### GENERALIZED ERROR CORRECTION MODEL

The Granger representation theorem asserts that there is a close linkage between cointegration and error correction models. According to this theorem, if two or more time series are cointegrated they are bound to have an error correction representation. Similarly if two or more time series that are error correcting themselves are cointegrated in the long run (Engle and Granger 1987). The error correction model allows estimating both short term and long run effects of explanatory time series variables. The  $\gamma$  coefficient on the lag of  $Y$  is the error correction rate and can be interpreted as the speed at which  $Y$  adjusts to any discrepancy between  $Y$  and  $X$  in the previous period. The short-run and long adjustments between  $X$  and  $Y$  are represented by  $\lambda_1$  and  $\lambda_2$ . The coefficient  $k_1$  represents the long-run multiplier of  $X$  with respect to  $Y$  and any deviation from equilibrium point should induce change back to the equilibrium in the next period. The results of GECM model are given in Table-5. The long run relationship between retail and wholesale price of Mustard oil in the important markets of Delhi, Kolkata and Kanpur revealed that the value of error correction coefficient ( $\gamma$ ) was found to be significant and negative in all the four markets, which satisfy the basic requirement of the GECM model. The value of error correction coefficient  $\gamma$  was observed to be significantly higher in Delhi (-0.350926) followed by Kolkata (-0.182601) and Kanpur (-0.158517). The short run adjustments between retail and wholesale price were examined with the help of  $\lambda_1$  coefficient. The study of Table-5 revealed that any changes in wholesale price were immediately reflected significantly in retail price of Delhi (0.862239) and Kanpur (0.707733) markets. Whereas changes in wholesale price were reflected less significantly in short run in Kolkata (0.570579) markets. Similar trends were observed in long run price adjustments in wholesale and retail prices in all the four markets of Mustard oil. The value of long run multiplier  $k_1$  suggest that the equilibrium between wholesale and retail price of Mustard oil in all the three markets takes different time period based on the values of short and long run price adjustment coefficients. The study of markets revealed that Delhi market takes minimum time (1.13 months), Kanpur (1.52 months), and Kolkata (1.57) to attain the equilibrium level between wholesale and retail prices.

#### CONCLUSION

The high order of standard deviation points towards extent of high volatility in Mustard oil prices. The large difference between wholesale and retail price level indicated towards delayed or lack of information flow. The study thus revealed that Mustard oil markets in the country are distorted and not following the market efficiency criterion. The market data of wholesale and retail price when tested for stationarity was found to have unit root. However the data series became stationary at one differencing. The study of Vertical and horizontal Cointegration between wholesale and retail price in the selected markets was carried out. The two statistical tests i.e Trace test and Eigen value statistics revealed that there existed cointegrating vectors and cointegrating equations which confirms long run relationship in the markets under study. The value of error correction coefficient  $\gamma$  was observed to be significantly higher in Delhi and Kanpur markets as compared to Kolkata markets. The value of long run multiplier suggest that the equilibrium between wholesale and retail price revealed that Delhi market takes minimum time (1.13 months), Kanpur (1.52 months), and Kolkata (1.57) to attain the equilibrium level between wholesale and retail prices.

#### SCOPE FOR FURTHER WORK

This study provides ample evidence of market inefficiency prevails in commodity trading further research work can be undertaken to reduce such inefficiencies through policy interventions.

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**TABLES**

**TABLE - 1: MONTHLY WHOLESALE AND RETAIL PRICE OF MUSTARD OIL JANUARY 2001 TO FEBRUARY 2012**

Statistics	Markets ( Price Rs./ Qtls)					
	Delhi		Kanpur		Kolkata	
	Retail Price	Wholesale Price	Retail Price	Wholesale Price	Retail Price	Wholesale Price
Mean	5422.739	5051.119	5370.075	4916.993	5812.373	5392.313
Std. Dev.	1130.367	946.8086	1266.532	1072.848	1054.161	988.156
Skewness	-0.240954	-0.56183	-0.010215	0.036914	-0.757963	-0.499798
Kurtosis	2.22274	2.515335	1.947744	2.516934	2.474403	2.014645
Jarque-Bera	4.669715	8.361117	6.18443	1.333319	14.37309	10.99981
Probability	0.096824	0.01529	0.045401	0.513421	0.000757	0.004087
Observations	134	134	134	134	134	134

Source- Estimated

**TABLE - 2: UNIT ROOT TEST OF LOGGED PRICE SERIES OF MUSTARD OIL**

Price/Markets	Unit Root Tests	On Levels		On First Difference	
	With Intercept and Trend	Unit Root Statistics	critical value at 1% level	Unit Root Statistics	critical value at 1% level
Retail Price Delhi	Dickey Fuller (DF)	-2.26013	-3.5404	-11.25022	-3.5428
	Augmented Dickey Fuller (ADF)	-2.592997	-4.028496	-11.32905	-4.029595
	Phillips Perron(PP)	-2.558076	-4.028496	-12.6032	-4.029041
Wholesale Price Delhi	Dickey Fuller (DF)	-1.835999	-3.5404	-9.941109	-3.5428
	Augmented Dickey Fuller (ADF)	-2.278138	-4.028496	-10.64086	-4.029595
	Phillips Perron(PP)	-2.094828	-4.028496	-11.61281	-4.029041
Retail Price Kolkata	Dickey Fuller (DF)	-1.540729	-3.5428	-10.00793	-3.5428
	Augmented Dickey Fuller (ADF)	-1.985295	-4.029595	-10.17136	-4.029595
	Phillips Perron(PP)	-2.156472	-4.028496	-9.733247	-4.029041
Wholesale Price Kolkata	Dickey Fuller (DF)	-2.10714	-3.5404	-11.01775	-3.5416
	Augmented Dickey Fuller (ADF)	-2.29383	-4.028496	-9.796479	-4.029595
	Phillips Perron(PP)	-2.339021	-4.028496	-11.35423	-4.029041
Retail Price Kanpur	Dickey Fuller (DF)	-2.076298	-3.5404	-10.98774	-3.5416
	Augmented Dickey Fuller (ADF)	-2.211315	-4.028496	-11.07652	-4.029041
	Phillips Perron(PP)	-2.434399	-4.028496	-11.07305	-4.029041
Wholesale Price Kanpur	Dickey Fuller (DF)	-1.386737	-3.5428	-10.37202	-3.5428
	Augmented Dickey Fuller (ADF)	-1.62494	-4.029595	-10.7492	-4.029595
	Phillips Perron(PP)	-2.126824	-4.028496	-10.36874	-4.029041

Source- Estimated

**TABLE - 3: VERTICAL COINTEGRATION TEST RESULTS BETWEEN WHOLESALE AND RETAIL PRICE**

Wholesale & Retail Price	Null Hypothesis	Alternative Hypothesis	Eigen value	Trace Statistics	0.05 level Critical Value	Eigen value	Max-Eigen Statistics	0.05 level Critical Value
	No. of CE(s)							
Delhi Markets	None *	$r = 0$	0.286989	64.16307	25.87211	0.286989	43.29701	19.38704
	At most 1	$r \geq 1$	0.150423	20.86607	12.51798	0.150423	20.86607	12.51798
Kolkata Markets	None *	$r = 0$	0.256247	63.32524	25.87211	0.256247	37.894	19.38704
	At most 1	$r \geq 1$	0.180189	25.43124	12.51798	0.180189	25.43124	12.51798
Kanpur Markets	None *	$r = 0$	0.280695	61.56773	25.87211	0.280695	42.17207	19.38704
	At most 1	$r \geq 1$	0.140607	19.39566	12.51798	0.140607	19.39566	12.51798

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level, Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level, \* denotes rejection of the hypothesis at the 0.05 level.

Source- Estimated

**TABLE - 4: HORIZONTAL COINTEGRATION TEST RESULTS BETWEEN WHOLESALE PRICES SERIES OF MUATARD OIL: DELHI, KANPUR AND KOLKATA MARKETS**

Trace Statistics Test				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.391844	117.235	42.91525	0
At most 1 *	0.230906	53.5775	25.87211	0
At most 2 *	0.144469	19.97215	12.51798	0.0024
Eigen Value Test				
None *	0.391844	63.6575	25.82321	0
At most 1 *	0.230906	33.60535	19.38704	0.0002
At most 2 *	0.144469	19.97215	12.51798	0.0024

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level  
 Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level  
 \* denotes rejection of the hypothesis at the 0.05 level

Source- Estimated

**TABLE - 5: RESULTS OF GENERALIZED ERROR CORRECTION BIVARIATE MODEL**

Dependent Variable: Retail Price Mustard Oil Delhi Market				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
$\alpha_0$	0.001008	0.002488	0.40536	0.6859
$\gamma$	-0.350926	0.06846	-5.12598	0
$\lambda_1$	0.862239	0.058211	14.81231	0
$\lambda_2$	0.046723	0.058382	0.800301	0.425
$K_1$ (Months)	1.13			
Dependent Variable: Retail Price Mustard Oil Kolkata Market				
$\alpha_0$	0.001755	0.002101	0.835056	0.4052
$\gamma$	-0.182601	0.048298	-3.780686	0.0002
$\lambda_1$	0.570579	0.055015	10.37125	0
$\lambda_2$	0.104951	0.057763	1.816911	0.0716
$K_1$ (Months)	1.57			
Dependent Variable: Retail Price Mustard Oil Kanpur Market				
$\alpha_0$	0.001978	0.002439	0.810847	0.419
$\gamma$	-0.158517	0.051166	-3.098102	0.0024
$\lambda_1$	0.707733	0.05852	12.09393	0
$\lambda_2$	0.081944	0.058611	1.398116	0.1645
$K_1$ (Months)	1.52			

Source- Estimated

**CONSTRUCTING A MULTI-CRITERIA CO-BRANDING STRATEGY MODEL FOR FAUCET INDUSTRY**

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**ABSTRACT**

*This study aims to construct a multi-criteria co-branding strategy model for the faucet industry by examining the critical success factors. It also seeks to help decision makers with selecting an appropriate co-branding alliance strategy. Based on a literature review and expert interviews and subsequently utilizing the analytic hierarchy process (AHP), this study uses a hybrid approach and applies both quantitative and qualitative factors in the construction of hierarchical model. It identifies and prioritizes four critical success factors, 12 critical success sub-factors, and 43 criteria by employing the AHP. The results indicate that "brand strategy" is the most important success factor. Furthermore, the most important key sub-factors are "value proposition", "safeguard system", "brand positioning", "channel management" and "brand identity". Faucet firms should endeavor to formulate an effective brand strategy, establish a sophisticated safeguard system, and construct a precise channel management system in order to implement co-branding. Incorporating the analytical findings, this study proposes a hierarchical model to facilitate the formulation and implementation of strategies for co-branding. The hierarchical model would assist faucet firms in determining the relative importance of decision elements and planning feasible strategies for co-branding implementation.*

**KEYWORDS**

Analytic Hierarchy Process, Co-branding, Critical Success Factors, Faucet Industry, Strategy Alliance.

**INTRODUCTION**

Since the 1960s, over 50% of the world's annual production of faucets and bathroom fixtures has come from Taiwan. From die casting to finishing, the faucet industry in Taiwan used its competitive advantage of low labor cost to grow rapidly. The entire supply chain of the industry includes more than one thousand companies and its annual production is valued at two billion U.S. dollars. This industry occupies a prominent role in the global manufacturing industries (Yeh and Hsu, 2010). However, the manufacturing-based faucet industry has the same development trajectory as many traditional industries. Under the rapid development of the global economy, especially the opening of China as a global manufacturing base, the faucet industry in Taiwan is facing the development crisis of being traditional, labor-intensive and low-value added. The industry is slowly losing its competitive advantage of low labor cost in the current global marketplace. A pure focus on original equipment manufacturing (OEM) can no longer create competitive advantages for faucet companies in Taiwan. Some faucet manufacturers have chosen to shut down their factories in Taiwan or build new plants in China. But how is faucet industry still doing reasonably well and how does it keep its competitive advantages?

In order to adapt to changes in the global economic environment, many firms changed their business models. Some firms invested their resources into research and development, brand building, and other high value-added activities. They hope to use those investments to increase their competitive advantages. In fact, many firms in the faucet industry are small and medium enterprises, each firm focusing on only one or two specialized production activity. Due to resource constraints in the areas of finance, human resources, and technologies, these firms have only limited options for increasing their competitive advantages and becoming more innovative as long as they rely solely on their own capabilities (MacGregor, 2004). Furthermore, the major customers of these firms are industrial buyers. In contrast to consumer markets, high concentration of buying power is concentrated in the hands of the industrial markets' buyers. Consequently, there is higher risk and uncertainty in industrial markets. In other words, the relationships of faucet firms with their industrial customers in the industrial market are not purely transactional, but also based on trust (Bengtsson and Servais, 2005). Therefore, faucet firms have to adopt the manners of cooperative marketing in order to overcome the constraints they face. In particular, co-branding is the most effective strategy to resolve those problems (Besharat, 2010).

The main idea underlying co-branding is to let the names of both brands appear together on one product, logo or product packaging. The firms involved in a co-branding relationship are in a long-term partnership. Each firm combines resources, capabilities and core competencies with its alliance partner to pursue mutually beneficial advantages in designing, manufacturing and marketing of products or services (Besharat, 2010). Moreover, co-branding helps with reducing risk and uncertainty, creating barriers to entry from competitors, and entering markets which were previously difficult to enter (Bengtsson and Servais, 2005; Erevelles *et al.*, 2008).

In the research area of branding, most studies focused on how to build up brand equity in the consumer context (Keller, 2003), or concentrated on the issues concerning brand extension strategy (Doyle, 1989). However, few studies discussed the issues related to co-branding strategy, especially the co-branding strategy model. Considering the theoretical and practical gaps discussed above, and the complex process involved with building the co-branding strategy model, this study aims to construct a multi-criteria co-branding strategy model for faucet firms in Taiwan. Through literature review and expert interviews, this study collects factors regarding co-branding alliance strategy, and then uses the analytic hierarchy process (AHP) approach to prioritize the individual critical factors in order to assist firms in developing an effective co-branding strategy model.

The remainder of this paper is organized as follows. The second section describes the conceptual background and theories relevant to the field of co-branding, it also identifies each critical factor and its role within the co-branding strategy. The third section illustrates the research methodology and the detailed development of the proposed model. The fourth section presents the relative importance of the elements in the proposed model via the AHP approach. Finally,

the last section discusses the managerial implications of the research results with regard to applying co-branding strategy to faucet industry and recommends additional issues for research.

## LITERATURE REVIEW

### CO-BRANDING

The concept of co-branding originated from strategic alliances and brand extensions. In the 1990s, Park *et al.* (1996) examined the relationships in composite branding alliances from the perspective of brand extensions. They described the end product of combining two existing brands as composite brand extension (CBE). In subsequent studies covering this topic, the theoretical foundation of co-branding started to develop incrementally. Up until now, even though various scholars have differing views about co-branding, including brand alliance (Lafferty, 2007), multi-branding (DiPietro, 2005), ingredient branding (Vaidyanathan and Aggarwal, 2000), and joint or dual branding (Lebar *et al.*, 2005), they all imply the basic concept of co-branding.

Co-branding is defined as the strategy of presenting two or more independent brands together on the logo and/or packaging of a new product or service (Besharat, 2010; Erevelles *et al.*, 2008). Brand strategists use the strategy of co-branding to transfer meanings from each host brand to the new combined brand in order to generate a more advantageous meaning and attribute profile for the combined brand (Bengtsson and Servais, 2005; Prince and Davies, 2002). At the same time, the primary objective of co-branding strategy is to launch a new product in a new or existing market (Besharat, 2010). In addition, the main expectation of firms seeking to co-brand is to pool their resources and capabilities, while maintaining their respective independence and self-determination. Thus, the advantages of co-branding strategy include not only strengthening the learning ability of firms, sharing of costs, reducing of risk and uncertainty, creating barriers to entry from competitors, and increasing competitiveness. Co-branding also allows the firms to enter markets, which were previously very difficult to enter (Bengtsson and Servais, 2005; Erevelles *et al.*, 2008).

### THE FACTORS FOR CO-BRANDING STRATEGY

To construct the co-branding strategy model, it is necessary to not only consider the important components of marketing strategy such as marketing communication, channel and brand, but also to consider alliance network relationships and the fit between the products and brands of alliance partners. Because developing a co-branding relationship requires relying on the respective resources owned by alliance partners, building an effective platform for information sharing is particularly important (Devlin and Bleakley, 1988; Randall, 1989). In addition, the fit between the brands owned by each firm is also an important factor (Park *et al.*, 1991; Simonin and Ruth, 1998). Each critical factor and its role within the co-branding strategy are examined in further details below.

#### 1. NETWORK RELATIONSHIP

When alliance partners pool resources, they need to adapt to conflicts that may arise during the cooperation process (Johanson and Mattsson, 1987). With the passing of time, the strategic benefits realized through the alliance may start to diminish for the firms involved. Furthermore, as bureaucratic cost increases and as knowledge and capability are exhausted, the alliance can no longer provide strategic value (Pitts and Lei, 2006). Hence, building a relationship of trust and effective channels of communication can reduce the risk of negative and speculative behaviors as well as helps the partners obtain synergy with their pooled resources (Centola, 2004; Mohr and Spekman, 1994).

Strategic alliances based on co-branding face another dilemma. As the alliance partners learn from each other, they may also worry about the loss of their technical and operational know-how and capabilities. To allow the alliance relationship to function effectively, scholars have made some suggestions. First, in order to construct the foundation of an alliance based on trust, the alliance partners should build a complete safeguard system, including patent application as well as protection mechanism and exit mechanism for the contractual relationship of alliance (Randall, 1989). Secondly, through the building of information sharing mechanism, the alliance partners can work together on tasks such as sales forecast, joint marketing planning, and sales review. Within an environment of information sharing, alliance partners can pursue common goals, reduce the likelihood of conflict, and realize the benefits of economies of scale (Chin *et al.*, 2008; Devlin and Bleakley, 1988; Randall, 1989). The last advice recommends the evaluation of product and brand fit between the alliance partners (Aaker and Keller, 1990; Park *et al.*, 1991). Park *et al.* (1991) suggested that product fit and brand fit directly affect to what degree consumers accept the new combined brand, which in turn influence the views of consumers about the existing brands. Namely, while applying this concept to co-branding, the implication is that when the similarity of product attributes and the consistency of brand concepts between the alliance partners fit well together, consumers will more likely accept the brand extension of the existing brands. Otherwise, when there is a lack of fit for the similarity of product attributes and the consistency of brand concepts among the alliance partners, then co-branding can not produce beneficial results.

#### 2. BRAND STRATEGY

Motion *et al.* (2003) indicated that building co-branding relationship helps firm redefine brand identity, reposition their brands, and build brand equity. Thus, focusing on co-branding to formulate a brand strategy is useful for increasing the brand value of the new combined brand. Brand strategy covers concepts such as brand identity, value proposition, and brand positioning (Aaker, 1996; Osler, 2003).

Brand identity is the combined perception a consumer has about a brand, which is based on words, images, ideas and the mental associations of consumers with a brand (Upshaw, 1995). Through brand identity, a brand presents its uniqueness, meaning, values and personality. Brand identity also communicates a firm's culture, image, core value, and commitment to product quality (Brigitte, 2003; Pettis, 1994). Value proposition is the total benefits delivered by a firm as it solves an important problem or fulfills an important requirement for the targeted customer (Johnson *et al.*, 2008). In other word, when a firm implements a co-branding strategy, besides delivering value to the consumer through a product or service, it also needs to consider emotional benefit or self-expressive benefit to satisfy the deeper underlying needs of customers (Aaker and Joachimsthaler, 2000; Kim and Mauborgne, 2009). Brand positioning which emphasizes the advantages a product has over competing products is the method a firm uses to build a brand image (Kapferer, 1992). Brand positioning strategy uses product attributes, quality and competitors to position a product (Kotler, 1999).

#### 3. MARKETING COMMUNICATION STRATEGY

Marketing communication is the process a firm utilizes to let consumers get to know a firm or a product, attract more customers, raise brand awareness, and increase sales. Marketing communication mix is composed of advertisement, sales and public relations; it relies on product benefits and incentives to directly and indirectly persuade consumers and it is an important element for implementing integrated marketing communication (IMC) (Kotler and Keller, 2006; Schultz *et al.*, 1993).

Advertisement is a method firms employ to promote their values, products or services through the media by buying commercial time slots or display space in non-personal communication channels such as TV, newspaper, magazine, outdoor advertising or Internet (Kotler and Keller, 2006). The cost for using the different communication channels varies. As far as the promotion of faucet products is concerned, the issue of which type of advertising may produce better results than others deserves to further examine. Sales is direct person-to-person communication between sales personnel and buyers, or using mail, telemarketing, TV direct selling or electronic marketing to have instant, interactive and customized communication with the targeted customers (Kotler and Keller, 2006). Marketing public relations is a sustained and planned two-way communication activity to build a mutually beneficial relationship with the public. Basically, marketing public relations has high credibility and allows a firm to get in touch with customers, who normally dislike advertisement and sales (Kotler and Keller, 2006). A focus on building a relationship with the public allows a firm to create a favorable image and gain the trust as well as support of the public.

#### 4. CHANNEL STRATEGY

The marketing channel functions not only to serve a market, it also functions to create a market, turning potential buyers into profit-making orders (Kotler and Keller, 2009). Channel strategy is an important guiding principle influencing all marketing decisions and affecting long-term contractual relationships with other firms, it also guides the making of marketing policies and processes (Kotler and Keller, 2009). Consequently, channel strategy is also an important factor for implementing co-branding.

The positioning of an international marketing channel is a major challenge to a firm. The purchasing habits of customers may vary due to national differences. Therefore, the development of a marketing channel needs to adapt to local opportunities and conditions (Kotler and Keller, 2009). According to Rangan *et al.*

(1992), the best channel strategy configures a marketing channel in a manner that matches demands of customers. Because of that, after an alliance partner considers a faucet's product attributes and market patterns, choosing an appropriate channel model such as exclusive distribution, selective distribution or intensive distribution is a key consideration. Moreover, Kotler and Keller (2009) suggested that choosing the most appropriate channel is usually not the problem, the problem is with how to persuade appropriate distributors to help a firm distribute its products. Firms often use multiple channels to sell their products and services to give consumers more choices, but coordinating and integrating multiple channels poses challenges to marketing managers (Rosenbloom, 2007). Accordingly, channel management, including selection, training, motivation and assessment becomes particularly important. On the other hand, because firms have only limited understanding of markets and resources, different methods for developing marketing channels will influence the results of implementing co-branding. The most common methods and media for developing international markets consist of the agency recommendation, directory search, spot display, international exhibition, and direct calls (Murry and Heide, 1998).

## RESEARCH METHODOLOGY

At the mentions of above literature review, we found only a few studies exploring the issue of co-branding in the faucet industry. Hence, scholarly research into this issue is still at an exploratory and premature stage. Based on the pre-existing literature, we have a good understanding of the critical factors of co-branding regarding faucet industry. Additionally, we interviewed the CEOs of faucet firms, experts and consultants in the field to further comprehend the views of the industry on co-branding. The interviews help ensure that there is no disconnect between academic theory and practical reality. Furthermore, we created the co-branding strategy model, its critical factors for success, and hierarchical structure framework through the AHP approach. Finally, we determined the weight of each factor for success and offer a referential framework for firms as they seek to implement co-branding.

### AN OVERVIEW OF AHP

The purpose of this study is to use a hierarchical framework as a reference, mark out critical factors for success and construct a multi-criteria co-branding strategy model for the faucet industry. The AHP provides a flexible and easily understandable way of analyzing the co-branding strategy model. The AHP methodology as devised by Saaty is a powerful analysis tool in structuring complex problems (Saaty, 2000). We use AHP for ranking the importance of various alternatives (Chan *et al.*, 2004), because it involves both qualitative and quantitative methods. AHP which can transform complex problems into a simple hierarchic structure is a useful approach for evaluating alternatives of complex and multiple criteria (Chen and Wang, 2010). A decision-maker can determine the weights of various criteria by conducting pair-wise comparisons between them when applying AHP.

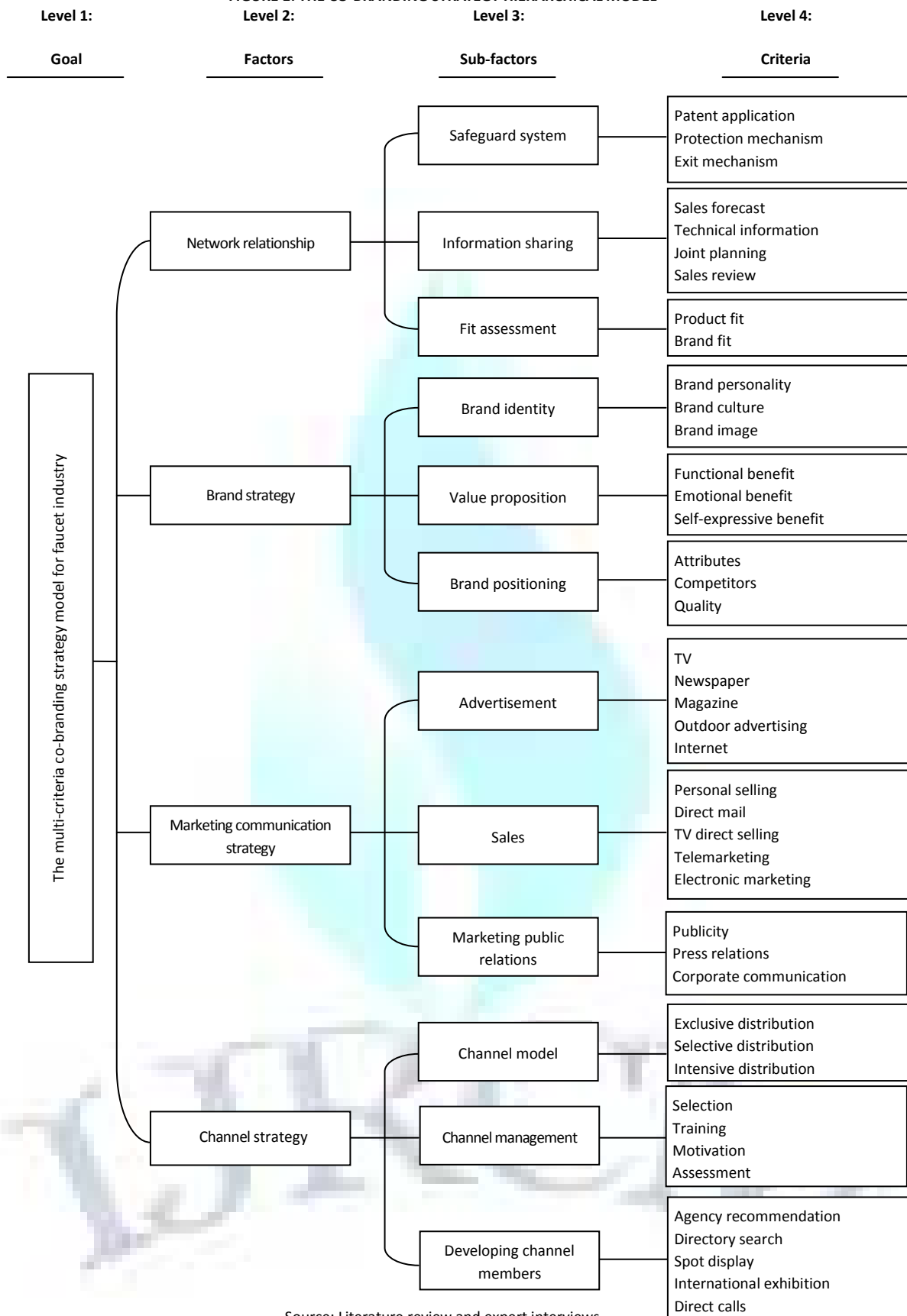
For these reasons, we proposed to analyze the critical factors for success in the co-branding strategy model through the AHP approach. We designed a nine point pair-wise comparative questionnaire and calculated data from the completed questionnaires. The judgments of the respondents were synthesized using the geometric mean approach suggested by Saaty (1994). The main procedures of AHP are: (1) structuring the co-branding strategy hierarchical model; (2) data collection by pair-wise comparisons of co-branding strategy elements; (3) checking the consistency of the collected data; (4) calculating the relative weights of co-branding strategy elements.

### A HIERARCHICAL FRAMEWORK

According to the steps mentioned above, we first reviewed the literature and determined the original co-branding strategy elements. Next, we visited eleven senior industrial experts and consultants in Taiwan and conducted in-depth interviews with them. The information gathered from the experts and consultants were used to identify suitable co-branding strategy elements for the faucet industry. Based on the interviews, we obtained four major factors, 12 sub-factors, and 43 criteria.

We designed the hierarchical layers shown in Figure 1. The ultimate goal is in the first layer, the major factors in the second layer, the sub-factors in the third layer, and finally, the criteria in the fourth layer. Under this hierarchical framework, we summarized 79 items by questionnaire and calculated the weight of each element using AHP software.

FIGURE 1: THE CO-BRANDING STRATEGY HIERARCHICAL MODEL



Source: Literature review and expert interviews

**PAIRWISE COMPARISON MATRIX**

The detailed steps regarding the AHP process are discussed as follows (Saaty, 1994; Saaty, 2000):

Step 1: Constructing a pair-wise comparison matrix. According to the hierarchical structure, we constructed a pair-wise comparison matrix with a scale of relative importance. The pair-wise comparisons yield a square matrix as matrix A:

$$A = [a_{ij}] = \begin{bmatrix} 1 & a_{12} & \dots & a_{1m} \\ a_{21} & 1 & \dots & a_{2m} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \dots & 1 \end{bmatrix} \quad (1)$$



where  $a_{ij}=1$  and  $a_{ji}=1/a_{ij}$ ,  $i, j=1, 2, \dots, m$ .

$a_{ij}$  represents a quantified judgment on a pair of criteria. The relative importance of two criteria is rated using a scale with the digits 1, 3, 5, 7, and 9. Number 1 denotes equally important. Numbers 3, 5, 7, and 9 mean moderately important, strongly important, very important, and absolutely important. The digits 2, 4, 6 and 8 are used to facilitate a compromise between slightly different judgments.

Step 2: Finding the relative normalized weight ( $w_i$ ) of each attribute by calculating the geometric mean of the  $i$ th row normalizes the geometric means of the rows in the comparison matrix. The purpose of calculating the maximum eigenvalue and eigenvector is to test the consistency of pair-wise comparison matrix A. The eigenvector method is used for calculating the weights (Hsu and Chen, 2007). The relative weights of the elements in each level are calculated as follows:

$$w_i = \frac{(\prod_{j=1}^m a_{ij})^{1/m}}{\sum_{i=1}^m (\prod_{j=1}^m a_{ij})^{1/m}} \quad (2)$$

Step 3: Finding out the maximum eigenvalue " $\lambda_{max}$ " (Saaty, 1994). We multiply the pair-wise comparison matrix A by eigenvalue  $w_i$  make new vector  $w'_i$ . Then, the  $\lambda_{max}$  is calculated as follows:

$$A = [a_{ij}] = \begin{bmatrix} 1 & a_{12} & \dots & a_{1m} \\ a_{21} & 1 & \dots & a_{2m} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \dots & 1 \end{bmatrix} * \begin{bmatrix} w_1 \\ w_2 \\ \vdots \\ w_m \end{bmatrix} = \begin{bmatrix} w'_1 \\ w'_2 \\ \vdots \\ w'_m \end{bmatrix} \quad (3)$$

$$\lambda_{max} = (1/m) * \left( w'_1/w_1 + w'_2/w_2 + \dots + w'_m/w_m \right) \quad (4)$$

Step 4: Calculating the consistency index using the equation  $CI = (\lambda_{max} - m) / (m - 1)$ . The smaller the value of CI, the smaller is the deviation from the consistency.

Step 5: Obtaining the random index (RI) for the number of attributes used in decision making. Calculating the consistency ratio CR using the equation  $CR = CI / RI$ . The value of CR = 0.1 or less is considered as acceptable.

## RESULTS OF ANALYSIS

This study sent out 25 AHP questionnaires and all of the respondents, including CEOs, industrial experts, and consultants have been involved with the faucet industry for over ten years. 22 usable questionnaires were returned for a response rate of 88%. On the basis of the data from the questionnaires, the weight value of each element was calculated by AHP software. After calculating the weight values, we found that virtually all replies to the questionnaires have a consistency ratio (CR) of less than 0.1. Hence, the pair-wise comparison matrices from decision makers are acceptable.

### THE PRIORITIES WITHIN THREE LEVELS OF CO-BRANDING STRATEGY MODEL

This section illustrates in further details the weight values of factors, sub-factors and criteria within three hierarchical levels of co-branding strategy model for faucet industry. The weight values of each level are shown in Table 1 and the details are discussed as follows.

#### 1. THE PRIORITIES AT FACTOR LEVEL

After sorting the relative weight value of each factor in the co-branding strategy model, "brand strategy" has the highest weight value (0.426). "Network relationship" has the second highest value (0.248), followed by "channel strategy" in the third place (0.209). "Marketing communication strategy" has the lowest value (0.117). The results show that brand strategy is an essential requirement for implementing co-branding. In other words, brand strategy is a critical factor in determining whether implementing co-branding in the faucet industry will be successful or not. The correct brand strategy will help a faucet firm build a positive brand image, distinguish its brand from the competition, and gain competitive advantage.

In addition, faucet firms need to pay extra attention to "network relationship" and "channel strategy" while they seek to implement co-branding. The concept of co-branding means that firms enter into alliance relationships with one another. At the same time, firms should re-organize their own brands so that they end up with a single combined brand in the market place. Hence, the mutual exchange of favors, reliance, trust, commitment and resources between the partner firms become particularly important. Building a relationship and ensuring its proper functioning directly help the implementation of co-branding. In the area of channel strategy, several tactics such as channel management, channel positioning, and channel development also play critical roles while firms implement co-branding.

#### 2. THE PRIORITIES AT SUB-FACTOR LEVEL

There are 12 sub-factors in the co-branding strategy model. These sub-factors further belong into four factors: "network relationship", "brand strategy", "marketing communication strategy" and "channel strategy". Within the "network relationship" factor, the weight value of the "safeguard system" sub-factor is highest (0.621). The next highest value is "information sharing" (0.2). "Fit assessment" has the lowest value (0.179). These results indicate that while implementing co-branding, the key technologies of each partner firm need to be protected. Within the "brand strategy" factor, the "value proposition" sub-factor has the highest weight value (0.365). "Brand positioning" has the second highest value (0.329). "Brand identity" has the lowest weight value (0.306). The difference between the weight values of the three sub-factors is small. Because brand strategy is the most important factor in the co-branding strategy model, brand identification, the value provided by a brand, and core position of a brand all play important roles.

As far as the "marketing communication strategy" factor is concerned, the sub-factor "marketing public relations" has the highest weight value (0.469). "Sales" has the second highest weight value (0.282), while sub-factor "advertisement" has the lowest weight value (0.249). The difference in weight values between "sales" and "advertisement" is small. These results show that building beneficial and long-lasting relationships with customers is an important tactic, and also reflect the long-time marketing model used by the faucet industry. Regarding the "channel strategy" factor, the sub-factor "channel management" has the highest weight value (0.622). Sub-factor "developing channel members" has the second highest weight value (0.249), while sub-factor "channel model" has the lowest weight value (0.129). Based on the results above, the effective managing of a channel system is a critical factor in determining whether co-branding can be successful. Faucet firms should pay special attention to the selection of channel members, incentive of channel firms, and assessment of channel performance.

#### 3. THE PRIORITIES AT CRITERIA LEVEL

There are 43 criteria in the co-branding strategy model. The criteria belong into 12 sub-factors. Regarding the "safeguard system" sub-factor, the criterion "patent application" has the highest weight value (0.554). The criterion "exit mechanism" has the lowest weight value (0.114). This shows the protection of intellectual property is the most important criterion. Within the sub-factor of "information sharing", the criterion "joint planning" has the highest weight value (0.509). The difference in weight values between "joint planning" and other criteria is considerably large. This result fully demonstrates that when firms prepare to implement co-branding, planning and formulating marketing strategy jointly is a must-have element. All partner firms need to reach consensus on a marketing strategy for the new combined brand. As far as the "fit assessment" sub-factor is concerned, the criterion "brand fit" has a high weight value (0.615), qualifying it as an important criterion. Whether the implementation of co-branding can produce a unified brand image has a significant influence on the success of the new combined brand. Regarding the sub-factor "brand identity", the criterion "brand image" has the highest weight value (0.463). This fact implies that faucet firms need to pay more attention to customers' overall perception of the new combined brand. Within the sub-factor "value proposition", the criterion "emotional benefit" receives the most attention and has the highest weight value (0.543). This result fully exhibits that the faucets produced under the new combined brand need to have excellent product attributes and appeal to demand of customers for a sense of quality, so that customers are satisfied visually and aesthetically. With the "brand positioning" sub-factor, the results indicate the criterion "quality" is the most important one (0.409). This fact shows the critical role quality has in the brand positioning of the new combined brand.

In the area of the sub-factor "advertisement", the results indicate that "Internet" advertising, with a weight value of 0.378, is more important than other forms of advertising. In addition, with the sub-factor "sales", the criterion "electronic marketing" has a weight value of 0.471. This sales method is also considered much more important than other forms of sales. The high weight values of both "Internet" advertising and "electronic marketing" echo each other. This shows

that even though the faucet industry is a traditional manufacturing industry, the industry pays as much attention to information technology as other industries. Because the Internet is the main tool for communication in a wired world, it is also an important media for the implementation of co-branding. Regarding sub-factor “marketing public relations”, “publicity” is considered the most important criterion with a weight value of 0.436. This shows communication based on news reporting, such as marketing through the print or electronic media, is an important marketing communication strategy for co-branding. Concerning sub-factor “channel model”, the criteria “intensive distribution”, “selective distribution” and “exclusive distribution” have similar weight values. This fact shows these three criteria are essential in implementing co-branding. In the area of sub-factor “channel management”, the criterion “selection” which means the selection of channel members has the highest weight value (0.519). The weight values difference between “selection” and other criteria is large. This fact reflects the high importance of choosing and investigating channel members. With sub-factor “developing channel members”, “directory search” is the most important criterion (0.306). The second highest criterion is “international exhibition” (0.264). This result is not surprising given that faucet firms most frequently use those two methods now to find develop new channels and customers. Firms should apply their experience in this area to developing channel members for the new combined brand. Using a comprehensive directory of firms in the faucet industry or industry-specific magazines, firms can find suitable channel members and customers. Regularly attending international exhibits will assist faucet firms with meeting customers from different countries and push the new combined brand into international markets.

TABLE 1: THE PRIORITY WEIGHTS OF EACH LEVEL

Factors	Weights (Ranking)	Sub-factors	Weights (Ranking)	Criteria	Weights (Ranking)		
Network relationship	0.248 (2)	Safeguard system	0.621 (1)	Patent application	0.554 (1)		
				Protection mechanism	0.332 (2)		
				Exit mechanism	0.114 (3)		
		Information sharing	0.200 (2)			Sales forecast	0.110 (3)
						Technical information	0.273 (2)
						Joint planning	0.509 (1)
						Sales review	0.108 (4)
		Fit assessment	0.179 (3)			Product fit	0.385 (2)
						Brand fit	0.615 (1)
		Brand strategy	0.426 (1)	Brand identity	0.306 (3)	Brand personality	0.257 (3)
Brand culture	0.280 (2)						
Brand image	0.463 (1)						
Value proposition	0.365 (1)					Functional benefit	0.174 (3)
						Emotional benefit	0.543 (1)
						Self-expressive benefit	0.283 (2)
Brand positioning	0.329 (2)					Attributes	0.304 (2)
						Competitors	0.287 (3)
						Quality	0.409 (1)
Marketing communication strategy	0.117 (4)	Advertisement	0.249 (3)	TV	0.262 (2)		
				Newspaper	0.120 (4)		
				Magazine	0.142 (3)		
				Outdoor advertising	0.098 (5)		
				Internet	0.378 (1)		
		Sales	0.282 (2)			Personal selling	0.206 (2)
						Direct mail	0.134 (3)
						TV direct selling	0.118 (4)
						Telemarketing	0.071 (5)
						Electronic marketing	0.471 (1)
		Marketing public relations	0.469 (1)			Publicity	0.436 (1)
						Press relations	0.288 (2)
						Corporate communication	0.276 (3)
Channel strategy	0.209 (3)	Channel model	0.129 (3)	Exclusive distribution	0.326 (3)		
				Selective distribution	0.332 (2)		
				Intensive distribution	0.342 (1)		
		Channel management	0.622 (1)			Selection	0.519 (1)
						Training	0.199 (2)
						Motivation	0.143 (3)
						Assessment	0.139 (4)
		Developing channel members	0.249 (2)			Agency recommendation	0.174 (3)
						Directory search	0.306 (1)
						Spot display	0.116 (5)
				International exhibition	0.264 (2)		
				Direct calls	0.140 (4)		

Source: Primary and computed data

OVERALL ANALYSIS OF CO-BRANDING STRATEGY MODEL FOR FAUCET INDUSTRY

After organizing the weight values of the various elements discussed above, this study determined an overall analysis regarding the co-branding strategy model. The results appear in Table 2. Ranking the twelve sub-factors by weight values, “value proposition” has the highest weight value (0.155), followed by “safeguard system” (0.154). The difference in weight values between the two criteria is minor. The two criteria have basically equal importance. The next sub-factors in the ranking are “brand positioning” (0.140), “channel management” (0.130) and “brand identity” (0.130). These five sub-factors have weight values above 0.1. The difference between weight values of these five sub-factors is also small. Furthermore, the sum of weight values for these five sub-factors makes up 70% of the total weight values for all sub-factors. In contrast, the other seven remaining sub-factors have weight values less than 0.1. These seven sub-factors also have much higher differences in their weight values, compared to the difference in weight values for the other five sub-factors. These results confirm that the five sub-factors with the highest weight values are the main critical success factors for the co-branding strategy model. Faucet firms need to focus on the five tactics of value proposition, safeguard system, brand positioning, channel management and brand identity to plan appropriately, execute solidly, assess effectively and review regularly. In particular, three of the five sub-factors belong to the “brand strategy” factor. This show brand strategy is the most important critical strategy for the co-branding strategy model. Co-branding combines the capabilities of the individual faucet firms to create a combined and mutually-owned brand. To achieve synergy that reflects one plus one greater than two, the implementation of co-branding requires the partner firms to first consider the direction of their brand strategy. Thus, faucet firms need to organize their respective viewpoints to reach consensus as well as formulate a correct and complete brand strategy.

This study also ranks the forty-three criteria by their weight values. As shown in Table II, the first ten criteria with the highest weight values are: "patent application" (0.085), "emotional benefit" (0.084), "selection" (0.067), "brand image" (0.060), "quality" (0.057), "protection mechanism" (0.051), "self-expressive benefit" (0.044), "attributes" (0.043), "competitors" (0.040) and "brand culture" (0.036). The sum of the weight values for these top ten criteria make up nearly 60% of the total weight values for all criteria. This result shows the critical position of those ten criteria. Among those ten criteria, "patent application" and "emotional benefit" have comparable weight values. The weight values of those two criteria are significantly higher than the weight values of the remaining eight criteria. The phenomena indicate that firms should pay particular attention to protection mechanism for their intellectual property and the communication of emotional value for the new combined brand when they implement co-branding. Furthermore, among these top ten criteria, seven criteria belong to the three sub-factors of "brand identity", "value proposition" and "brand positioning". In turn, the three sub-factors all belong to the "brand strategy" factor. This fact reflects the critical importance of brand strategy. The brand strategy for the new combined brand needs to emphasize the building of a positive brand culture and brand image, effective communicating of emotional and self-expressive values to the customer, and defining a clear position for brand attributes, quality and competitors.

TABLE 2: THE PRIORITY WEIGHTS AT OVERALL ANALYSIS

Factors	Sub-factors	Weights (Ranking)	Criteria	Weights (Ranking)
Network relationship	Safeguard system	0.154 ( 2 )	Patent application	0.085 ( 1 )
			Protection mechanism	0.051 ( 6 )
			Exit mechanism	0.018 (18)
	Information sharing	0.050 ( 8 )	Sales forecast	0.006 (35)
			Technical information	0.014 (25)
			Joint planning	0.025 (15)
			Sales review	0.005 (37)
	Fit assessment	0.045 ( 9 )	Product fit	0.017 (20)
			Brand fit	0.028 (12)
			Brand personality	0.033 (11)
Brand strategy	Brand identity	0.130 ( 4 )	Brand culture	0.036 (10)
			Brand image	0.060 ( 4 )
	Value proposition	0.155 ( 1 )	Functional benefit	0.027 (13)
			Emotional benefit	0.084 ( 2 )
	Brand positioning	0.140 ( 3 )	Self-expressive benefit	0.044 ( 7 )
			Attributes	0.043 ( 8 )
Marketing communication strategy	Advertisement	0.029 (11)	Competitors	0.040 ( 9 )
			Quality	0.057 ( 5 )
			TV	0.008 (32)
			Newspaper	0.004 (38)
			Magazine	0.004 (38)
			Outdoor advertising	0.003 (42)
	Sales	0.033 (10)	Internet	0.011 (27)
			Personal selling	0.007 (33)
			Direct mail	0.004 (38)
			TV direct selling	0.004 (38)
			Telemarketing	0.002 (43)
			Electronic marketing	0.016 (21)
Marketing public relations	0.055 ( 6 )	Publicity	0.024 (16)	
		Press relations	0.016 (21)	
		Corporate communication	0.015 (24)	
		Exclusive distribution	0.009 (28)	
		Selective distribution	0.009 (28)	
		Intensive distribution	0.009 (28)	
Channel strategy	Channel model	0.027 (12)	Selection	0.067 ( 3 )
			Training	0.026 (14)
	Channel management	0.130 ( 4 )	Motivation	0.019 (17)
			Assessment	0.018 (18)
			Agency recommendation	0.009 (28)
			Directory search	0.016 (21)
	Developing channel members	0.052 ( 7 )	Spot display	0.006 (35)
			International exhibition	0.014 (25)
			Direct calls	0.007 (33)

Source: Primary and computed data

**CONCLUSIONS**

Co-branding strategy is an important issue for small and medium enterprises. However, no prior studies focused on co-branding strategy model. In particular, this study is the first to examine the critical success factors for implementing co-branding strategy. The purpose of this study is to construct the framework for a multi-criteria co-branding strategy model specifically tailored to the faucet industry. The AHP approach was used to successfully find the critical success factors, which can be used as elements within the co-branding strategy model. The proposed model provides an objective and effective method to assist faucet firms in determining the relative importance of decision elements and formulating viable strategies for co-branding implementation. Accordingly, this study contributes the following suggestions to the faucet industry and the field of co-branding.

First, the faucet industry in Taiwan has already formed a complete industrial cluster, including plants for peripheral accessories, plants for parts, plants for electroplating, and other supporting value-added processes. The firms in this industry have tight relationships with one another and possess a solid foundation of interdependence and trust. These advantages intensified the clustering of this industry and build a favorable base for implementing co-branding. Even though those advantages are beneficial to the implementation of co-branding, combining the individual brands of firms into a new one still raises complex concerns. Thus, building a system for protecting the rights and interests of all faucet firms becomes particularly important. Firms can only cooperate and implement co-branding effectively under conditions, which are protective of their rights and interests. The safeguard system should include patent application, protection mechanism, and exit mechanism. Among these, patent application is especially important. Through the protection provided by patent application, alliance firms can protect their respective core technologies effectively and reduce the risk of losing their intellectual property. In other words, once the technologies of each firm are protected by patents, the firms no longer need to be concerned with the risk of losing their core technologies due to infringement, misappropriation, theft and so on, because a protective mechanism has already been built for the firms.

Next, according to the analytical results, whether the results were analyzed from the perspective of the three hierarchical structures at the factor, sub-factor, and criteria levels; or from the perspective of overall analysis, the results all indicate that brand strategy, as well as its sub-factors and criteria, are the critical success factors for implementation of co-branding. Therefore, firms need to formulate a feasible branding strategy for the new combined brand in order to build brand awareness, convey brand image, and create brand differentiation. The brand strategy for the new combined brand should include the three dimensions of brand identity, value proposition, and brand positioning. In the area of brand identity, because the combined brand is the symbol for an entirely new brand, each firm should combine words, imagery, ideas and customer perception of existing faucet brands to form a combined new brand specific to the faucet industry and build a new high-value brand identity based on the foundation of its respective existing brand. Specifically, firms can combine the history, stories, spirit of the faucet industry; allow the new combined brand to reflect those characteristics, form a unique brand culture for faucets, and build a specialized brand personality and brand image.

As far as value proposition is concerned, the results demonstrate that emotional benefit and self-expressive benefit are more important than functional benefit. This means faucet products no longer only play the role of a common necessity for consumers; faucet products have been elevated to high-quality goods reflecting high-level characteristics such as quality of life, sense of aesthetics, and individuality. Thus, the new combined faucet brand needs to emphasize innovation, design and function in order to strive for excellent product attributes and communicate a high-level brand value. Regarding brand positioning, firms should emphasize product quality for the new combined brand. Firms not only have to meet the basic demand of quality as reliability, but also need to seek the goal of quality as excellence. A product is said to have achieved quality as excellence when customers perceive that the attributes of the product provide them with higher utility than the attributes of products sold by rivals (Hill and Jones, 2010). Therefore, firms must make sure that their product distinguishes itself in terms of attributes such as design, style, value, uniqueness, function and service; so that the product can clearly show the difference between itself and competing products.

Finally, the results indicate that effective managing of the channel system is an important element of the co-branding strategy model. Hence, it is very important to build an effective channel management system, including the selection of channel members, incentive of channel firms, and assessment of channel performance. Among these criteria, selection of channel members is the most one. Whether the essential qualities of the channel members are positive or negative influences the success of the new combined brand. Alliance firms need to thoroughly investigate their channel members and examine the reputation, performance, financial soundness, willingness to cooperate, and other characteristics of channel members to select high-quality channel members. Furthermore, with the development of information technology, the Internet has become an important channel. The results of this study show that the Internet, as a new marketing channel, possesses significant importance. In particular, through electronic marketing, firms can bypass complex and redundant channel levels. Although utilizing the Internet as a platform for conducting transactions can effectively reduce overhead cost, firms have to build complete protection procedures to ensure the security and confidentiality of transactions. Therefore, the Internet also has become a critical platform and channel for implementing co-branding.

With respect to future research, this study expects there will be additional solid research extending this model or exploring related issues of co-branding as soon as possible. For instance, the proposed hierarchical strategy model can be further refined and applied to other industries in order to compare whether different industries have differing critical success factors, and how the level of importance for those critical success factors may vary from one industry to another.

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**IMPACT OF ORGANIZATIONAL CLIMATE ON ORGANIZATIONAL LEARNING****HAMID REZA QASEMI****ASST. PROFESSOR****MANAGEMENT DEPARTMENT OF ISLAMIC AZAD UNIVERSITY-ALIGUDARZ BRANCH****IRAN****SAEED BONYADI****EX. STUDENT****MANAGEMENT DEPARTMENT OF ISLAMIC AZAD UNIVERSITY-ALIGUDARZ BRANCH****IRAN****ABSTRACT**

Human resources are the most valuable assets of society and organizations, preparation and training those needs to an efficient and effective system. Creating the organizational climate of incentive learning is a part of requirements for this system. The main question of this research is that how organizational climate can affects job satisfaction and work performance through improving OL<sup>2</sup>? So, the aim is surveying relationship between organizational climate with organizational learning and the other hand surveying relationship between organizational learning with job satisfaction and work performance. Statistical population is Lorestan IAU's employees and the data collection tool has been questionnaire considered base on nature of research. Sample size was determined 117 based on Cochran formula. The data were analyzed using linear regression testing at SPSS software and finally concluded that there was a direct relationship between the level of employee's autonomy, trust and reward with organizational learning; and also there was a positive relationship between organizational learning with job satisfaction and work performance. Thus for increase job satisfaction and work performance, managers must focus on increase organizational learning based on growth the level of trust(64%), autonomy(64%) and reward(73%) through valid and accurate instructions.

**KEYWORDS**

Islamic Azad University (IAU), Job satisfaction, Organizational climate, Organizational learning, Work performance.

**INTRODUCTION**

The most valuable assets of any organization are certainly its human forces. Environmental changes will not allow organizations to be managed traditionally against competitors pressures related with them skills, abilities and technology. OL is an integrative process during which an organization can meet existing and emerging needs, to identify and exploit existing and acquired knowledge assets, increase decision-making potential and develop new opportunities (Liu et al., 2009). Those organizations have a chance of survival in a competitive world which is able adapt constantly with environmental changes. These rapid changes have forced organizations to adopt appropriate strategy to achieve competitive advantage. Emphasis on employee's continuous learning to achieve organizational goals with maximum effectiveness is a way to gain sustainable competitive advantage. Accessing to the competitive advantage depends on each organization features, but employees and their knowledge are playing a crucial role in this direction. In other word, learning is a main source of competitive advantage. Learning is for change, and it must be transformed into evolution in every organization, and positive evolution should be transformed into habit.

According to Karen et al (2000), organizational climate is related to determine the measurable characteristics of the workplace that understood directly or indirectly by those who work in this environment; and it has been assumed that it affects their behavior and motivation, as well as effective and influential acts to shape behavior. Studies have shown that a healthy organizational climate has a profound positively impact on staff, so the elements of organizational climate are trust, autonomy, risk, reward and management support. Increasing the amount of these dimensions motivates the staff by their work environment; it means that the work environment becomes a enjoyable and profitable place (Gudarzi et al., 2001).

In this study, we will evaluate the impact of organizational climate variables on organizational learning that finally affects the job satisfaction and work performance.

**CONCEPTUAL FRAMEWORK**

Human resources are considered as a capital and the source of any creativity and innovation in organizations who can affect organizational performance. The purpose of organizational learning strategy is producing a human resources-based capability. This goal is in line with one of the main principles of HRM, it means that should be invested on staff to develop human capital of organization requirements and increase inventory of store of its knowledge and skills (Armstrong, 2005). In interactive learning, learning occurs by the exchange of information and evaluate of transactions that reveal the motives, resolve, and resources of rivals and allies within and outside the organization. Interactive learning allows managers to exchange a good deal of information with one another, which fosters more realistic collaboration (Srivastava et al., 2011). Apart from technical and economic interests, Habermas proposes that human experience and social activity revolve around such things as communication, achieving consensus and making meaning of our lives (or what he terms a "practical interest") and freedom, autonomy and responsibility, including trying to maintain freedom from unjust constraints, power relations, and the systems of beliefs and values which hem us in (an "emancipator interest"). Importantly, Habermas' work highlights fundamental tensions between commercial interests (the broad interests of money and power) and human needs for relating, understanding, growth and freedom. In essence, he argues that this tension is a fertile source of knowledge (and, one might suggest, of learning) (Habermas, 1987; Laurie Field, 2011). Drawing on the work of numerous scholars (e.g. Crossan et al., 1999; Huber, 1991; Levitt and March, 1988; March, 1991; Marsick and Watkins, 2003; Pace, 2002; Senge, 1990; Weick and Westley, 1996; Weick, 1985), we view organization learning is a continuous process of value/knowledge integration that in the context of a learning environment involves acquiring, interpreting, and sharing information to create meaning. Individual learning feeds group and OL through the processes of interaction, integration, and cooptation (Pokharel et al., 2010). According to Campbell et al (1980), organizational climate can be considered as a organization personality because of it shows the style of organization relevance with the members. McKinsey (1983) notes that "organizational climate can considered as a source of employee efficiency who work in that environment" (Goudarzi, 2001).

**METHODOLOGY**

The conceptual amplitudes of this study are HRM concepts, OL, organizational climate, work performance and job satisfaction. Its geographical territory is Lorestan province in Iran. The variables of organizational climate are trust, autonomy, risk, reward and management support (Migdadi, 2009). We will survey the

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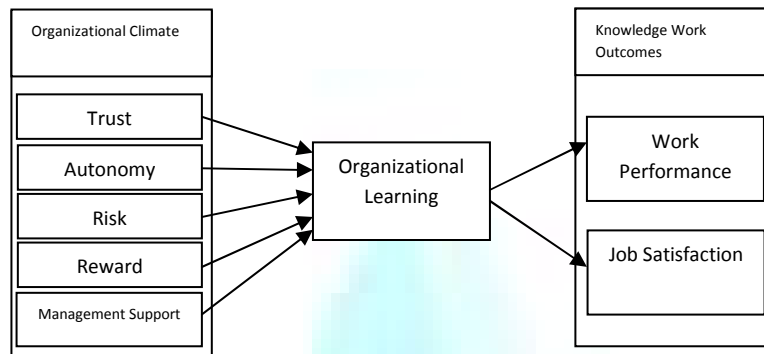
1 . Organizational Learning

2 . Islamic Azad University

relationship between these variables and OL to test will work performance and job satisfaction swing through the changes of independence variables? So there are three kind of variables in this research:

- Independence variables: the elements of organizational climate
- Intermediate variable: OL
- Dependence variable: knowledge work outcomes

**FIGURE 1: CONCEPTUAL MODEL OF THE RESEARCH** (Janz & Prasanphanich, 2003, Migdadi, 2009)



Therefore, the following hypothesis is presented:

- H1. The level of trust positively influences OL.
- H2. The level of autonomy positively influences OL.
- H3. The level of risk positively influences OL.
- H4. The level of reward positively influences OL.
- H5. The level of management support positively influences OL.
- H6. The level of OL positively influences work performance.
- H7. The level of OL positively influences job satisfaction.

The statistical population size is 521 and the sample size is determined using the systematic sampling method. These are shown sectional in table (1). The amount of answered questionnaires is 103 which were used in the evaluation.

**TABLE 1: STATISTIC POPULATION AND SAMPLE SELECTION**

Job category	presidency	Finance/administrative	Academic	Student affairs	research	Cultural affairs	civil	Total
Aligoudarz	3	30	15	10	5	4	3	70
Borujerd	6	129	58	25	6	14	10	248
Dorud	2	23	9	6	2	2	3	47
Khoram Abad	5	82	27	13	6	17	6	156
Total	16	264	109	54	19	37	22	521
Sample size	4	53	25	12	4	14	5	117

The questionnaire includes 49 questions based on five-point likert scale. Cronbach’s alpha remains the most common measure for estimating internal consistency reliability which requires only a single test administration to provide a unique estimate of the reliability for a given test. An alpha value above 0.7 was taken as an acceptable measure of reliability (Gliem and Gliem, 2003; Jyothibabu et al, 2010). So, It was measured 94.95% in this study.

**TABLE 2: THE MAIN AND SUB - VARIABLES OF THE RESEARCH**

Main variable	Sub- variables	Indicators
Organizational climate	Trust	Honesty, sufficiency, loyalty, truth, stability
	Risk	Unreliability, repetition, avoidance, acceptance, control
	Reward	Effort, material rewards, immaterial rewards, equity, scales
	Autonomy	Power entrusting, proficiency, action freedom, new solutions
	Management support	Performance appraisal system, relationships, leadership, help to personnel
OL	Knowledge creation	Creating new ideas, creativity, opportunity to comment
	Knowledge distribution	Information exchange, meetings, formal process
	Knowledge interpretation	evaluating by experts, information analysis, evaluation of proposals system
	Improve organizational memory	Recording new information and knowledge, applying new knowledge, distributing and promoting new knowledge
Work performance	Effectiveness	Accessing to the goal, adoptive solutions to achieve the goal, solidarity
	efficiency	Division of labor, coordination, time
Job satisfaction	Work satisfaction	Amenity, salary, relationship with superiors,
	Growth satisfaction	Growth opportunity, be succeed, deserve democracy system

Regression analysis is a statistical tool to investigate relationships between variables. Linear regression refers to the type of regression where we have a continuous or nearly continuous dependent variable. It is sometimes divided into simple linear regression (where there is only one independent variable) and multiple linear regressions (where there is more than one). The simplest case is when there is only one independent variable (IV), and it is continuous. In this case, we can make a scatter plot of the dependent variable (DV) and the IV. Multiple linear regression (and simple linear regression as well) makes certain assumptions about the data.

1. Linearity, the model assumes that the relationship between the DV and the IVs can be well-estimated by a straight line
2. Normality of residuals.

Residuals refer to the distances between the line and the points. Multiple linear regressions assume that these distances are normally distributed with a mean of 0.

3. Homoscedasticity and independence of residuals

Not only must the residuals be normally distributed, they must have the same variance (that's called homoscedasticity) and they must not be related to the IVs. The modified model may be written:

$$I = \alpha + \beta E + \varepsilon X + \varepsilon$$

The variable I is termed the "dependent" or "endogenous" variable; E is termed the "independent," "explanatory," or "exogenous" variable;  $\alpha$  is the "constant term" and  $\beta$  is the "coefficient" of the variable E.

As you know, the conditions of using regression analysis are:

- Mean of errors must be equals 0.
- The variance of errors must be equals 1.
- There is no correlation between model errors.
- Dependent variable is distributed normally.

Therefore, Durbin-Watson test has been used to check the correlation between errors and Kolmogorov-Smirnov test has been used to survey normality of dependent variable.

Decision is made based on significant level of testing (P-value), if (P < 0.05) the zero hypothesis is rejected and if (P > 0.05) it is accepted.

**FINDINGS**

To analysis gathered data by regression, it is requiring to testify circumstances of using the method. First, it is tested them.

Durbin-Watson test is used to check the independence between errors and recognize the residual perths; the test statistic range is 0 to 4. The test will show there is no correlation between them if the test statistic is 1.5 to 2.5. Below, the results of this test are described.

**TABLE 3: MODEL SUMMARY**

		Durbin-Watson
Model	1	1.874 <sup>a</sup>

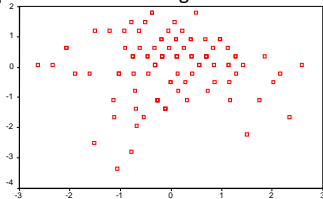
a. Predictors: (Constant), Organizational

b. Dependent Variable: Organizational

The maximum of harmonic residual is obtained 1.874 that it shows there is no problem in analysis. Figure (2) shows the errors are completely distributed random and their variance is constant.

**FIGURE 2: SCATTERPLOT**

Dependent Variable: Organizational learning

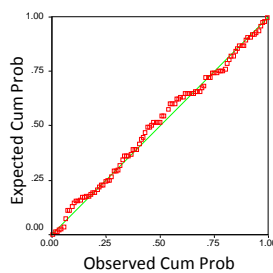


Regression Standardized Residual

Next condition of using regression analysis is that dependent variable should be distributed normally. As shown in figure (3), normal p-p plot of regression (normal paper histogram) is display that observed and expected values are around 45 line. So their distribution is normally.

**FIGURE 3: NORMAL P-P PLOT OF REGRESSION STANDARDIZED RESIDUAL**

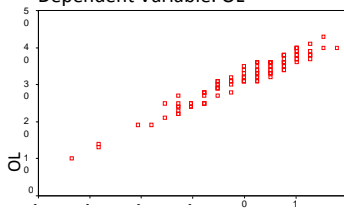
Dependent Variable: Organizational learning



Checking the linear relationship between organizational climate components and OL is shown in figure (4) through displaying of regression standardized predicted histogram.

**FIGURE 4: SCATTER PLOT**

Dependent Variable: OL



Regression Standardized Predicted Value

As shown in this figure, there is a linear relationship between trust, autonomy, risk, reward and management support that it can be analyze by principal component analysis which is displayed in table (4).



TABLE 4: REPRODUCED COVARIANCES

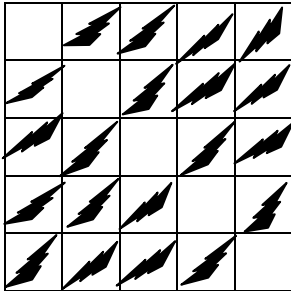
		Trust	Autonomy	Risk	Reward	Management support
Reproduced Covariance	Trust	14.015 <sup>b</sup>	12.096	10.781	13.343	11.343
	Autonomy	12.096	10.440 <sup>b</sup>	9.305	11.516	9.790
	Risk	10.781	9.305	8.293 <sup>b</sup>	10.264	8.726
	Reward	13.343	11.516	10.264	12.703 <sup>b</sup>	10.799
	Management support	11.343	9.790	8.726	10.799	9.181 <sup>b</sup>
Residual <sup>a</sup>	Trust		1.984E-03	-.599	.416	-.487
	Autonomy	1.984E-03		.127	-1.735	-1.478
	Risk	-.599	.127		-2.552	-2.046
	Reward	.416	-1.735	-2.552		.921
	Management support	-.487	-1.478	-2.046	.921	

Extraction Method: Principal Component Analysis.

- a. Residuals are computed between observed and reproduced covariances.
- b. Reproduced communalities

Figure (5) displays the linear relationship between each two factors together; it means that the observed points of each two factors are scattered around a straight line.

FIGURE 5: MATRIX SCATTERING TO DETERMINE THE LINEARITY



The double variable distribution chart is shown as a matrix table that the chart in each square must be linear. Table (5) shows the correlation coefficient between the observed and predicted (dependent variable) values that is 0.986.

TABLE 5: MODEL SUMMARY

		R	R Square	Adjusted R Square	Std. Error of the Estimate
Model	1	.986 <sup>a</sup>	.972	.971	1.092

a. Predictors: (Constant), Trust, Autonomy, Risk, Reward, Management support

One of the most valuable statistical indicators is coefficient of determination which estimated 0.972 in this model. It means that common variance between X and Y (dependent and independent variables) equals 0.972; in the other words, 97.2 percent of changes of OL is explained through the level of trust, autonomy, risk, reward and management support.

According to table (6) ANOVA results, the significant level is calculated 0.000 (P< 0.05), therefore, the hypothesis of “the regression is significant” is accepted.

Table 6: ANOVA<sup>b</sup>

		Sum of Squares	df	Mean Square	F	Sig.	
Model	1	Regression	4021.069	5	804.214	673.847	.000 <sup>a</sup>
		Residual	115.766	97	1.193		
		Total	4136.835	102			

a. Predictors: (Constant), Trust, Autonomy, Risk, Reward, Management support

b. Dependent Variable: Organizational learning

Table (7) shows the evaluated regression coefficient in the model, it also displays the amount of intercept and t statistic for significant test of regression coefficients.

TABLE 7: COEFFICIENTS

		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
Model	1	(Constant)	.0755	.670	0.047	.105	.016
		Trust	.639	.184	.381	3.467	.001
		Autonomy	.644	.079	.373	8.154	.000
		Risk	5.459E-02	.049	.032	1.106	.271
		Reward	.732	.105	.351	3.497	.000
		Management support	-8.551E-02	.063	-.047	-1.362	.176

a. Dependent Variable: Organizational learning

Based on obtained results, the significant levels of regression coefficient for “risk and management support” are respectively 0.271 and 0.176. Both of them don’t have any impact upon OL because (P> 0.05). So the other P-value are less than 0.05 and it shows they influence the OL as below:

$$3X2 + 0/644 X1 + 0/732 X0/0755 + 0/639 = Y$$

Where

X1 is the level of “trust”

X2 is the level of “reward”

X3 is level of "autonomy"

Analyzing the relationship between OL as an independent variables and work performance as a dependent variable shows that the relation is positive and significant in about 66% of cases. Table (8) shows the correlation coefficient between the observed and predicted (dependent variable) values that is 0.659.

TABLE 8: MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.659 <sup>a</sup>	.434	.428	2.816

a. Predictors: (Constant), Organizational learning

Also, the coefficient of determination is 0.434 that means 43.4 percent of changes of work performance is explained with changes of OL. As shown in table (9), the significant level is calculated 0.000 (P< 0.05), therefore, the hypothesis of "the regression is significant" is accepted.

TABLE 9: ANOVA<sup>b</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	614.116	1	614.116	77.442	.000 <sup>a</sup>
	Residual	800.933	101	7.930		
	Total	1415.049	102			

a. Predictors: (Constant), Organizational learning

b. Dependent Variable: Work performance

Table (10) shows the significant level of regression coefficient for "work performance". According to this table both of regression coefficient and intercept are significant because the significant levels are 0.000 (P< 0.05).

TABLE 10: COEFFICIENTS<sup>a</sup>

Model	1		Unstandardized Coefficients		t	Sig.
			B	Std. Error		
		(Constant)	9.362	1.416	6.611	.000
		OL	.385	.044	8.800	.000

a. Dependent Variable: Work performance

PART 3

Analyzing the relationship between OL as a independent variables and job satisfaction as a dependent variable.

The correlation coefficient between the observed and predicted (dependent variable) values that is 0.754 as shown in table (11).

TABLE 11: MODEL

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.754 <sup>a</sup>	.569	.564	3.044

a. Predictors: (Constant), Organizational learning

The coefficient of determination is 0.569 that means 56.9 percent of changes of job satisfaction is explained with changes of OL. As shown in table (12), the significant level is calculated 0.000 (P< 0.05), therefore, the hypothesis of "the regression is significant" is accepted.

TABLE 12: ANOVA<sup>b</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	1233.073	1	1233.073	133.112	.000 <sup>a</sup>
	Residual	935.607	101	9.263		
	Total	2168.680	102			

a. Predictors: (Constant), Organizational learning

b. Dependent Variable: Job satisfaction

Table (13) shows the significant level of regression coefficient for "work performance". According this table both of regression coefficient and intercept are significant because the significant levels are less than 0.05 (P< 0.05).

TABLE 13: COEFFICIENTS<sup>a</sup>

Model	1		Unstandardized Coefficients		t	Sig.
			B	Std. Error		
		(Constant)	4.081	1.531	2.666	.009
		OL	.546	.047	11.537	.000

a. Dependent Variable: Job satisfaction

CONCLUSION

This research has investigated first the role and impact of organizational climate upon OL, second the impact of OL upon work performance and job satisfaction. According to above calculations, hypothesis number 1, 2, 4, 6 and 7 are accepted but hypothesis number 3 and 5 are rejected. So this means among the organizational climate variables, the level of trust, autonomy and reward affect directly the level of OL and its regression equation is:

autonomy + 0/644reward + 0/732 trust/0/755 + 0/639 = OL

But there is no any relationship between the level of risk and management support with OL. Also, OL affects both of work performance and job satisfaction. In overall, it can be concluded that work performance and job satisfaction are influenced by OL through the level of trust, autonomy and reward. It can be concluded that:

1. Increasing trust level, autonomy, and reward in organization can creates a favorable organizational climate.
2. Risk level and management support may not help to create an appropriate organizational climate. This issue is questionable, and then it needs to more research.
3. Managers must focus on increasing organizational learning based on increasing trust level, autonomy, and reward to access high performance and job satisfaction of the employees.

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**BPO INDUSTRY IN INDIA: B2B MARKET TRANSFORMATION**

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**ABSTRACT**

*The Business Process Outsourcing (BPO) industry in India is considered significant which require radical transformation to leverage its critical success factor in the competitive environment. BPO service redesigning process, transformation and innovation at basic level focus on continuous improvement in service delivery need to be studied and deeper efforts for improvement can be achieved. With respect to the BPO service improvement through innovation can be represented in different views. Thus focus of B2B need to be widened beyond "cost" element to "value" and "benefits" approach. Deciding on revenue and cost the B2B has to look for alternative using transformation. Low-cost outsourcing from other countries exerts downward push on costs which leads the Indian BPO to loose market share. Rising global competition also exert high pressure on Indian BPO industry. Advantage of Indian outsourcing industry can be well taken into consideration which provides the clear idea behind the development as super power creating India as target destination for multinationals to back end their operations. The government both at state and central level are focusing on the various area and possible ways to support the sector with the developing infrastructure and political and trade relation with other counties. Indian BPO service providers have gained market share through innovative service delivery leveraging various strategic factors and adding value to its functions. The paper will highlight the transformation in Indian BPO sector explaining challenges and factor for innovation providing opportunities to the sector.*

**KEYWORDS**

B2B, BPO Industry, transformation, India.

**INTRODUCTION**

 Outsourcing service providers in India has grown far ahead to attract clients and transforming process with value addition to its business clients. This increasingly value delivery to the clients has won many hearts. The Business Process Outsourcing industry in India needs to be considered significantly which require radical transformation to leverage its critical success factor in the competitive environment. BPO service providers need to transform and enhance relationship network with its clients to maximize value delivery through customer centric business.

We need to understand about the service delivery and technology of these BPO service providers in India can create transformation and whether it is appropriate enough to provide value addition; or Do Indian BPO providers transforming business clients to focus on change? Whether effective service is being provided to the client regularly conducting regular transformation in service and delivery? If one of these is true then, does Indian BPO think of business transformation to focus on potential earning of revenue and get large business clients? This paper is intended to discuss strength, weakness opportunities and threats of Indian BPO industry and analyze how Indian BPO service industry provides value addition to the clients.

Normally, every business clients will complain for the BPO business irrespective of any specific area from customer care to value addition. On the other hand, BPO service providers claim to provide value to its clients through enhanced services. The regular dissatisfaction from B2B leads the business to attract new form of competition. The regular innovative service delivery at fundamental level by the BPO business need to be put forward to gain market revenue and to deliver improved value. Incremental process improvements are essential for providing value to its business clients looking for better customer services and satisfaction. For this reason, the BPO service redesigns the process through transformation and innovation at basic level through focus on continuous improvement. Other parts of the coin is the cost at which the business supports the customer and cost at which BPO provide services. Clients continuously flatter and try to reduce cost giving benefits to its customer ultimately BPO providers will become the primary option for reducing cost. BPO has to provide continuous improvement and focusing on value delivery.

**BPO – SERVICE FOCUSING ON IMPROVEMENT**

In the process of outsourcing service improvement through innovation and transformation plays a vital role to gaining revenue. BPO service providers search for people who continuously provide innovative solution to the process outsourced by the business. In respect to the BPO service improvement through innovation can be represented in different views:

Firstly, Client centric view: Improved service provided by the BPO business service provider need to give additional value with respect to the higher order of magnitude which can accomplish the client objective to improve revenue, sales and customer loyalty. Nevertheless, innovative improvement need not be the only factor related to revenue but also focus and put thrust on other changing factor to marketing, product development, accounting procedures, business analysis, engineering development, customer services, IT solution, R&D, and others. In client centric view major challenge is to understand the issue based on "core value" being provided by the business to its customer and how to "add" to it through outsourcing by the service providers.

Secondly, Business centric view: BPO service providers are looking for transformation which helps the desired "core value" to the business client. Meanwhile, "adding value" create positive application to "continuous improvement" in the service being provided. The biggest challenge to the service provider is to generate solution that will integrate the client mentioned "value".

Lastly, Customer centric view: Being a customer looking for maximizing benefits in terms of cost and value for money becomes major concerns. Thus, focus of B2B needs to be widened beyond "cost" element to "value" and "benefits". Deciding on revenue and cost the B2B has to look for alternative using transformation.

**B2B TRANSFORMATION**

B2B with the view of handling the changing environment concentrates on basic business process change that can shift the cost issue to value concentration. The basic transformation of the BPO would need to categorize the priorities in client process which support and transform the major aspects. Priority transformation within the client process is critical and complex which need time and effort in order to benefit the client. The resultant aspect is the capability of business to deliver continuous and improved service eliminating possible error and attain value process.

**B2B PARTNERS – INDIA, A GLOBAL HUB**

The Indian economy has growth tremendously with the end of last century and started developing at great pace in the new millennium in vast sector ranging from traditional agriculture to automobile and IT sector having the capability to be a global hub for service and manufacturing having vast portfolio of modern industries with dominant services with growth output on more than 50% attributing major contribution in the economic growth and development of the country.

With the opening of the Indian economy with dynamic and flexible policies which brings the macroeconomic reforms serving to achieve a stabilized economy and shed the foreign exchange crises increasing the foreign reserve to stabilize the market and consequently increasing the development of financial market and export. After the policy reform in the country is able to attract significant number of foreign investment and improve the business opportunities adding to growth and development. Policies especially related to external affairs have been structured gradually to open the Indian economy and consequently the Indian market for direct investment.

With the open economic policies, India has developed and grown rapidly with positive impact on both social and economical front which direct India as one of the fastest growing economy in the world. The service sector makes up a further 28%, and industrial sector around 12% with the labor force totals half a billion workers. India's large service industry accounts for 54% of the country's GDP while the industrial and agricultural sector contribute 29% and 17% respectively. Indian economy at a glance includes - GDP: \$1.209 trillion (2008 est.); GDP Growth: 6.7% (2009); GDP by sector: agriculture: 17.2%, industry: 29.1%, services: 53.7% (2008 est.); Inflation: 7.8% (CPI) (2008); Labor force: 523.5 million (2008 est.); Main industries includes: textiles, chemicals, food processing, steel, transportation equipment, cement, mining, petroleum, machinery, software; Revenue: \$153.5 billion (2008 est.; wikipedia.org/wiki/Economy\_of\_India). According to the World Trade Statistics of the WTO (2006), India's total merchandise trade (exports and imports) was valued at \$294 billion in 2006 and India's services trade inclusive of export and import was \$143 billion. India's global economic engagement in 2006 covering both merchandise and services trade was of the order of \$437 billion, up by a record 72% from a level of \$253 billion in 2004.

## OUTSOURCING

Outsourcing non-core business processes and competencies to a third party gives the organization better focus and control on their core competences, which will lead to increase the overall profitability of their business (Aldarrab et.al, 2006). During the early century the tax has been collected with the other party which has gained other application giving birth to the outsourcing process in business in late nineties. The corporate are looking for the reduction of the cost as the competitive advantage through reducing business activities. This concern about the cost through business activities and adopted change in action related to the business activities has created the platform for BPO service providers to proliferate and grow attaining service excellence based on cost reduction and adding value. This resulted the vertically integrated and self-sufficient corporations were achieved by managers who reevaluated the core functions of the organization (Mullin, 1996). Later, to improve the business process and to increase the profitability the corporate firms bring the operational excellence to provide better services achieving quality, efficiency with cost benefits to the clients.

Outsourcing can be done for various reasons achieving results with support activities, business transformation, develop capabilities, developing competitiveness, developing core competencies, gaining competitive advantage, improving cash flow, improving operations, increasing sales, increasing shareholder value, innovation, overcoming lack of internal capabilities, service excellence, reduce capital investment, reducing costs, reducing inventory, operational excellence, adding value etc.

## SERVICES OUTSOURCING

Service sector in India is considered one of the biggest sectors to attract foreign investment through attracting corporations to offshore the services to the country. Also with the revolution of telecommunication infrastructure and education system in the country creating skilled workforce in large as well as the high quality level in speaking multilingual languages with good command over English made the companies to offshore their non core competencies to Indian firms and ideal choice to outsource. Indian Outsourcing services firms are not only restricting themselves to one area of handling consumer queries but also involved in clinical research, analysis, case management, customer care service, data processing, business transaction, accounts management, financial management, assets management, form processing services, insurance, medical, product research, market research, policy issuance, policy management, auditing, promotion, risk assessment, sales management, survey, animation, screening, market development etc.

BPO industry in India is considered as process partners, catering extensively and valuable services to it business client's mostly in western countries having large and small operation. Business Process Outsourcing (BPO) expenditure is likely to grow by 10 per cent a year from \$140 billion in 2005 to over \$220 billion by 2010 worldwide including IT outsourcing (Source: Logica CMG study). The sector has been grown tremendously with the start of the new millennium with the capturing of large market share and extensively enlarged in size and capacity offering services to both domestic and international business. With the boom in Information technology and communication revolution which enhanced the growth stage with respect to resources, cost efficiency and technology. Matching with the IT and communication infrastructure BPO industry in India plays a catalyst role for service export and contribute high to annual revenue growth both from domestic and international market. This fast growth also led the sector to emerge as one of the key investment market in the country. India's share of the global offshore outsourcing market for software and back-office services is 44%. According to the NASSCOM, India's IT, software, services exports worth \$17.2bn in the year ended March 2005, a rise of 34.5% over the previous year. A further expansion of 30% in exports is predicted in the coming year, to reach \$22.5bn. The US accounts for 68% of Indian exports.

Business process outsourcing (BPO) is a broadly defined as getting support from the external entity for getting process done. BPO differentiates itself by either application of new method or putting in new technology to improve process. The motivational factor which works behind the main idea can be: factor cost advantage, economy of scale, business risk mitigation, superior competency, utilization improvement etc. Outsourcing in India started with the development of software industries (Bhowmik, 2004). With the initiation of various multi million projects by various state to establish and develop the software industry especially in states like Karnataka and Andhra Pradesh etc. has lead India to achieve new targets capturing market share around the world. With the advantage, India on comparative cost advantage production, Indian industries especially dealing with IT and its application has gained well status in the national and international market. With the added advantage of low cost labor availability and skilled professionals in large number has added the cutting edge to the software industry. India is hoping to enlarge this sector in the future with highly skilled and well developed infrastructure. Business to business outsourcing to India in the area of IT, customer service, legal, supply etc is increasingly becoming strategic choice of the companies searching for competitive advantage with reduced cost. The government at both central and state level are focusing on the various area and possible ways to support the sector with the developing infrastructure and political and trade relation with other counties.

## CHALLENGES FOR BPO IN INDIA

With the tremendous growth in Information Technology, communication and infrastructure, established business process (IT) outsourcing sector in India faces several challenges. These challenges need to be understood and should be analyzed to implement the solution to overcome its complication and order of magnitude which will avert India to attain the leading position in the global ranking of outsourcing industry. Reengineering of the off-shoring business with the change in the operation system and business model has becomes the common trend in the sector. Changing business processes is the goal to keep the country in its leading position, though it is considered as a difficult and a time-consuming job (Aldarrab et.al, 2006)

In future, India may face various challenges, including: Skilled workers: The off-shoring IT BPO industry are now taking technical graduate who are currently undergoing college training or are just graduates. Indian IT-BPO may face predictable shortage in the next few decades. Secondly, Cost of service: with the development the cost of services are increasing which will support the competitor within Asia to extract market share which was previously enjoyed by the Indian BPO industry. Thirdly, with the incremental growth in the clients requirement the infrastructure need will be more which can create problems of space availability to companies operating in metros. Other cities need to create with well developed infrastructure to support the incoming business.

Challenges that Indian BPO may face in the future and need to be analyzed with great concern are: Indian BPO with large concentration of firm makes difficult entry to the sector. The new entrants look for niche market and expose slowly with the potential which needs huge investment and time. Undeveloped infrastructure in the cities leads the companies to move to metro which provide limited space to expand and grow. Lack of specialized human resource most of them engaged in other technical area for which the firm faces regular turnover leading to low efficiency and low productivity.

Low-cost outsourcing from other countries exerts downward push on costs which leads the Indian BPO to loose market share. Rising global competition also exert high pressure on Indian BPO industry. China, Malaysia, Singapore and other Asian countries are growing in terms of BPO market share. Lack of research and development in BPO industry restrict innovation and development. The business clients are looking for regular innovation in services increasing efficiency and reducing cost which will lack without research in the area.

Other challenges that Indian BPO sector can face in the future are:

1. Benchmarks: Benchmarking within the policies is not yet taken as corporate culture in the BPO service in India which needs to be developed.
2. Brand equity: Attracting talents with specialization is the biggest problem due to the fact the people still consider BPO job as low profile.
3. Demanded results from outsourcing partners based on parameters like quality, timeliness, information security, business continuity and disaster recovery are regularly changing.
4. Training: Lack of specialization in the employee and clarity on skill and no standard curriculum which could fulfill the need intense designed training program etc.
5. India's outsourcing sector is heavily dependent on external market for business. In the present situation, economic slowdown has acted as a drawback for the industry. Such other factors may challenge the industry due to dependency of the sector.

**BPO SERVICE PROVIDERS IN INDIA**

According to a survey ranking is terms of revenues generated and other parameters like Employee Size (Operation level executives), Percentage of last salary hike, Cost to company, Overall Satisfaction Score, Composite Satisfaction, Organizational Culture, Job Content, Growth, Training, Salary and Compensation, Appraisal System, People, etc on the BPO companies in 2003-04 done by NASSCOM the list of BPO companies in India are: WNS Group, Wipro Spectramind, Daksh e-Services, Convergys, HCL Technologies, Zenta, ICICI Onesource, MphasiS, EXL, Tracmail, GTL Ltd.

Advantage of Indian outsourcing industry can be well taken into consideration which provides the clear idea behind the development as super power creating India as target destination for multinationals to back end their operations. Annually, India produce large number of English speaking professional which will act as base, adding to the workforce pool ready for taking assignment which are absorbed by the IT companies supporting the industry framework for the outsourcing process. Besides this, India acts as the cost advantage country when compared to the international market. Cost benefits, both to the companies and the BPO will give soothing platform for long term alliance between the companies. Providing the high quality service to the customer through innovation and speedy solution will add as advantage. Infrastructure availability and government support in terms of policies and development has motivated the Indian BPO companies to venture abroad and capture the major market share in the international scenario. Some of the major supportive and non supportive factors which affect the Indian BPO are:

Key factors/ development factors	Supportive factors	Non supportive factors
Responsiveness	<ul style="list-style-type: none"> <li>• High cultural responsiveness</li> <li>• Strong reputation for technical and strategic fit</li> <li>• Developed high specialized capabilities</li> </ul>	<ul style="list-style-type: none"> <li>• Technological adaptability</li> <li>• Culturally less adaptive to other Asian countries ( China &amp; Japan)</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li>• Capacity building</li> <li>• Infrastructure development</li> <li>• Other supportive infrastructure availability</li> </ul>	<ul style="list-style-type: none"> <li>• Availability of land and developed technological centre for the industry</li> <li>• Lack of development infrastructure for immediate achievement</li> </ul>
Human Resource	<ul style="list-style-type: none"> <li>• Technical development and supportive education system</li> <li>• Language proficiency</li> <li>• Adequate and talented IT skilled professional</li> </ul>	<ul style="list-style-type: none"> <li>• High turnover</li> <li>• Low penetration of skilled professionals</li> <li>• Lack of innovative capacities</li> <li>• In spite of large workforce pool, supply is slow.</li> </ul>
Cost	<ul style="list-style-type: none"> <li>• Favorable labor cost</li> <li>• Large skilled manpower</li> </ul>	<ul style="list-style-type: none"> <li>• Retention issues</li> <li>• Development cost</li> </ul>
Location attractiveness	<ul style="list-style-type: none"> <li>• Time zone advantage</li> <li>• Networking</li> <li>• Location favorable</li> </ul>	<ul style="list-style-type: none"> <li>• Competition within the region</li> <li>• Low absorption</li> <li>• Low retaining capabilities</li> </ul>

**FUTURE OUTSOURCING TRENDS WORLDWIDE**

1. Control will become the major issue as clients will design the requirement
2. Creation of multi-polar world as more competitors from different countries will exist.
3. Environmental risk factors will frequently occur which sometimes leads to downturn.
4. India will be leading in Services with a advantage in English language and cost factor
5. Indian companies will face stiff competition from other counties in Asia and likely to provide specialized services with minimal risk and cost.
6. Interlinking of the supply chains create stability and put pressure.
7. Outsourcing expenditure will continuously increase due to the regular technological and innovation requirement.
8. South Asian countries will transform the global economy through service and development. Shift in basic skills, costs and processes to domain knowledge and other knowledge will shape the economies.
9. Technological power will shift from the West to the East
10. Competition among larger firms for market share

**OPPORTUNITIES FOR INDIAN BPO SECTOR**

With the increasing competition within the South Eastern region has pressurized the Indian BPO to look for alternative areas. Knowledge Process Outsourcing (KPO) has been exhibited as the major area on which Indian BPO are looking sharply to capture the opportunities. Some of these knowledge domain areas are:

**1. RESEARCH AND DEVELOPMENT**

- Product Innovation – Various multinational companies both in manufacturing and service sector are investing large amount on product development and innovation process which open potential market for Indian service industry.

- Co-development - Indian service industry has the opportunity to link with various multinational organizations for co-development of product and services to commercialize compounds they develop together. Some of these areas are; pharmaceuticals, clinical trials and research testing

**2. ENGINEERING OUTSOURCING**

India has the opportunity to provide high-quality engineering services to MNC's in the fields of: asset management, automation, design, engineering, process engineering, software development etc.

**3. ACCOUNTING SERVICES**

With the capability of developing high standard accounting system in India the firm in India provides accounting service like financial analysis, stock market view, etc.

**4. MANAGEMENT SERVICES**

Indian service sector with high potential of large-value addition and can offer management services for IT, operations, IT based security etc.

**5. INFRASTRUCTURE MANAGEMENT**

The growth of Indian economy in all sectors has created added advantage for many projects. Infrastructure for manufacturing, service and other sectors need to be developed to greater extends to improve overall productivity.

**6. LEGAL OUTSOURCING**

India with high potential of legal lawyer specialized in various area with the proficiency in English and exposure to different countries legal system are capable to support the multi national for legal support like patents, entry and exit regulation, strategic alliance, networking, etc.

7. Other fields include animation, Education, film, Financial Research, web designing, medical writing: publishing, training, Biotechnology, Nanotechnology, automation and many others.

The outsourcing industry in India offers the greatest potential to grow and expand in different sector supporting the main industry. These sectors can be identified as:

- Customer interaction and support
- Finance and accounting services
- Human resources support services
- Technological process development
- Information systems outsourcing and systems integration
- IT services and development
- Knowledge service
- Software application development

SWOT analysis of Indian BPO sector:

<p><b>Strength</b></p> <ul style="list-style-type: none"> <li>• Cost advantage</li> <li>• Strong education and training</li> <li>• Process development</li> <li>• Established reputation of firms</li> <li>• Large export market</li> <li>• Quality focus</li> <li>• Skilled workforce</li> <li>• Expertise in new technologies</li> <li>• Entrepreneurship</li> <li>• Technical innovations</li> <li>• Reverse brain drain</li> <li>• Existing corporate relationships</li> <li>• Global branding</li> <li>• Attractive offerings</li> <li>• Speedy expansion</li> <li>• Growth in domestic</li> <li>• Quality software development.</li> <li>• English language proficiency</li> <li>• Internal Support</li> <li>• Financial support</li> <li>• Factor Cost Advantage</li> <li>• Economy of Scale</li> <li>• Business Risk Mitigation</li> <li>• Superior Competency</li> <li>• Utilization Improvement</li> <li>• Technical Support Services</li> <li>• Insurance Processing</li> <li>• Networking</li> <li>• Highly developed telecommunication</li> <li>• Developed transport system</li> </ul>	<p><b>Weakness</b></p> <ul style="list-style-type: none"> <li>• Brand management</li> <li>• Infrastructure</li> <li>• Cultural differences</li> <li>• Marketing &amp; Sales</li> <li>• Education</li> <li>• Business process</li> <li>• Distance from US</li> <li>• Uncertainty</li> <li>• Slower Legal system</li> <li>• Lack of globalization skills</li> <li>• Internal competition</li> <li>• Over-promise / Under-deliver</li> <li>• Regional geopolitical uncertainty</li> <li>• Rising labor costs</li> <li>• Competition from other countries</li> <li>• Policies</li> <li>• Corruption</li> <li>• Positioning</li> <li>• Benchmarking</li> <li>• Delivery system</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Changing Regulation</li> <li>• Commercial terms</li> <li>• Global destination</li> <li>• Developed partner</li> <li>• Developed Patent system</li> <li>• Developing communication facilities and Developing analytical systems</li> <li>• Improved Licensing system</li> <li>• Increasing off-shore market</li> <li>• Increasing population of skilled workers</li> <li>• Innovative processes</li> <li>• Low cost economies</li> <li>• Lower costs technology availability</li> <li>• Political scenario</li> <li>• Research and development</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Costs of finance</li> <li>• Costs of utilities like power</li> <li>• Credibility loss</li> <li>• Dual exchange rates Competition form other Countries</li> <li>• Government subsidies and taxes</li> <li>• Price wars</li> <li>• Quality standards,</li> <li>• Understanding of the intricacies of global regulatory requirements</li> <li>• Unhealthy competition</li> <li>• Unorganized international partners Relationship and service</li> </ul>

Indian BPO industry contribute large percentage share of total \$ 5.7 billion in 2005 with the growth of 44.4% has been estimated in 2005. Growth of BPO sector has also favored due to security practices and under laid developed trust based on standardization and quality measures being used during the years.

Indian BPO industry has achieved to gain major market share through transforming the process and developing cutting edge on: 1) cost 2) Information quality standard and security 3) process innovation act as fundamental thrust which supported transformation process and service pillars. The series of activities based on improving efficiency and effectiveness, productivity and system improvement and transformation is achieved with business process metrics being initiated. This spectrum leads to stable, secured, scalable and flexible process management which add value to the client and capable of changing based on environment change situation.

The initiative of performance and productivity based process transformation has been drilled by several operational parameters initiated at global business process centre. This initiative has accrued to standardization and process handling enabling ability to consider alternatives and transformation.

### INNOVATIVE DELIVERY BY INDIAN BPO INDUSTRY

Indian BPO providers have gained market share through innovative service delivery through various key leverages:

- 1) Business Process Reengineering: Service providers evaluate the business client processes with a view to provide value rather than performed repeated steps and functions which restrict efficiency and productivity. The benchmarking process will support and provide the measures and scale within them. This process of reengineering will be formed to reduce errors and cost of overall process.
- 2) Cost: The key reason for the Indian BPO firms to attract larger business community is due to the cost reduction. Low technology cost, information security cost, automation etc has benefited clients through remarkable cost saving which previously marked as huge investment. Clients have obtained far larger benefits beyond cost is the achievement of productivity in spite of low cost. Some of them are due to large volume and improved process system.
- 3) Value creation: Reducing end user complain, differentiated service, cost reduction, error reduction, improved and accurate system process has developed creation of value to its clients.

Strategies for improving the BPO industry

- Allows executives to better manage resources
- Creates an improved and consistent participant experience
- Creating improved business process system
- Developing and implementing competency frameworks
- Efficient utilization of capacity
- Enables HR to focus on core product and development strategies
- Enhances data security
- Enhancing internal efficiencies through process improvement
- Improve performance, increase delivery and Reduce transaction costs
- Improves audit and compliance procedures
- Business value-addition of its function
- Performance-linkage and tenure track system adoption
- Recognition and Flexible system approach
- Setting up new facilities

### CONCLUSION

The regular innovative service delivery at fundamental level by the BPO business need to be put forward to gain market revenue and to deliver improved value. The BPO service improvement in India through innovation can be represented in different views: Client centric view; Business centric view; Customer centric view. With the opening of the Indian economy with dynamic and flexible policy decision which brings the macroeconomic reforms serving to achieve a stabilized economy and shed the foreign exchange crises increasing the foreign reserve to stabilize the market and consequently increasing the development of financial market and export. The sector with the concern about the cost through business activities and adopted change in action related to the business activities has created the platform for BPO service providers to proliferate and grow attaining service excellence based on cost reduction and adding value.

Indian BPO may face challenges in the future and need to be analyzed with great concern with large concentration of firm, entry barriers to the sector, market concentration and requirement if investment and time. Undeveloped infrastructure, lack of specialized human resource with provides limited scope to expand and grow in other technical area for which the firm faces regular challenge. Advantages of Indian outsourcing industry as target destination for multinationals to back end their operations. The paper elaborates the strength and weakness as internal factor and various opportunities to build on with innovation delivery.

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**DETERMINANT FACTORS THAT ATTRACT INTERNATIONAL TOURISTS TO VISIT ETHIOPIA**

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**ABSTRACT**

The main purpose of this study is to identify the most important and significant variables/ dimensions, factors and facilities that attract tourists to visit Ethiopia and determine their level of satisfaction. The study analyses the responses of international tourists visiting Ethiopia. They were asked to identify the most significant variables /dimensions or attributes/facilities that determine their level of satisfaction. The most significant variables such as airport dimensions, hotel facilities, and services experiences dimensions, pull and push motivational factors were identified. The data collected from 300 tourists visited Ethiopia were analyzed using appropriate statistical tools such as independent t-test, One-way ANOVA, a stepwise multiple regression analysis, factor analysis and descriptive statistics. Tourism marketers and policy makers are provided with the information related to significant dimensions and variables that will determine the level of satisfaction. Thus; they may be focused to most significant variables rather than many insignificant variables that may not have a significant impact on the level of satisfaction. This enables the tourism stakeholders to develop appropriate strategy in tourism marketing which in turn will enable the country to generate more foreign currency and attract more number of tourists into the country.

**KEYWORDS**

Dimensions, quality, Motivation, Ethiopia, Satisfaction, Destination, Tourism, Tourists

**INTRODUCTION**

Although marketing is a new field of academic study as compared to such fields as chemistry and philosophy, marketing is not a new human activity. After all, people have always produced surplus goods or services that they wanted to barter or sell. To do so they first needed to find someone willing to make the exchange. The practice of marketing simply takes this basic human behavior and plans its strategic implementation.

Tourism is also a field of academic study, but it too is an activity with a long history. After all, people traveling to visit other places are not a recent phenomenon. As early as the religious pilgrimages of the Middle Ages, seeing the sites was always a part of the reason for undertaking a trip.

According to Robert and Joy (2001), "Tourism encompasses all short term movement of people away from their place of residence including that undertaken for business, holiday/pleasure and visiting friends and relatives". Tourism is travel and temporary stay involving at least one night away from the region of a person's usual domicile which is undertaken with the major expectation of satisfying leisure, pleasure, or recreational needs which are perceived as being better able to be satisfied than in the region of their domicile. "Tourism comprises "the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes" (WTO, 1985).

Jha (2006) has indicated the following definition for tourism: "Tourism is the totality of the relationship and phenomenon arising from the travel and stay of strangers, provided the stay does not imply the establishment of a permanent residence and is not connected with the remunerated activities." "Tourism is an activity involving a complex mixture of material and psychological elements. The material ones are accommodations, transportation, the attractions and entertainment available. The psychological factors include a wide spectrum of attitudes and expectations." "Tourism is a study of the demand for the supply of accommodation and supportive services for those staying away from home and the resultant patterns of expenditure, income creation and employment."

"Tourism is the sum total of operations mainly of economic nature, which directly relate to the entry, stay and movement of foreigners, inside and outside a certain country, city or origin." Tourism is a composite industry. It consists of various segments which can produce a wide range of products and services."

Burkhardt and Medlik (1981) opined that tourism marketing activities are systematic and co-coordinated efforts extended by national tourist organizations and or tourist enterprises or international, national and local levels to optimize the satisfaction of tourist groups and individuals in view of sustained tourism growth. Krippendorff (1987) defined marketing in tourism is to be understood as a systematic and co-coordinated execution of business policy by tourist undertakings whether private or state-owned at local, regional, national or international levels to achieve the optional satisfaction of the needs of identifiable consumer groups and in doing so achieves an appropriate return. In view of the foresaid definitions, the following points emerge:

- Tourism marketing is an integrated effort to satisfy tourists by making available to them the best possible services.
- It is a device demand to transform the potential tourists into actual tourists.
- It is the safest way to generate demand and expand market.
- It is also supposed to be an effort to make possible harmony between the social interests and interactions of tourist organizations.
- It is an approach to promote business and to feed the organizations necessary information's for framing and revamping the marketing Decisions.

The marketing of tourism is simply applying the appropriate marketing concepts to planning a strategy to attract visitors to, a destination, whether resort, city, region, or country. While there are many definitions of marketing, the definition of marketing used by the American marketing association on their website, [www.marketingpower.com](http://www.marketingpower.com) perhaps defines marketing best "the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational goals."

Tourism is considered to be an economic bonanza. It is a multi-segment industry. Tourism has the following positive economic effects:

- Generates national income
- Expands employment opportunities
- Raises tax revenues
- Generates foreign exchanges
- Transforms regional economy

The definition describes marketing as an exchange that satisfies both the individual (the visitor) and the organization (in this case, the different destinations and the country).

Unfortunately marketing is sometimes misunderstood as only selling a destination convincing the tourist to visit even if they really don't want to come. While selling is an important part of promotion, there would be no long-term gain for a destination to focus only on convincing people to visit without first making sure the destination offers the experience they desire. Even if a destination or a country used high-pressure sales techniques to convince tourists to visit, this would be a short-sighted strategy because tourism success relies on repeat visitors. A tourist swayed by a sales pitch that paints an unrealistic picture of what this destination has to offer would most likely be unhappy with the experience and not visit again. The definition states that the marketing exchange should also meet the needs of both the destination and those who live there. The destination has a mission to provide for the needs of its host communities, including maintaining the infrastructure, providing for public safety, and encouraging economic development. Therefore, developing the site as a tourist destination should be undertaken only if the economic benefits tourism can provide include increasing tax revenue so that more money is available for infrastructure maintenance, attracting visitors who may someday relocate to the destination, and providing economic development through attracting new businesses.

Studies of consumer behavior emphasizes that customer satisfaction is a major issues in post-purchase period (Westbrook and Oliver, 1991). Oliver (1981) defined customer satisfaction as a customer's emotional response to the use of a product or service. However, it is more likely that the customer satisfaction is a complex human process that involves cognitive and affective processes as well as other psychological and physiological influences (Oh and Parks, 1997).

A traditional definition of customer satisfaction followed the disconfirmation paradigm of consumer satisfaction/dissatisfaction (CS/D), suggesting the CS/D is the result of interaction between the consumer's pre-purchase expectations and post purchase evaluation (Berkman and Gilson, 1986; Engel et al, 1990; Handy, 1997). Anton (1996) gave a more contemporary approach and defined customer satisfaction as a state of mind in which the customer's needs, wants and expectations throughout the product or service life have been met or exceeded, resulting in subsequent repurchase and loyalty. Nevertheless, some resources support the notion that satisfaction can be measured from a perspective of performance evaluations, making the inclusion of the disconfirmation process unnecessary (Churchill and Taylor, 1992; Olshavsky and Miller, 1972). Choi and Chu (2000) identified traveler's perceptions of 33 hotel attributes. These factors were factor –analyzed using principal component analysis with orthogonal Varimax rotation to identify the underlying dimensions or hotel factors that explained the variance in the attributes. From the Varimax rotated factor matrix, seven factors were extracted from the original 3 variables.

Motivation is defined as forces that influence and predispose to a specific behavior (Dann, 1981; Pearce, 1982). In tourism research, a perception is the image of a tourist destination that makes effective the behavior intentions (Gnoth, 1997). Baloglu and McCleary (1999) state that perceptions about the destination are a function of internal motivations (push motives) and external motivations (pull motives). Each tourist has his/her own internal and external motivations to travel which lead to different perceptions about a tourist destination.

Founded on Crompton's (1979) push-pull motive model and supported by the literature review, the present study proposes an integrated approach to understanding the motivations of tourists in relation to the underlying associations between push and pull motives and their contributions to the perception of the tourist destination as a whole.

Motivation is the need that drives an individual to act in a certain way to achieve the desired satisfaction (Beerli and Marti'n, 2004). Many different reasons and motives compel people to travel. These forces are perceived as being able to decrease the condition of tension felt by the individual. The state of tension then gives way to the necessity that encourages an action or attitude (Fodness, 1994). Although the decision to satisfy needs may rely on other psychological variables, in reality, all human behavior is motivated (Crompton, 1979). Most studies looking to explain the tourist decision are based on the expectancy Value theory (Fishbein, 1967). This theory defines expectation as the probability that a certain attitude will lead to positive or negative benefits, thus allowing the isolation of determining factors of behavior and, furthermore, specifying how expectations and values can be combined in order for choices to be made. The possibilities for combining expectation with value are numerous. The motivation for adopting a certain form of behavior is determined by the value and by the expectation for each benefit. The greater or lesser tendency to adopt certain behavior depends on expectations and the consequent value of these attitudes for the individual.

## METHODS

The survey undertaken has identified three target groups. To realize the objectives of the study both secondary and primary sources were used. The secondary sources include magazines, Brochures, newspapers, articles; statistical bulletins, websites etc. were used. When it comes to primary data three types of questionnaires targeting three respondent groups were used which will be further explained below.

The first respondent group consisted of international travelers who visited Ethiopia and all were 18 years and above. An international tourist other than transit tourists who stayed in the selected hotels or guest houses were asked to fill the questionnaire by the front desk manager in charge and receptionist staffs depending on their convenience.

A questionnaire containing various sections was developed and tested on 10 three to five star hotels on 60 tourists in total 6 from each hotel. Based on the response and comments given from the respondents, necessary adjustments were made on the wording, phrasing, sequencing as well as other issues related to those questions. Based on the feedback given from sample tests and making all the necessary adjustments to the point of certain omissions or deletions, the final questionnaire was developed.

The questionnaire tried to solicit answers for various variables/dimensions motivating tourists to visit Ethiopia, factors that helped the tourist to decide to visit Ethiopia, level of destination attractiveness, detrimental factors for destination loyalty, identification of most valued market segments, and evaluation of various infrastructural facilities available, quality of experiences and services and role of marketing intermediaries to meet the needs of tourists.

The developed questionnaire was distributed to 4 government hotels, 4 private hotels, 4 guest houses, where tourist traffic is quite high based on recommendations from the hotel industry relevant personnel's and 11 actively performing travel and tour operators. The number of copies distributed to all hotels and guest houses was 480 (12x40) and 220 copies (11x 20) to actively performing travel and tour operators. Out of the 700 hundred copies 350 copies were returned, however, during editing; only 300 copies were found valid / usable for analysis.

Although, the nominal response rate was 50 % (350/ 700) the actual response rate turned out to be 43% (300/700). Since the number of questionnaires distributed in total was 700 where as the actual number of usable questionnaires were only 300 copies the actual response rate was pushed down to 43 % (300/700).

Once the data's were collected, then the questionnaires were edited, coded, entered and processed using SPSS. During analysis both descriptive and inferential statistics methods were used, wherever they were deemed appropriate. The inferential methods used for the purpose of analysis in testing the hypothesis included independent T-test, one way – ANOVA, stepwise multiple regressions analysis and factor analysis. From the descriptive statistics, descriptive, frequency tables, ranking methods, bar charts, simple line graphs etc; were used.

## DATA ANALYSIS AND INTERPRETATIONS

In line with the above objectives, the following null hypothesis were developed or formulated to be tested using appropriate statistical tools such as independent t-test, One-way ANOVA, a stepwise multiple regression analysis, factor analysis and descriptive statistics.

Before discussing the hypothesis of the study sample profile of international tourists are compiled below.

- **Gender profile of international tourists:** 69% of the foreign tourists who visited Ethiopia were Male and 31% female.
- **Age Group Profile of International Tourists:** The Tourists were grouped among Six-age groups. The highest age group of tourist (35%) was 30-39 age groups while the least age group 69 years and above accounted 3 %.
- **Marital Status Profile of International Tourists:** The tourists were also classified into four groups on the basis of their marital status. The survey reveals that a 43 % foreign tourists visiting Ethiopia were married while 5% of the tourists were widows.
- **Income Profile of International Tourists:** The tourists were distributed by their annual income into five categories. The survey revealed that 30 % of the tourists earn < \$ 20, 000 USD while 12% earn > \$ 50,000 USD annually.
- **Education profile of international Tourists:** The tourists were also classified into three categories on the basis of the highest Educational level attained. 52 % of the tourists constituted Graduates and 23% accounted for post graduates.
- **Occupation Profile of international Tourists:** Classification of tourists was made into six groups according to their occupational status. Services constituted 43 % of the tourists while 3% accounted for housewives.

## HYPOTHESIS TESTING

Based on the purpose of this study hypothesis are reiterated below and then the results of the appropriate statistical analysis for testing them are reported.

### DEMOGRAPHIC CHARACTERISTICS VS. OVERALL SATISFACTION

To assess the internal reliability of the factor identified a Cronbach's alpha coefficient was calculated before testing each hypothesis in line with objectives. The results for all question showed that the alpha coefficients for all the variables were found above the minimum value of 0.50 considered as acceptable.

**H1:** There is no significant mean response difference in the overall satisfaction of tourists in terms of tourists' demographic characteristics, such as gender, age, education level, and total household incomes and occupation.

Two-tailed Independent sample t-test and One-Way ANOVA results of the mean difference of overall satisfaction by socio- demographic Characteristics of the respondents.

**TABLE 1: MEAN DIFFERENCE OF OVERALL SATISFACTION BY DEMOGRAPHIC CHARACTERISTICS**

S/NO	Variable	Independent T-test		One way-ANOVA	
		t-value	Sig. (2-tailed)	F-value	sig
I	<b>Gender</b>	1.185	.239		
	Male				
	Female				
II	<b>Age(years)</b>			9.005	.000
	"18-29"				
	30-39				
	"40-49"				
	"50-59"				
	"60-69"				
	">69 +"				
III	<b>Marital status</b>			28.816	.000
	Married				
	Divorced				
	Single				
	Widow				
IV	<b>Income</b>			13.960	.000
	"<\$20,000"				
	"\$20,000"-\$29,000"				
	"\$30,000-\$39,000"				
	"\$40,000-\$49,000"				
	"\$>\$50,000"				
V	<b>Education levels</b>			3.230	.041
	Undergraduate				
	Graduate				
	Post graduate				
VI	<b>Occupation</b>			24.270	.000
	Services				
	Professional				
	Self-employed				
	Clerk				
	House wives				
	Student				

According to Field (2005) and Nandagopal et al. (2007), when the "Levene's Test for Equality of Variances" significance level is greater than  $p > 0.05$ , "equal variances assumed" is opted, otherwise, "equal variances not assumed" is considered for testing mean differences at 95% confidence interval. For this study, this decision rule is used.

In line with the above explanation, Table 1 illustrates the two-tailed independent t-test and one-way ANOVA results of the mean difference of overall satisfaction by the demographic characteristics of the respondents.

- The t-test result indicated that there was no significant difference in the overall satisfaction of the respondents by gender only. The sig value is *greater than 0.05*. Thus, the null hypothesis could be rejected for the gender categorical variable only.
- The one-way ANOVA test result explained by age, marital status, income, and education level and occupation category indicated that, the significance value associated with the F-test for equality of means is *less than 0.05*. Thus, the null hypothesis could be accepted for age, marital status, income, and education level and occupation categories.

#### TRAVEL BEHAVIORS VS. OVERALL SATISFACTION

**H2:** There is no significant mean response difference in the overall satisfaction of tourists in terms of tourists' travel behaviors such as past experience, decision time to travel, Duration of advance booking, length of stay, membership in a group, etc.

TABLE 2: MEAN DIFFERENCE OF OVERALL SATISFACTION BY TRAVEL BEHAVIOR

S/NO	Variable	One-way ANOVA	
		F-value	Sig
I	<b>Advance Decision to Visit Ethiopia</b>	84.672	.000
	2 weeks		
	4 weeks		
	5-8 weeks		
	9-12 weeks		
	13-20 weeks		
II	<b>Duration of Advance Booking</b>	12.931	.000
	"1 week"		
	" 2 weeks "		
	"3 weeks"		
	"4 weeks"		
	"5-8 weeks"		
	"9-12 weeks"		
	" > 20 weeks "		
III.	<b>Travel arrangement</b>	24.589	.000
	Independent		
	Group tour		
IV	<b>Size of Travel Group</b>	15.725	.000
	Alone		
	1-3		
	4-7		
	8 -10		
	18-20		
	>20		
V	<b>Length of Stay (Days)</b>	6.726	.000
	<=3 days		
	10-16 days		
	17-29 days		
	>60 days		
VI	<b>Number of Previous Visits</b>	31.186	.000
	Not visited earlier		
	Visited once		
	Visited 2 times		
	Visited 3 times		
	Visited 4 times		
	Visited > 5 times		
VII	<b>Potential for Revisiting</b>	12.133	.000
	Would like to visit again		
	Would advise others to visit		
VIII	<b>Purpose of Visiting</b>	3.172	.014
	Business		
	Conference		
	Vacation		
	Visiting relatives & friends		
	Not stated		

Table 2 illustrates the one-way ANOVA results of the mean difference of overall satisfaction by the travel behavior of the respondents. The one-way ANOVA test result indicated that there was no significant difference in the overall satisfaction of the respondents by advance decision to visit Ethiopia, duration of advance booking, travel arrangement, size of travel group, length of stay ( days), number of previous visits, potential for revisiting and purpose of visiting. The significance value associated with the F-test for equality of means for all categories is less than 0.05. Thus, the null hypothesis could be accepted for all categories.

**AIRPORT FACILITIES/DIMENSIONS**

**H3: Airport facilities /dimensions are not significant driver's of tourists overall satisfaction.**

To test this hypothesis, the stepwise multiple regression analysis has been used.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \dots + \beta_k X_k + e_i$$

Where,

Y= tourist overall satisfaction

X<sub>i</sub> = airport facilities

β<sub>i</sub> = slope of the line and

e<sub>i</sub> = error term associated with the i<sup>th</sup> observation.

The stepwise multiple regression outputs are analyzed as follows:

TABLE 3A) DIMENSIONS OF AIRPORT FACILITIES (MODEL SUMMARY)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
14	.891(n)	.794	.787	.36571

\* (Alpha = .9203)

Researchers reported that an item is considered statistically reliable for a pioneer explanatory study when Cronbach’s alpha coefficient is greater than 0.50 (Kusku, 2003; Nunnally, 1967). This decision rule is applied for this study. The Alpha coefficient (0.9203) for dimensions of airport facilities is reliable, i.e., it exceeds the 0.5 threshold recommended. The value of R= .891 shows a strong relationship between airport facilities/ dimensions and overall satisfaction level of tourists. The value of R<sup>2</sup>=.794 explains that 79.4 % of the variation is explained and 20.6 % remained unexplained. In behavioral statistics, an R<sup>2</sup> of between 0.50 and 0.60 is considered as an acceptable (LEWIS, 1985). Thus, the predictive ability of the model is high.

TABLE 3B) DIMENSIONS OF AIRPORT FACILITIES (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
14	Regression	138.934	10	13.893	<b>103.883</b>	<b>.000(n)</b>
	Residual	35.976	269	.134		
	Total	174.911	279			

The ANOVA output table describes the overall variance accounted for in the model. It appears the 14 predictor variables are not all equal to each other and could be used to predict the dependent variable, overall satisfaction of tourists as is indicated by an extremely large F value (**103.883**) and a small significant level (.000). Moreover, the associated Sig value is less than the significance level (p<0.05). Thus, **the null hypothesis is rejected** based on the F statistics shown above.

1. TABLE 3C) DIMENSIONS OF AIRPORT FACILITIES (REGRESSION COEFFICIENTS)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
14	(Constant)	3.047	.242		12.574	.000
	General ambience	.910	.049	1.258	18.746	.000
	Check in facilities	.277	.065	.245	4.273	.000
	Airport bus services	.754	.078	.962	9.691	.000
	Money- changing facilities	.373	.063	.315	5.953	.000
	Customs clearance	.781	.097	.718	8.094	.000
	Toilets	.385	.031	.523	12.427	.000
	Refreshments stalls/cafeteria	.291	.076	.398	3.814	.000
	Luggage handling	.444	.051	.374	8.717	.000
	Information & sign boards	.469	.077	.438	6.071	.000
	Lounge	.255	.050	.325	5.057	.000

**DEPENDENT VARIABLE: OVERALL SATISFACTION LEVEL OF VISITING ETHIOPIA**

According to the stepwise multiple regression analysis, the following 10 out of the 14 airport facilities (general ambience, check in facilities, airport bus services, money- changing facilities, customs clearance, toilets, refreshments stalls/cafeteria, luggage handling, information and sign boards and lounge) are found significantly related to tourist satisfaction level on airport facilities at p< 0.05 (Table 14C). While 4 airport facilities are excluded for being less important at p > .05.

**TOURIST PERCEPTION OF HOTEL FACILITIES**

A factor analysis using principal component analysis was carried out in order to measure whether the factors claimed would be measured or was in fact, measured. Prior researchers stated that an item/statement with a factor load below 0.50 is not valid (Cattel, 1966; Fornell and Larcker, 1981); a factor load above 0.35 is sufficient for data analysis (Bruce and Colleen, 2000); and factor loadings of 0.40 or lower are not considered to be significant (Hair et al., 1998). Hence, this paper considers factor load of 0.40 and above as significant factor load for including the variable in the statistical analysis.

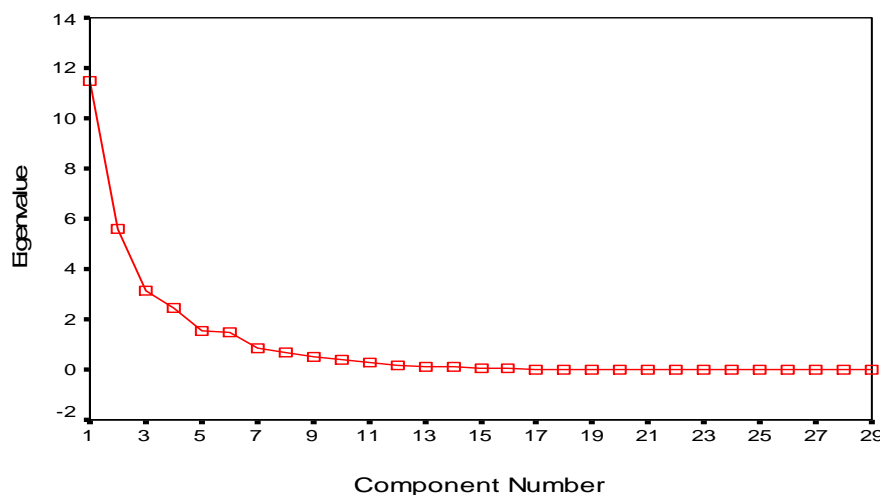
All of the above hotel facilities are significant; none of them are dropped because the rotated factor loadings are above 0.4. According to the Eigen value and variance (%) all the six components explain 88.747 % of the variance, while 11.253% of the variance is unexplained. From the six components, component 1 is found to be the most important explaining 39.533 % of the variance, while component 6 is the least important of all explaining 5.142 % of the variance.

TABLE 4: TOURIST PERCEPTION OF HOTEL FACILITIES IN ETHIOPIA

Hotel Factors	Factor Loadings	Eigen Value	Variance ( % )
<b>Component 1</b>		<b>11.464</b>	<b>39.533</b>
Staffs provide efficient services	.875		
Staffs understand your requests	.852		
Staffs are helpful	.842		
Check-in & check out are efficient	.792		
Staffs multi-lingual skills	.688		
Staffs have neat appearance	.631		
<b>Component 2</b>		<b>5.617</b>	<b>19.369</b>
Hotel provides comfortable ambience	.847		
Hotel is part of a reputable chain	.807		
Room is value for money	.763		
Safe box is available	.759		
Food & beverage are of high quality	.757		
Loud fire alarms are available	.746		
Hotel food & beverage are of value for money	.533		
<b>Component 3</b>		<b>3.13</b>	<b>10.793</b>
Secretarial services is available	.940		
Business related facilities are available	.904		
Business- related meeting rooms are available	.832		
Wake up calls is reliable	.621		
Mini bar available	.620		
<b>Component 4</b>		<b>2.476</b>	<b>8.536</b>
Valet/laundry services are comfortable	.849		
Room service is efficient	.807		
Information desk is available	.735		
Room is quiet	.683		
<b>Component 5</b>		<b>1.558</b>	<b>5.374</b>
Room is clean	.937		
In-room temperature control is of high quality	.929		
Staffs are polite & friendly	.568		
<b>Component 6</b>		<b>1.491</b>	<b>5.142</b>
International dial is available	.829		
Food & beverage facilities are of great variety	.817		
Security personnel are responsible	.557		
Bed/ mattress/ pillow are comfortable	.545		
<b>Cumulative variance (%)</b>			<b>88.747</b>

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 7 iterations.

Graph 8: Scree Plot for Perception of Hotel Attributes



The above Scree plot explains the change in variation at each factor. The Scree plot suggests in the 29 factor solution, the six components contribute a larger part of the data, while other component numbers are contributing a little in the variation as we move to the right.

**DESTINATION ATTRACTIVENESS ATTRIBUTES**

**H4: Destination attractiveness attributes/ dimensions are not significant drivers of tourists overall level of satisfaction to visit Ethiopia.**

To test this hypothesis, the stepwise multiple regression analysis has been used.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \dots + \beta_k X_k + e_i$$

Where,

Y= tourist overall satisfaction level of visiting Ethiopia

X<sub>i</sub> = destination attractiveness attributes

β<sub>i</sub> = slope of the line and

e<sub>i</sub> = error term associated with the ith observation.

The stepwise multiple regression outputs are analyzed as follows:

**TABLE 5A) DESTINATION ATTRACTIVENESS ATTRIBUTES (MODEL SUMMARY)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
20	.966(t)	.932	.929	.20944

\* (Alpha = .9203)

The Alpha coefficient (0.9203) for destination attractiveness attributes is reliable, i.e., it exceeds the 0.5 threshold recommended. The value of R= .966 shows a strong relationship between destination attractiveness attributes and overall satisfaction level of tourists. The value of R<sup>2</sup>=**.932** explains that 93.2 % of the variation is explained and 6.80 % remained unexplained. Thus, the predictive ability of the model is high.

**TABLE 5B) DESTINATION ATTRACTIVENESS ATTRIBUTES (ANOVA)**

Model		Sum of Squares	df	Mean Square	F	Sig.
20	Regression	172.415	14	12.315	280.745	.000(t)
	Residual	12.502	285	.044		
	Total	184.917	299			

The ANOVA output table describes the overall variance accounted for in the model. It appears the 14 predictor variables are not all equal to each other and could be used to predict the dependent variable, overall satisfaction of tourists as is indicated by an extremely large F value (280.745) and a small significant level (.000). Moreover, the associated Sig value is less than the significance level (p<0.05). Thus, the null hypothesis is rejected based on the F statistics shown above.

**TABLE 5C) DESTINATION ATTRACTIVENESS ATTRIBUTES (REGRESSION COEFFICIENTS)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
20	(Constant)	2.706	.207		13.089	.000
	The quality level of tourism facilities & amenities	1.258	.031	.984	40.420	.000
	Scenic beauty	.651	.040	.556	16.308	.000
	Family-oriented experiences	.858	.034	1.171	25.375	.000
	Wild life experience	1.627	.061	1.518	26.861	.000
	Adventure experience	.470	.025	.530	18.712	.000
	Accessibility to the destination	.575	.043	.509	13.278	.000
	Participation in major events/festivals	2.705	.084	2.871	32.377	.000
	Perceived safety of the destination	1.866	.060	1.856	31.323	.000
	Perceived image of the destination relative to competing destination	1.491	.054	1.465	27.412	.000
	Visits for business purposes	.246	.021	.350	11.799	.000
	Entertainment & recreational experiences	1.262	.044	1.487	28.394	.000
	Cultural experience	1.524	.065	1.835	23.274	.000
	Visits to friends & family	.621	.027	.797	22.961	.000
	Eco-tourism experiences	.423	.025	.399	16.605	.000

**Dependent Variable: overall satisfaction level of visiting Ethiopia**

According to the stepwise multiple regression, the above 14 out of the 15 destination attractiveness attributes ( the quality level of tourism facilities and amenities, family-oriented experiences, wild life experience, adventure experience, participation in major events, perceived safety of the destination, perceived image of the destination relative to competing destination, visits for business purposes, entertainment and recreational experiences, cultural experience, visits to friends and family, accessibility to the destination, eco-tourism experiences, scenic beauty) are found significantly related to tourist satisfaction level on airport facilities at p< 0.05 (Table 16C), While 1 destination attractiveness is excluded for being less important at p > .05.

**DESTINATION CHOICE PREFERENCE VARIABLES**

**H5: Destination choice preference variables are not significant drivers to make Ethiopia as a recommendable place to be visited.**

To test this hypothesis, the stepwise multiple regression analysis has been used.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \dots + \beta_k X_k + e_i$$

Where,

Y= recommended place to visit

X<sub>i</sub> = destination choice preference

β<sub>i</sub> = slope of the line and

e<sub>i</sub> = error term associated with the ith observation.

The stepwise multiple regression outputs are analyzed as follows:

**TABLE 6A) DESTINATION CHOICE PREFERENCE VARIABLES (MODEL SUMMARY)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
16	.947(p)	.898	.893	.16178

\*\*\*Alpha = .956

The Alpha coefficient (0.956) for Destination choice preference variables is reliable, i.e., it exceeds the 0.5 threshold recommended. The value of R= .947 shows a strong relationship between destination choice preference dimensions and overall satisfaction level of tourists. The value of R<sup>2</sup>=**.898** explains that 89.8 % of the variation is explained and 20.6 % remained unexplained. Thus, the predictive ability of the model is very high.

**TABLE 6B) DESTINATION CHOICE PREFERENCE VARIABLES (ANOVA)**

Model		Sum of Squares	df	Mean Square	F	Sig.
16	Regression	65.457	14	4.676	178.630	.000(p)
	Residual	7.460	285	.026		
	Total	72.917	299			

The ANOVA output table describes the overall variance accounted for in the model. It appears the 14 predictor variables are not all equal to each other and could be used to predict the dependent variable, overall satisfaction of tourists as is indicated by an extremely large F value (178.630) and a small significant level (.000).

Moreover, the associated Sig value is less than the significance level (p<0.05). Thus, the null hypothesis is rejected based on the F statistics shown above.

TABLE 6 C) DESTINATION CHOICE PREFERENCE VARIABLES (REGRESSION COEFFICIENTS)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
16	(Constant)	2.269	.127		17.886	.000
	Food	.117	.044	.170	2.657	.008
	Cost	.220	.025	.306	8.647	.000
	Scenic beauty	.517	.028	.698	18.242	.000
	Friendliness	.339	.022	.509	15.610	.000
	Entertainment	.424	.026	.707	16.576	.000
	Safety	.093	.040	.131	2.317	.021
	Climate	.421	.031	.525	13.357	.000
	Shopping	.170	.014	.321	11.757	.000
	Accommodations	.353	.033	.414	10.603	.000
	Attractions	.228	.023	.314	9.886	.000
	Culture	.180	.028	.368	6.502	.000
	Language	.102	.022	.201	4.706	.000
	Historic	.097	.023	.143	4.246	.000
	Cleanliness	.082	.020	.108	4.197	.000

**Dependent Variable: Ethiopia as a recommendable place to be visited**

According to the stepwise multiple regression, the above 11 out of the 17 Destination choice preference Variables (culture, cost, shopping, language, climate, season, attractions, accommodations, safety, food, historical sites, friendliness, entertainment, cleanliness) are found significantly related to destination loyalty/ tourist satisfaction level on destination choice preference variables at  $p < 0.05$  (Table 17C), While 5 Destination choice preference Variables are excluded for being less important at  $p > .05$ .

**PUSH AND PULL MOTIVATIONAL FACTORS TO TRAVEL**

PUSH MOTIVATIONAL FACTORS VS. OVER ALL SATISFACTION OF TOURISTS

**H6: Push motivational Factors are not significant drivers of tourist's overall level of satisfaction.**

To test this hypothesis, the stepwise multiple regression analysis has been used.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \dots + \beta_k X_k + e_i$$

Where,

Y= tourist overall satisfaction level of visiting Ethiopia

$X_i$  = push motivational factors

$\beta_i$  = slope of the line and

$e_i$  = error term associated with the  $i$ th observation.

The stepwise multiple regression outputs are analyzed as follows:

TABLE 7A) PUSH MOTIVATIONAL FACTORS (MODEL SUMMARY)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
10	.796(j)	.634	.621	.48400

\*\*\*\*\* (Alpha = .8356)

The Alpha coefficient (0.8356) for push motivational factors is reliable, i.e., it exceeds the 0.5 threshold recommended. The value of  $R = .796$  shows a strong relationship between push motivational variables / dimensions and overall satisfaction level of tourists. The value of  $R^2 = .634$  explains that 63.4 % of the variation is explained and 26.6 % remained unexplained. Thus, the predictive ability of the model is high.

TABLE 7B) PUSH MOTIVATIONAL FACTORS (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
10	Regression	117.218	10	11.722	50.039	.000(j)
	Residual	67.699	289	.234		
	Total	184.917	299			

The ANOVA output table describes the overall variance accounted for in the model. It appears the 15 predictor variables are not all equal to each other and could be used to predict the dependent variable, overall satisfaction of tourists as is indicated by an extremely large F value (50.039) and a small significant level (.000). Moreover the associated Sig value is less than the significance level ( $p < 0.05$ ). Thus, the null hypothesis is rejected based on the F statistics shown above.

TABLE 7C) PUSH MOTIVATIONAL FACTORS (REGRESSION COEFFICIENTS)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
10	(Constant)	.202	.296		.684	.495
	Enriching myself intellectually	1.030	.095	1.578	10.829	.000
	Stimulate emotions and sensations	.780	.125	1.003	6.238	.000
	Find interesting people	.657	.052	.880	12.589	.000
	Developing friendship	1.709	.189	3.525	9.021	.000
	Going places friends have not been	1.430	.170	3.144	8.398	.000
	Escape from the routine	.758	.214	.881	3.545	.000
	Have fun	.255	.077	.441	3.329	.001
	Know different cultures and lifestyles	.526	.116	.724	4.544	.000
	Do different things	.576	.174	.760	3.310	.001
	Reliving stress	.615	.209	.727	2.943	.004

**Dependent Variable: overall satisfaction level of visiting Ethiopia**

According to the stepwise multiple regression, the above 10 out of the 15 push motivational factors (enriching myself intellectually, stimulating emotions and sensations, finding interesting people, developing friendship, going to places friends have not been, escape from the routine, have fun, know different cultures and lifestyles, do different things, relieving stress) are found significantly related to tourist satisfaction level on pushes motivational factors at  $p < 0.05$  (Table 19c), While 5 push motivational factors are excluded for being less important at  $p > .05$ .



PULL MOTIVATIONAL FACTORS VS. OVERALL SATISFACTION OF TOURISTS

**H7: Pull motivational Factors are not significant drivers of tourist’s overall satisfaction.**

To test this hypothesis, the stepwise multiple regression analysis has been used.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \dots + \beta_k X_k + e_i$$

Where,

Y= tourist overall satisfaction level of visiting Ethiopia

X<sub>i</sub> = pull motivational factors

β<sub>i</sub> = slope of the line and

e<sub>i</sub> = error term associated with the ith observation.

The stepwise multiple regression outputs are analyzed as follows:

**TABLE 8A) PULL MOTIVATIONAL FACTORS (MODEL SUMMERY)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
28	.842(bb)	.709	.693	.43605

\*\*\*\* Alpha =.8701

The Alpha coefficient (0.8701) for pull motivational factors is reliable, i.e., it exceeds the 0.5 threshold recommended. The value of R= .842 shows a strong relationship between airport facilities/ dimensions and overall satisfaction level of tourists. The value of R<sup>2</sup>=.709 explains that 70.9 % of the variation is explained and 20.6 % remained unexplained. Thus, the predictive ability of the model is high.

**TABLE 8B) PULL MOTIVATIONAL FACTORS (ANOVA)**

Model		Sum of Squares	df	Mean Square	F	Sig.
28	Regression	131.108	16	8.194	43.096	.000(bb)
	Residual	53.809	283	.190		
	Total	184.917	299			

The ANOVA output table describes the overall variance accounted for in the model. It appears the 19 predictor variables are not all equal to each other and could be used to predict the dependent variable, overall satisfaction of tourists as is indicated by an extremely large F value (43.096) and a small significant level (.000). Moreover the associated Sig value is less than the significance level (p<0.05). Thus, the null hypothesis is rejected based on the F statistics shown above.

**TABLE 8C) PULL MOTIVATIONAL FACTORS (REGRESSION COEFFICIENTS)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
28	(Constant)	6.415	.782		8.204	.000
	Relaxing atmosphere	.878	.122	1.534	7.212	.000
	Cultural attractions	.487	.095	.506	5.104	.000
	Accessibilities	.375	.048	.540	7.783	.000
	Beaches	.187	.036	.324	5.157	.000
	Shopping facilities	.932	.069	1.382	13.502	.000
	Landscape	2.908	.251	3.338	11.597	.000
	Hospitality	.504	.050	.568	10.057	.000
	Lodging	.819	.078	1.483	10.529	.000
	Level of Standard of living	1.619	.138	2.031	11.717	.000
	Sports equipment	.424	.057	.809	7.407	.000
	Distance	.253	.097	.436	2.599	.010
	Natural environment	1.063	.134	1.238	7.925	.000
	Transports	.179	.037	.336	4.777	.000
	Weather	.428	.079	.635	5.441	.000
	Different ethnics	.429	.093	.754	4.598	.000
	Night life	.143	.044	.288	3.277	.001

**Dependent Variable: overall satisfaction level of visiting Ethiopia**

According to the stepwise multiple regression, the above 16 out of the 19 pull motivational factors (accessibilities, beaches, shopping facilities, landscape, hospitality, lodging, standard of living, sports equipment, natural environment, transports, relaxing atmosphere, weather, different ethnics, cultural attractions, night life, distance) are found significantly related to tourist satisfaction level on pull motivational factors at p< 0.05 (Table 20c), While 5 pull motivational factors are excluded for being less important at p > .05..

**QUALITY OF EXPERIENCE AND SERVICES VS OVER ALL SATISFACTION OF TOURISTS**

**H8: Quality of experiences and Services dimensions are not significant drivers of tourists over all level of satisfaction.**

To test this hypothesis, the stepwise multiple regression analysis has been used.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \dots + \beta_k X_k + e_i$$

Where,

Y= tourist overall satisfaction level of visiting Ethiopia

X<sub>i</sub> = quality of experiences and services available in Ethiopia

β<sub>i</sub> = slope of the line and

e<sub>i</sub> = error term associated with the ith observation.

The stepwise multiple regression outputs are analyzed as follows:

**TABLE 9 A) DIMENSIONS OF QUALITY OF EXPERIENCE AND SERVICES (MODEL SUMMARY)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
15	.794(o)	.631	.616	.48701

\*\*\* (Alpha = .8712)

The Alpha coefficient (0.8712) for Dimensions of quality of experience and services is reliable, i.e., it exceeds the 0.5 threshold recommended. The value of R=.794 shows a perfect relationship exists between quality of experiences and service dimensions and tourists overall satisfaction. The value of R<sup>2</sup>= .631 explains that 100 % of the variation is explained. Thus, the predictive ability of the model is Moderate.

TABLE 9 B) DIMENSIONS OF QUALITY OF EXPERIENCE AND SERVICES (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
15	Regression	116.610	11	10.601	44.696	.000(o)
	Residual	68.307	288	.237		
	Total	184.917	299			

The ANOVA table describes the overall variance accounted for in the model. It appears the 23 predictor variables are not all equal to each other and could be used to predict the dependent variable, overall satisfaction of tourists as is indicated by an extremely large F value (44.696) and a small significant level (.000). Moreover, the associated Sig value is less than the significance level ( $p < 0.05$ ). Thus, the null hypothesis is rejected based on the F statistics shown above.

TABLE 9 C) DIMENSIONS OF QUALITY OF EXPERIENCE AND SERVICES (REGRESSION COEFFICIENTS)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
15	(Constant)	3.456	.766		4.513	.000
	Airport quality & efficiency	.254	.028	.483	9.167	.000
	Availability & quality of health/medical facilities to serve tourists	.122	.036	.196	3.438	.001
	Access to quality financial institutions & currency exchange facilities	.252	.037	.407	6.767	.000
	Access to affordable telecommunications facilities	2.625	.202	2.639	12.971	.000
	Quality and diversity of shopping facilities	1.530	.198	1.652	7.727	.000
	Public transport efficiency & quality	.159	.051	.303	3.100	.002
	Variety & quality of accommodations	.400	.053	.400	7.498	.000
	Tourism experience is comfortable & relaxing	.940	.144	.688	6.514	.000
	Extent of technology & e-commerce usage by tourism industry	.550	.191	.630	2.878	.004
	Tourist experience is enjoyable & memorable	.545	.109	.567	5.003	.000
	Availability of knowledgeable tour guides	.163	.044	.224	3.703	.000

**Dependent Variable: overall satisfaction level of visiting Ethiopia**

According to the stepwise multiple regression, the above 11 out of the 23 Dimensions of quality of experience and services ( airport quality and efficiency, availability and quality of health/medical facilities to serve tourists, access to quality financial institutions and currency exchange facilities, access to affordable telecommunications facilities, quality and diversity of shopping facilities, public transport efficiency and quality, variety and quality of accommodations, tourism experience is comfortable and relaxing, extent of technology and e-commerce usage by tourism industry, tourist experience is enjoyable and memorable, availability of knowledgeable tour guides,) are found significantly related to tourist satisfaction level on Dimensions of quality of experience and services at  $p < 0.05$  (Table 22c) , while 5 Dimensions of quality of experience and services are excluded for being less important at  $p > .05$ .

TABLE 10: OVERALL LEVEL OF SATISFACTION LEVEL OF VISITING ETHIOPIA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dissatisfied	45	15.0	15.0	15.0
	Neutral	130	43.3	43.3	58.3
	Satisfied	110	36.7	36.7	95.0
	Very Satisfied	15	5.0	5.0	100.0
	Total	300	100.0	100.0	

Of all the international tourists 15% were dissatisfied, 43% were neutral, 37 % were satisfied, and only 5% were very dissatisfied.

**CONCLUSION**

The profile of inbound tourists such as demographic characteristics, travel information and patterns, activities preferred by tourists during their stay in Ethiopia certainly were analyzed using descriptive statistics. Among the 300 respondents, 69% of the foreign tourists who visited Ethiopia were Male and 31% female. The tourists were grouped among Six-age groups. The highest age group of tourists (35%) was 30-39 age groups while the least age groups (3 %) constituted to 69 years and above. The tourists were also classified into four groups on the basis of their marital status. The survey revealed that 43 % of the foreign tourists visiting Ethiopia were married while 5% of the tourists were widows. The tourists were distributed by their annual income into five categories. The survey revealed that 30 % of the tourists earn less than \$ 20, 000 USD while 12% earn greater than \$50,000 USD annually. The tourists were also classified into three categories on the basis of the highest educational level attained. 52 % of the tourists constituted graduates and 23% accounted for postgraduates. Classification of tourists was made into six groups according to their occupational status. Services constituted 43 % of the tourists while 3% accounted for housewives.

The satisfaction level of tourists who visited Ethiopia was analyzed using t-test and F-test. The t-test result indicated that there was no significant difference in the overall satisfaction of the respondents by gender only. The one-way ANOVA test result explained by age, marital status, income, and education level and occupation category indicated that, there was significant difference in the level of satisfaction of tourists This result implies to the tourism marketer to further analyze the underlying reason for demonstrating different levels of satisfaction.

Airport facilities both for domestic and international flight were investigated on a 4- point- scale using a stepwise multiple regressions, in line with the level of tourist satisfaction. General ambience, check in facilities, airport bus services , money-changing facilities, customs clearance, toilet facilities, refreshments/cafeteria, luggage handling, information and sign boards were found significant drivers of satisfaction of tourists. Further analysis of the study regarding dimensions of airport facilities revealed that all airport dimensions were not equally contributing to enhance the level of tourist satisfaction. For example, general ambience, air port bus services and customs clearance were carrying more weight respectively than other dimensions of airport facilities in contributing to tourist satisfaction.

The perception of hotel facilities available in the country has been investigated using a factor analysis with Varimax Kaiser Normalization model. Component 1 which mainly deals with staffs service quality was the most important factor explaining 39.533% of the variance while component six mainly dealing with international dial, food and responsible security personnel etc, explained 5.142% of the cumulative variance equivalent to 88.747 %. From the six components, component 1 is found to be the most important explaining 39.533 % of the variance while component 6 is the least important of all explaining 5.142 % of the variance. Once customer's requirements are clearly identified and understood, hotel managers are likely to be able to anticipate and cater for their customer's desires and needs, rather than merely reacting to their dissatisfaction.

The relationship between destination attractiveness and Overall satisfaction level of visiting Ethiopia was examined by utilizing a stepwise multiple regression analysis. The results of this research showed destination attractiveness attributes or variables significantly related to satisfaction level of tourists. The quality level of tourism facilities and amenities, scenic beauty, wild life experience, adventure experience, accessibility to the destination, participation in major events among others were given more importance in attracting international travelers to Ethiopia. Tourism bureaus at Federal, regional state level, tour operators, ministry of wild life conservation, event organizers are required to synchronize their efforts to make the respective destinations across the length and width of the country worth a visit. Thus, tourism marketers should work and develop a marketing strategy in the areas of scenic beauty, wildlife experience adventure experience etc. In fact, this would be worthwhile, for researchers to empirically examine the marketing strategies in the popular destinations through further studies. Such an action will certainly help the economic growth of the destinations. Further analysis of the study regarding dimensions of destination

attractiveness attributes revealed that all destination attractiveness attributes were not equally contributing to enhance the level of tourist satisfaction. For example, participation in major events/festivals, perceived safety of destinations and cultural experiences were carrying more weight respectively than other destination attractiveness in contributing to tourist satisfaction.

In this study an attempt was made to explore the relationship between tourist's choice of behavioral attributes and destination loyalty. The results of this research showed that tourist destination loyalty and preferences or choice behavior attributes or variables such as culture, cost, shopping, language, climate, scenic beauty, season, accommodations, safety, food, historical sites, friendliness, entertainment, cleanliness are found significantly related to destination loyalty/ tourist satisfaction level. In consumer behavior research customer loyalty is measured by three different indicators: intention to buy the same product, intention to buy more of the product and willingness to recommend the product to others. Further analysis of the study regarding Destination choice preference variables revealed that, all Destination choice preference variables were not equally contributing to enhance the level of tourist satisfaction or destination loyalty. For example, entertainment, Scenic beauty and climate were carrying more weight respectively than other Destination choice preference variables in contributing to tourist satisfaction.

Push and pull factors were examined using a step wise multiple regression analysis. This study tried to examine the relationship between push and pull motivational factors and overall satisfaction level of inbound tourist using a step wise multiple regression analysis. The tourist decide to go on a holiday because he /she needs to solve intrinsic motives (push motives), to solve a conflict arousal such as rest, social and intellectual rewards. On the other hand, the destination attributes (pull motives) such as weather, the availability of different ethnic groups, landscape features etc. are perceived as the way to solve intrinsic motives (Push motives). The results of this research showed that push-pull motivational factors were significant drivers of satisfaction levels of tourists.

Push factors such as enriching myself intellectually, stimulating emotions and sensations, finding interesting people, developing friendship, going to places where friends have not been, escaping from the routine, having fun, knowing different cultures and lifestyles, doing different things, relieving stress) are found significantly related to tourist satisfaction level. Further analysis of the study regarding push motivational factors revealed that all push motivational factors were not equally contributing to enhance the level of tourist satisfaction. For example, developing friendship, going to places where friends have not been and enriching myself intellectually were carrying more weight respectively than other Push motivational factors in contributing to tourist satisfaction.

Pull factors such as accessibilities, beaches, shopping facilities, landscape, hospitality, lodging, standard of living, sports equipment, natural environment, transports, relaxing atmosphere, weather, different ethnics, cultural attractions, night life and distance are found significantly related to tourist satisfaction level. Further analysis of the study regarding pull motivational factors revealed that all pull motivational factors were not equally contributing to enhance the level of tourist satisfaction. For example, landscape, Level of standard of living and relaxing atmosphere were carrying more weight respectively than other pull motivational factors in contributing to tourist satisfaction.

The results of this research showed push-pull motivational factors are significantly related to satisfaction levels of the tourist. It shows that, it is human nature to continuously seek and solve intrinsic problems (push factors) with different levels of involvement in their lives with the outside world (Pull factors).The tourist who decides to travel in order to increase his /her knowledge would be expected to reveal more concern about the landscape features and sport activities .In turn, the tourist who travels in order to increase his /her social status would rank higher facilities and core attractions. There is a relationship between push and pull factors that will be decided sequentially. Firstly, a tourist decides to travel depending on his /her emotional state (push motives) and next, the tourist determines the place to visit and related activities (pull-motives).

Factors needed which overseas destination and experience should be chosen was analyzed using a ranking method on a 12 point rating - scale where 1 is most important and 12 is least important. Tourist attractions, culture & history and friendliness of people were ranked as 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> respectively. When we analyze this question further, it intends to identify common destination preference factors applicable to all destinations located in any corner of the world. However, the tourism marketer in any country can infer from the most valued factors by tourists to choose any overseas destination and adopt to his/her local, national circumstances. In other words, it may serve as a bench mark as to what factors are dictating tourists to travel to an overseas destinations.

The relationship between quality of experience and service dimensions and overall satisfaction level of tourists was examined using a stepwise multiple regressions. Quality of experience and services dimensions such as airport quality & efficiency, access to quality financial institutions and currency exchange facilities, access to affordable telecommunications facilities, quality and diversity of shopping facilities, public transport efficiency and quality, variety and quality of accommodations, tourism experience is comfortable and relaxing, extent of technology and e-commerce usage by tourism industry, tourist experience is enjoyable and memorable, availability of knowledgeable tour guides, availability and quality of health/medical facilities to serve tourists are found significantly related to tourist satisfaction level who visited Ethiopia. Further analysis of the study regarding dimensions of quality of experience and services revealed that all Dimensions of quality of experience and services were not equally contributing to enhance the level of tourist satisfaction. For example, access to affordable telecommunications facilities, quality and diversity of shopping facilities and tourism experience is comfortable & relaxing were carrying more weight respectively than other Dimensions of quality of experience and services in contributing to tourist satisfaction.

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## NON FINANCIAL FACTOR OF MEASURING ORGANIZATIONAL PERFORMANCE BRINGS LONG TERM FINANCIAL CAPABILITY: AN EXPERIENCE FROM BANGLADESH

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### ABSTRACT

*This paper deals with the measurement of organizational performance (MOP) and tries to highlight that Non-Financial factor of measuring organizational performance brings long term financial capability. An endeavor has been made to present the problems associated with the financial indicators of performance and how Non-Financial Indicators (NFI) help in decision making. Both importance of NFIs in Bangladeshi context and consequences of ignorance NFIs have been discussed to find out the evidence of Non-Financial factors impact. Finally, this paper suggests that using the NFIs which linked to factors such as corporate strategy, value drivers, organizational objectives and the competitive environment.*

### KEYWORDS

Measurement of Organizational Performance (MOP); Non Financial Indicators (NFIs); Organizational Performance (OP).

### INTRODUCTION

Measuring of organizational performance is an important factor for the organization itself and the stakeholders of the organization. It is not always an easy job to do. Measurement of OP is always linked with organizational missions, goals and objectives. Choosing performance measure is a challenge. Performance measurement systems play a key role in developing strategy, evaluating the achievement of organizational objectives and compensating managers. Yet many managers feel traditional financially oriented systems no longer work adequately.

From A recent survey of U.S. financial services, companies found that most of the companies were not satisfied with their measurement systems that have been used right now. They believed that there were too much emphasis on financial measures such as earnings and accounting returns and little emphasis given on drivers of value such as customer and employee satisfaction, innovation and quality.

In response to that, companies are now implementing new performance measurement systems. For example, A third of the financial services companies, made a major change in their performance measurement system during the past two years and 39% of the companies, plan a major change within two years.

As a result of the Inadequacies in financial performance measures, innovations ranging from non-financial indicators of "intangible assets" and "intellectual capital" to "balanced scorecards" of integrated financial and non-financial measures had made. This article discusses the advantages of non-financial performance measures and offers suggestions for implementation.

### OBJECTIVES AND METHODOLOGY OF THE STUDY

As the competition among the competitors has been increased, this Competition forces every organization to increase their performance and profit but somehow it is not possible to achieve both of these objectives due to the misconception of organizational performance. In most of the cases, organization emphasizes on financial record as an indicator of performance, As financial record is the final outcome of any performance which cannot be modified within current year so new indicator must be needed. So, here we have tried to emphasis on Non-Financial indicator to measure organizational performance so that organization can learn lessons and take act in the current year to achieve financial success. To establish this concept, we have collected secondary information from the various different kinds of published journals, articles, and books related with the analysis. This study is exploratory in nature and based on secondary information. For the reliability of this study, we have given emphasis on the practical knowledge and expert opinions about the organizational performance.

### PROBLEMS ASSOCIATED WITH THE FINANCIAL INDICATORS OF PERFORMANCE

By tradition, firm often uses financial indicators of performance to measure the success of the organization. Researcher Kaplan (1983) has identified three main probable consequences for the high-tech diversified manufacturing industries that are still practicing traditional cost based reporting system. These are:

**USE-TYPE:** Traditional cost reports use of arbitrary cost allocation schemes and there is no link between products, different processes or indirect cost that they create. Therefore, without reliable picture of what different processes really cost, management is unable to see the connection between decisions and their effects on the cost.

**RELEVANCE-TYPE:** The system fails to develop quality control that ensures customer satisfaction and factor productivity measure or fails to highlight opportunity costs. Further it also fails to provide answers to the manager for some basic questions like- what takes up the time of production planning staff, the right amount of resources is in the place etc.

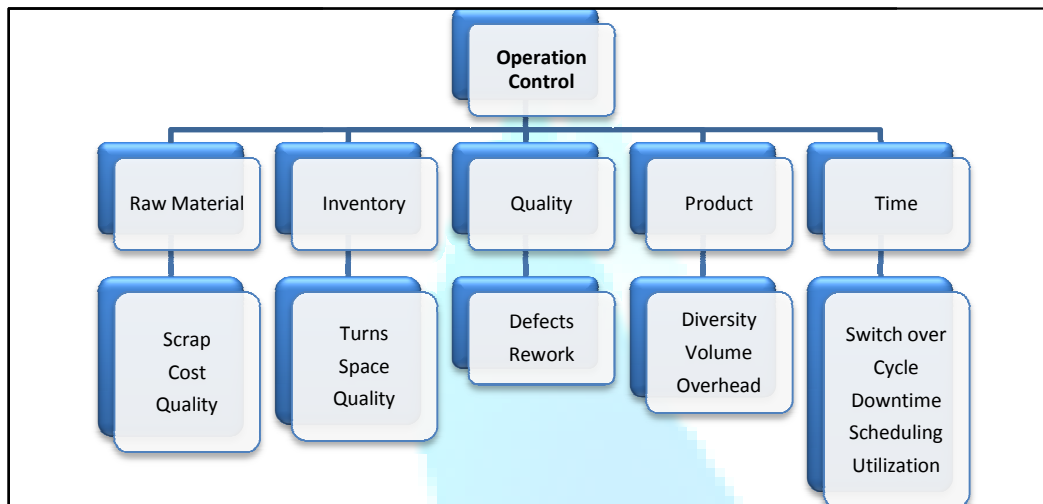
**CONTROL-TYPE:** The traditional cost report also fails to consider the Non-Financial factors that need to measure the efficiency of customer's service. Therefore, this system subsidize low-volume, customized product, at the cost of high volume standard products in manufacturing industry (O'Guin 1991). So, the system under-cost is the complex products and consequently creates a control- type problem for the firm. Many researchers have found that there is an impact of Non-Financial Indicators (NFIs) on the decision making process in achieving the organizational target (Smith, 1994; Green-Singleton 1993).

## NON-FINANCIAL INDICATORS IN DECISION MAKING

Nowadays In the area of operation management, Non-Financial indicators (NFIs) are receiving recognition among the practitioners of the diversified manufacturing firms. In the strategy of new control measure, NFIs can help a firm to maintain consistency with goals and objectives and measurement of both internal and external factors that are required to achieve the firm's target (Berlin and Brimson, 1988). It was found that the negative consequences of the above three types of failures such as, Use-types, relevance-type, and control-type could be overcome by the use of NFIs. Thus it has been argued that NFIs improve the decision of value, facilitated evaluation and control measure of a firm (Smith 1994). Most significant reasons for the use of NFIs are that it deals with causes like innovation, Quality, satisfying customer and production efficiency (Singleton, G.B, 1993).

Now-a-days, it is not just an issue of financial justification for the firm-owners. It is also an issue of increasing firm's image, market share, customer loyalty, efficiency and growth in comparing with competitors. Therefore, the firm should be willing to invest capital to meet customer's expectations that largely depend on the operational efficiency of the firm. Chalos (1992) identifies various NFIs to measure the operation control, which is shown below figure:

FIGURE 1: NON-FINANCIAL PERFORMANCE MEASUREMENT



Source: Chalos I (1992), *Managing cost in manufacturing*. Prentice Hall, New York.

The above point understands a company's value drivers, the factors that create stakeholder value. Once known, these factors determine which measures contribution to long-term success and so how to translate corporate objectives into measures that guide managers' actions. As a matter of fact, Quality cost is one of the Important Factors largely influences the success of the organization and the following costs such as:

**PREVENTION COSTS:** The costs of all activities specifically designed to prevent poor quality from products or services. Examples are the costs of new product review, quality planning, supplier capability surveys, process capability evaluations, quality improvement, team meetings, quality improvement projects, quality education and training.

**APPRAISAL COSTS:** Appraisal costs are the costs associated with measuring, evaluating or auditing products or services to assure conformance to quality standards and performance requirements. These include the costs of incoming and source inspection/test of purchased material, in-process and final inspection/test, product, process or service audits, and calibration of measuring and test equipment, associated supplies and materials

**FAILURE COSTS:** The costs resulting from products or services are not conforming to requirements or customer/user needs. Failure costs are divided into internal and external failure categories. **Internal Failure Costs:** Failure costs occurring prior to delivery or shipment of the product, or the furnishing of a service, to the customer. Examples are the costs of scrap, rework, re-inspection, re-testing, material review, downgrading, **External Failure Costs:** Failure costs occurring after delivery or shipment of the product — and during or after the furnishing of a service — to the customer. Examples are the costs of processing, customer complaints, customer returns, warranty claims, product recalls.

The above all costs can be controlled and managed during the operational year of any firm and firm can build a strong internal position which will lead them to financial gain at the end.

### IMPORTANCE OF NFIS IN BANGLADESHI CONTEXT

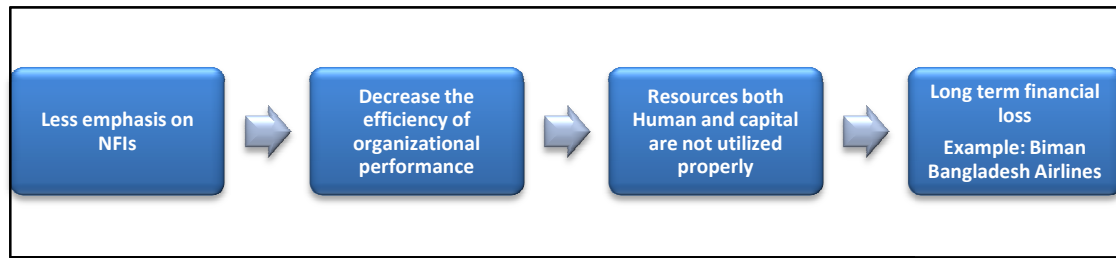
If we try to solve the following questions, all answers will emphasis on NFIs.

- Why do the government firms turn into private firm?
- Why do the government firms face huge financial loss every year?
- Why are the performances of government firm becoming weaker day by day?
- Why are the private firms gaining huge financial benefits?

The main reasons behind the poor performance of government are that they don't emphasis the Non-Financial factor like **Total Quality Management Customer Satisfaction, Time Management, Inventory, and Product Development**. Here a model of ultimate effects of ignorance of NFIs are tried to show below in figure - 2. Studies show that here in Bangladesh, most of the firms particularly in manufacturing want to gain financial benefit immediately after investments which force them to emphasis financial measurement. Because of too much emphasis on financial measure, it forces the organizations to ignore Non-Financial factors which lead them to accept loss at the end of the competitive market. Noapara (Jessore, Bangladesh) Industrial area can be one of the best examples where around 15 cement factories established a decade ago in a full swing but after a few years only 5 of them are survived. Most of the firms take loan from bank and to make immediate profits force them to increase their production without considering standard quality and the ultimate effect is very logical that they are bound to shut down all factory due to lack of market confidence.

## CONSEQUENCE OF IGNORANCE OF NFIS

FIGURE-2: CONSEQUENCE OF IGNORING NFIS



Because of this in Bangladesh most of the government firms except some firms are facing huge financial loss and in recent time it is noticeable that some government firm turn into private firm and when they emphasis NFIs, it becomes profitable. For example: BTCL, DESCO etc. So, the importances of NFIs are acceptable to modern organization as their performance measurement tool.

## ADVANTAGES OF NFIS

After the analysis we can say that, Non-financial measures offer some clear advantages over measurement systems based on financial data. **First**, these NFIs have closer link to long-term organizational strategies. Financial evaluation systems generally focus on annual or short-term performance against accounting yardsticks. They do not deal with growth relative to customer requirements or competitors, or other non-financial objectives that may be important in achieving profitability, competitive strength and longer-term strategic goals. For example, new product development or expanding organizational capabilities may be important strategic goals, but may hinder short-term accounting performance. With supplementing accounting measures with non-financial data about strategic performance and implementation of strategic plans, companies can communicate objectives and provide incentives for managers to address long-term strategy. **Second**, critics of traditional measures argue that drivers of success in many industries are "intangible assets" such as intellectual capital and customer loyalty, rather than "hard assets" allowed to balance sheets. Although it is difficult to quantify intangible assets in financial terms, non-financial data can provide indirect, quantitative indicators of a firm's intangible assets.

## CONCLUSION

Although non-financial measures are increasingly important in decision-making and performance evaluation, companies should not simply copy measures used by others. The choice of measurements must be linked to factors such as corporate strategy, value drivers, organizational objectives and the competitive environment. In addition, companies should remember that performance measurement choice is a dynamic process - measures may be appropriate today, but the system needs to be continually reassessed as strategies and competitive environments evolve.

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## PREDICTORS OF WILLINGNESS TO ADOPT CUSTOMER RELATIONSHIP MANAGEMENT IN NIGERIAN ORGANIZATIONS: A FRAMEWORK APPROACH

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### ABSTRACT

*This study looked into the salient factors that predict or drive the willingness of organizations in the Nigerian Stock Exchange to adopt Customer Relationship Management (CRM) as a competitive strategy. It used the Technology-Organization-Environment (TOE) framework developed by Tornatzky and Fleischer (1990) and later adopted by Ramdani and Kawalek (2008) to ascertain which factors in the framework could predict adoption willingness in an African country – Nigeria. Exactly 102 large enterprises in the Exchange were sampled randomly out of 115 enterprises. Using multiple regression 10 hypotheses were tested to ascertain which predictor variable will be significant at 0.05%. The output revealed factors of relative advantage, complexity, triability and industry turn out to be significant. Other factors of compatibility, top management support, information system experience, firm size, competitive pressure and external information support turned insignificant. Recommendations made are to the effect that CEOs in the Nigerian business environment should deploy these factors in their attempt to adopt CRM to drive competition in their industries. Again it was recommended that organizations should enhance their R&D units to improve and derive the greater benefits of CRM usage.*

### KEYWORDS

Customer Relationship Management, Enterprise Systems, Technology-Organization-Environment framework, Large Enterprises.

### INTRODUCTION

The 21<sup>st</sup> century business scholar and indeed captains of industries across the globe are daily strategizing on best methods to attain efficiency, improve the level of productivity and ensure improved corporate governance. This tendency is driven by a holistic attempt to contribute to global economic wellbeing. In striving to achieve these goals, many organizations are adopting emerging best practices not only to stave off competitors but to bootstrap to fight environmental challenges and even overcome the global economic recession.

In this onerous task, organizations cannot but integrate customer-centric strategies to ensure that the customer, who many marketing scholars refer to as the 'King', will be inspired to continue to buy value laden products and services in the quest to discharge wants and need states (Kotler and Keller, 2008; Jobber, 2004). Hence the emergence of Enterprise Systems (ES) such as Customer Relations Management (CRM) is increasingly becoming a resourceful technique in attaining corporate goals (Winner 2001, Sepulcri, 2003).

Essentially, CRM is an emerging competitive pattern among industries across the globe – it focuses on customer care and retention for profitable gains. According to Rangone and Renga (2005), CRM in its traditional form is a business strategy. It is a systematic approach issued from relationship and one-to-one marketing which is based on the integrated and active management of personalized and individualized customer profile.

In their argument, CRM conjures the orientation that such personal relationships leads to improved customer acquisition, satisfaction and loyalty, allowing better returns to be achieved. To do so, the firm shall take advantage of every contact with customers to learn more about their needs, preferences and lifetime value, so as to devise suitable ways to serve them with possibly tailored solutions.

However, certain factors or stimulus must be responsible for CEOs willingness to adopt or deploy the use of CRM as a competitive strategy. In the UK, researchers such as Winners (2001), Ramdani and Kawalek (2008) etc., have studied certain factors that can predict adoption of best practices like CRM using SMEs. Some of these studies have been predicated on the model developed earlier by Tornatzky and Fleischer (1990). In the Ramdani and Kawalek's (2008) study, 13 variables of the model were tested on the dependent variable of willingness to adopt CRM. Outcomes revealed certain variables were significant in predicting willingness in the UK environment

However, the Technology-Organization-Environment (TOE) Model in this study will be tested on organization in the Nigerian Stock Exchange to find out which will be significant in predicting willingness to adopt CRM. The outcome of this study will serve as a guide in the adoption prospect by Large Enterprises (LE) in the Nigerian business environment. Its outcome will be informative – this is the poise of this study.

### THEORETICAL FRAMEWORK

Several dimensions have been adduced to explain the conceptual understanding of CRM. Davids (2001) defined CRM as a combination of policies, processes and strategies implemented by an organization to unify its customer interactions and provide a means of tracking customer information. For him, CRM involves the use of technology in attracting new and profitable customers, while forming tighter bonds with existing ones.

Markus and Tanis (2000) opines that ES are commercial software packages that enable the integration of transaction-oriented data and business processes throughout an organization and eventually throughout the entire inter-organizational supply chain. One of such innovative technique is the Customer Relationship Management (CRM) programme which Di'Maria and Micelli (2008) and Sepulcri (2003) identified as a technology-driven platform that firms are increasingly adopting to secure competitive advantage.

Thus CRM includes many aspects that relate directly to one another (Davids, 2001):

- ⇒ Front office operations – Direct interaction with customers, e.g. face to face meeting, phone calls, e-mail, online services etc.
- ⇒ Back office operations – Operations that ultimately affect the activities of the front office (e.g. billing, maintenance, planning, marketing, advertising, finance, manufacturing, etc)
- ⇒ Business relationships – Interaction with other companies and partners, such as suppliers/vendors and retail outlets/distributors, industry networks (lobbying groups, trade associations). This external network supports front and back office activities.
- ⇒ Analysis – Key CRM data can be analyzed in order to plan target-marketing campaigns, conceive business strategies, and judge the success of CRM activities (e.g., market share, number and types of customers, revenue, and profitability.)

The conclusion is gaining ground currently and Davids (2001) echoes it further by cautioning softly that it is important to note that while most consumers of CRM view it as software "solution", there is a growing realization in the corporate world that CRM is really a customer-centric strategy for doing business; supported by software. Thus in the opinion of Lee (2008), CRM adds value to customers in ways that add value back to the company.

In light of this Lee (2008) identifies the variances/types of CRM.

**Operational CRM:** Operational CRM provides support to "front office" business processes, e.g. to sales, marketing and service staff. Interactions with customers are generally stored in customers' contact histories, and staff can retrieve customer information as necessary. The contact history provides staff members with



immediate access to important information on the customer (products owned, prior support calls etc.), eliminating the need to individually obtain this information directly from the customer. Reaching to the customer at right time, at right place is preferable.

Operational CRM processes customer data for a variety of purposes:

- Managing Campaigns
- Enterprise Marketing Automation
- Sales Force Automation
- Sales Management System

**Analytical CRM:** Analytical CRM analyzes customer data for a variety of purposes:

- Designing and executing targeted marketing campaigns
- Designing and executing campaigns, e.g. customer acquisition, cross-selling, up-selling
- Analyzing customer behaviour in order to make decisions relating to products and services (e.g. pricing, product development)
- Management information system (e.g. financial forecasting and customer profitability analysis)

Analytical CRM generally makes heavy use of data mining and other techniques to produce useful results for decision-making.

**Sales Intelligence CRM:** Sales Intelligence CRM is similar to Analytical CRM, but it is intended as a more direct sales tool. Features include: alerts sent to sales staff regarding:

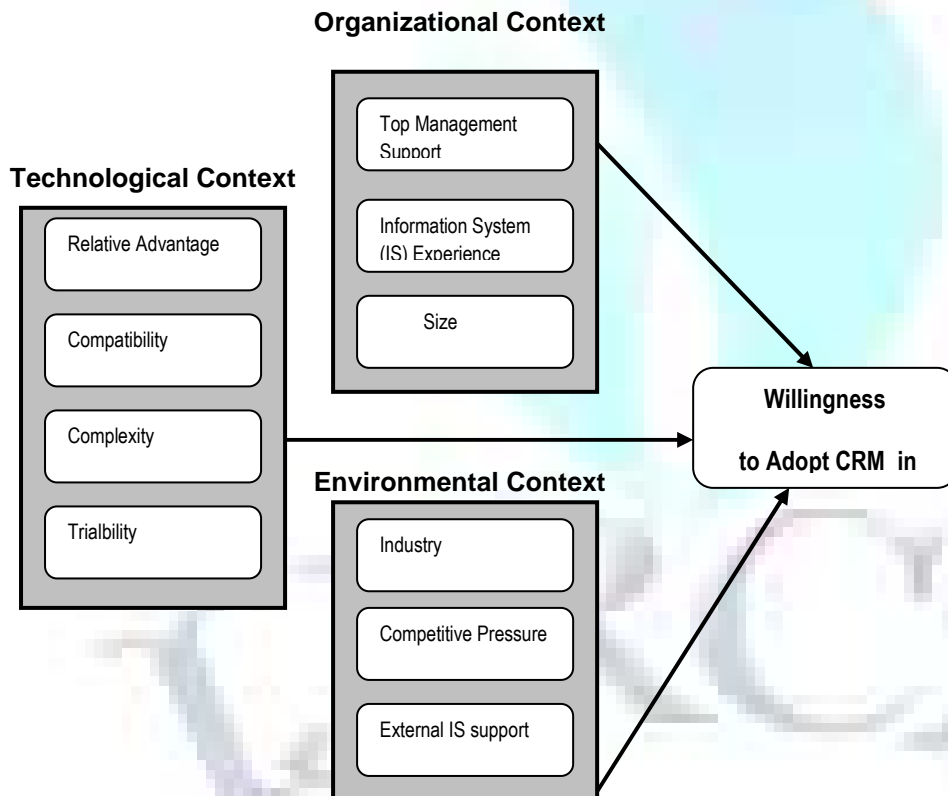
- Cross-selling/Up-selling/Switch-selling opportunities
- Customer drift
- Sales performance
- Customer trends
- Customer margins
- Customer alignment

**Campaign Management:** Campaign management combines elements of Operational and Analytical CRM. Campaign management functions include:

- Target groups formed from the client base according to selected criteria
- Sending campaign-related material (e.g. on special offers) to selected recipients using various channels (e.g. e-mail, telephone, SMS, post)
- Tracking, storing, and analyzing campaign statistics, including tracking responses and analyzing trends

**Collaborative CRM:** Collaborative CRM covers aspects of a company's dealings with customer that are handled by various departments within a company, such as sales, technical support and marketing. Staff members from different departments can share information collected when interacting with customers. For example, feedback received by customer support agents can provide other staff members with information on the services and features requested by customers. Collaborative CRM's ultimate goal is to use information collected by all departments to improve quality of services provided by the company.

**THE TECHNOLOGY-ORGANIZATION-ENVIRONMENT (TOE) FRAMEWORK MODIFIED**



Source: Boumediene, Randani and Peter, Kawalek 'Predicting SMEs Willingness to Adopt ER, CRM, SCM & E-Procurement Systems' *Revista Latinoamericana de Administracion*, 2008 : PP 47- 70

In the original TOE Framework, there exist 13 factors. This researcher found it expedient to make a slight modification by eliminating three (3) variables whose definitive meanings look similar during a pilot test on Nigerian businesses. Each is herewith discussed in turn under domain sub-heads.

**TECHNOLOGICAL CONTEXT**

**Compatibility (CM):** the compatibility of an emerging best practice is the degree to which a strategy is perceived as consistent with the existing values, past experiences, and needs of potential adopters (Rogers, 2003) or as Premkumar (2003) puts it, it is an important determinant of ES and related systems adoption.

**Complexity (CX):** the degree to which a new strategy (innovation) is perceived as relatively difficult to understand and use (Rogers, 2003)

**Triability (TR):** the degree to which it may be experimented with on limited basis (Rogers, 2003). Kendall, et al (2001) found triability to be positively related to e-commerce adoption.

**Relative Advantage (RA):** the degree to which an innovation is perceived as being better than the idea it supersedes (Roger, 2003).

## ORGANIZATIONAL CONTEXT

Factors of organizational import that came under their consideration in their study included the following:

*Top Management Support (TMS):* TMS is level of commitment of organizational leaders to adopt an innovation. Jeyaraj et al. (2006) found TMS to be one of the best predictors of organizational adoption of ES. In the opinion of Thong (1999) TMS can stimulate change by communicating and reinforcing values through an articulated vision for the organization.

*Information System Experience (ISE):* This is defined as previous use of similar or related information sharing/processing platforms. Thus firms that are unaware of new strategies/technologies or who may not want to take a risk to adopt them will be unlikely adopters. Dholakia and Kshetri (2002) are of the opinion that technologies already existing in an organization can influence the future adoption of a new techniques/ES.

*Size:* Size is defined as the scope of operation in the industry, Familoni (2001). Jeyaraj (2006) avers that size is one of the best predictors of technical innovation by organizations. Although studies by Goode and Stevens (2002) show that business size was not significant in IS adoption, there seem to a general argument that larger firms have a greater need, resources, skills and experience, including ability to adopt innovation than smaller firms.

## ENVIRONMENTAL CONTEXT

In the Ramdani and Kawalek (2008) study, environment was seen to be factorial to adoption tendencies. In this regard they identified the following variables as consisting in the environmental factors:

*Industry:* An industry constitutes the collection of firms producing similar or related products (Familoni, 2001). The argument among researchers is that the operating industry for any firm influences its possible adoption of innovation (Levenburg et al. 2006; Raymond, 2001).

*Competitive Pressure:* This is conceived as the extent of jostling for patronage in a given industry (Chambers Dictionary, 2006). Jeyaraj (2006) opines that competitive pressure is one of the best predictors of adoption tendencies. In the opinion of Gatignon and Robertson (1989), competition in the adopter's industry is generally perceived to positively influence the adoption of innovations of IT import.

*External IS Support:* This refers to the extent of support from vendor firms available to provide maintenance services to the innovation. It also refers to technical infrastructural provision that will lend support to and fast-track IT developments. Premkumar and Roberts (1999) avers that the availability of support for implementing and using IS innovation is a prerequisite for success of technical best practices.

## STATEMENT OF OBJECTIVES & HYPOTHESIS

This study is poised to ascertain which of the 10 variables as contained in the TOE framework above will serve as predictor of willingness to adopt CRM. Its outcome thus will serve as a guide to managers in Nigerian Large Enterprises on which domain variables to pay attention to when considering the adoption of CRM as a competitive strategy to drive their operations.

The following hypotheses are herewith stated for testing.

**Hypothesis 1 (RA):** The more relative advantage a competitive strategy like CRM has, the more willing organizations will be to adopt it.

**Hypothesis 2: (CMP):** The more CRM strategy is compatible with organizations' operations the more organizations will be willing to adopt it

**Hypothesis 3: (CX)** The more an evolving enterprise strategy is complex the less organizations will be willing to adopt it.

**Hypothesis 4: (TR)** The more an enterprise strategy is amenable to trial and its outcome positively verified, the more organizations will be willing to adopt it.

**Hypothesis 5: (TMS)** The more top management support is offered the more willing organizations will be to adopt CRM as a competitive strategy

**Hypothesis 6: (ISE)** The more internal system experience an organization has the more it will be willing to adopt new competitive strategy like CRM

**Hypothesis 7: (SIZE)** The bigger an organizations size is the more willing its leaders will be at adopting better competitive strategies like CRM

**Hypothesis 8: (Industry)** Organizational scope and type are likely to be good influencers of willingness to adopt CRM within an industry.

**Hypothesis 9: (CM)** The stronger the competitive pressure found an industry the more its leaders are likely to be influenced to adopt CRM

**Hypothesis 10: (EISS)** The more organizations have access to external system support from their environment the more they will be willing to adopt better competitive strategies like CRM

## STUDY METHODOLOGY

This study focused on survey methods only. Essentially the study is driven by use of questionnaires and interview techniques to elicit primary data. As has been said earlier, it is based on the Nigerian business environment sampling large enterprises (LE) in the Nigerian Stock Exchange. The Classification of these organizations was drawn from the Stock Exchange Fact Book 2009 as published by the Exchange.

There were 22 industrial sectors as at time of sampling. Exactly 63% of these sectors were randomly selected for the study. The sectors include: Agro/Allied, Healthcare, Commercial/Services, Packaging, Insurance, Petroleum, Printing & Publishing, Industrial/Domestic Products, Chemicals & Paints, Info-tech & Communications, and Airline Services & Logistics. These make of 14 sectors in all. In these sectors there are a total of 151 large enterprises (LE). Out of these, 70% were sampled using random sampling techniques. This gives a figure of 109 organizations in the Stock Exchange that were sampled for this study. However, during the field exercise, exactly 102 questionnaire instruments were returned. This represents 93 % response rate – whereas Curran and Blackburn (2001) in their study says a good sample and standard response in any study should achieve a 60% response rate.

Measurement of the study construct is done using a 5-point Likert Scale. Method of entering data was from 5 (representing the strongest value of opinion) down to 1 (representing the weakest value of opinion on any construct).

In terms of validity and reliability, face validity was ensured by carrying out a pilot test on the correctness of concepts, measures for each variable and also passing the questionnaire instrument through screening by two professors of business management in Delta State University and the University of Benin, Benin City Nigeria. In terms of validity, construct validity was ensured by taking into account the "usage" principle (Babbie, 2007) as the Technology-Organization-Environment (TOE Model) has been used and tested by various researchers in published journals (Kwuan and Chau, 2001; Zhu et al, 2003; Premkumar and Roberts, 1999; and Iacovou et al, 1995).

Data analysis and presentation – these were done via tables, etc. Analysis were done using the multiple regression model and SPSS (Statistical Package for Social Sciences) to manipulate the data thereof as collected from field.

## PRESENTATION OF TABLES & ANALYSIS

Within the conception of Iyoha and Ekanem (2002); Osuagwu (2006) the regression model is expressed thus:

$$\text{CRM} = \beta_0 + \beta_1.RA + \beta_2.CM + \beta_3.CX + \beta_4.TR + \beta_5.TMS + \beta_6.ISE + \beta_7.Size + \beta_8.Industry + \beta_9.CP + \beta_{10}.EISS + \epsilon_1$$

Where:

CRM = Willingness to Adopt CRM (dependent variable)

**Independent Variables**

RA = Relative Advantage

CM = Compatibility

CX = Complexity

TR = Triability

TMS = Top Management Support

ISE = Internal Information System Experience

Firm Size = Firm Size  
 IND = Industry  
 CP = Competitive Pressure  
 EISS = External Information System Support  
 $\epsilon_i$  = Stochastic disturbance or error term

MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.643 <sup>a</sup>	.414	.349	.52886

- a. Predictors: (Constant), External information system support,
- b. Compatibility, Top management support, Triability, Firm size, Relative advantage, Complexity, Competitive pressure, Industry, Information system experience.

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	1.639	.447		3.668	.000
Relative advantage	.198	.096	.228	2.052	.043
Compatibility	-.053	.083	-.060	-.636	.527
Complexity	-.214	.087	-.259	2.455	.016
Triability	.256	.106	.257	2.420	.017
Top management support	-.119	.083	-.159	-1.429	.156
Information system experience	.142	.124	.165	1.148	.254
Firm size	.003	.102	.003	.030	.976
Industry	.253	.112	.297	2.262	.026
Competitive pressure	.150	.115	.162	1.300	.197
External information system support	-.042	.094	-.049	-.453	.652

b. Dependent Variable: Willingness to adopt CRM

STUDY OUTCOME

From the table of regression model above, one can find that the predictor variables of Relative advantage, .043, Complexity 0.016, Triability .017 and Industry 0.026 are found significant predictors of willingness to adopt CRM as a competitive strategy in the Nigerian Stock Exchange. All other factors are found to be insignificant.

**Relative advantage:** This factor is found in this study to be significant. Studies by Grandon and Pearson (2004) and Kuan and Chau (2001) found relative advantage a significant predictor of adoption willingness. Their argument is that when an enterprise system (ES) is perceived to offer relative advantage over the firm's current practice, it is more likely to be adopted.

**Complexity:** In this study complexity turns out to be significant – this is in tandem with the outcome of the work of Lertwonstien and Wongpinunwatana (2003) and Thong (1999). They found complexity to be a major determinant on adoption willingness.

**Triability:** Triability as a driver of willingness is revealed to be significant – triability was conceived by Rogers (2003) as the degree to which an innovation may be experimented with on limited basis. This study finds congruence with the work of researchers like Kendal et al (2001) who found triability to be positively related with e-commerce adoption willingness. Here

**Industry:** This factor is found to be significant – it thus has strong capacity to influence adoption willingness. The outcome of this study agrees with studies by Levenburg et al, (2006).

Having regards to the rest factors of top management support, internal information system experience, firm size, competitive pressure and external information support (i.e. vendor support) – this study found them all to be insignificant. As a matter of fact, compatibility, top management support, internal information system experience, competitive pressure, and vendor support were negatively correlated with the dependent variable. Whereas in studies by Rogers (2003) and Premkumar (2003) found compatibility to be an important determinant of adoption tendencies. Top management support was found to be one of the best predictors of adoption willingness (Jeyaraj, et al, 2006). As regards internal information system experience, Kuan and Chau (2001) and studies far back as that of Fink (1998) found it to be a strong influencer of new ES technologies for which CRM is part. Having regard to firm size, Goode and Stevens (2000) show that organizational size is the best predictor of adoption willingness. This confirms and even validates earlier study by Yap (1990).

As for competitive pressure, one of the predictor variables under the environment domain of the TOE framework, this study found it to be insignificant. This contradicts studies by Premkumar and Roberts (1999), Delone (1988) and even Raymond's (1985) far back. These researchers aver that competitive pressure is positively related to adoption likelihood. Lastly, vendor support is found to be positively related to adoption willingness (Premkumar and Roberts, 1999). Their reasoning is that with popularity of outsourcing and the growth in third party support, enterprises are becoming more willing to adopt new IS and ES innovations

CONCLUSION & RECOMMENDATION

This study set before itself the task of determining which of the 10 factors in the modified TOE model could predict adoption willingness of CRM among enterprises in the Nigerian Stock Exchange. It has also discussed the outcome of these predictors using multiple regression model as analytical tools.

Salient conclusions that can be drawn is that of the 10 predictor variables, only 4 (i.e. relative advantage, complexity, triability and industry type) were found significant at 0.05% level of significance. All the rest are not effective predictors of adoption willingness in respect of CRM as a dependent variable. Perhaps logical reasons adduceable could lie in differences in environment and the types of organizations sampled. The initial study conducted by Randani and Kawalek (2008) sampled organizations in the UK environment. Again, these enterprises were SMEs using logit regression. Whereas this study is based in the Nigerian environment, enterprises sampled were LE in the Nigerian Stock Exchange. These in combination could be the reasons why these studies yield incongruent results. A strong point to note in this study is that whereas the TOE model in the Randani and Kawalek (2008) study yielded a goodness of fit of 59% this study is merely 27% - hence the TOE model applied to Nigerian environment can be considered a weak predictor of willingness to adopt CRM.

A logical explanation in the opinion of this researcher is that within the Nigerian business environment, there exist obviously other factors which are not contained in the TOE framework of predicting williness as regards large firms in the Nigerian Stock Exchange.

What CEOs in these enterprises can do in the meanwhile is to identify those significant factors in this study and use them in their decisions as they contemplate adoption of CRM as a competitive strategy. Again researchers in Nigeria and indeed African countries academic institutions may wish to undertake studies on CRM to evolve a better and more fitting model that can yield better predictive variables. It will also be useful for CEOs to strengthen their R&D units and cause them evolve methods of bringing CRM on board to support customer centric functions and improving relations between organizations and their customers for profitable gains.

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## COMPARISON OF VALUE-RELEVANCE OF CASH FLOW AND OPERATING PROFIT IN EXPLANATION OF COMPANIES STOCK RETURN WITH CONSIDERING INFORMATION ASYMMETRY: EVIDENCE FROM TEHRAN STOCK EXCHANGE

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### ABSTRACT

*Evaluation of accounting information efficacy in Value-Relevance of operating profit with the company's value is focused in recent researches. The purpose of this research, relationship between operational cash flow and operating profit is considered in explanation of company's stock return, generally, and considering information asymmetry by regression model of the panel data for 151 companies, members of Tehran Stock Exchange, during 2005-2009. Results of this research demonstrate that generally, there is a positive relationship between operational cash flow and operating profit with return of the companies' stock, but increasing information asymmetry, relationship between operating profit and return will decrease and the operational cash flow explain return of the company's stock better than the operating profit (and vice versa). Thus, applying the methods based on the operating profit is appropriate in such a manner that information asymmetry level was low and we could not apply a similar method for assessment of the companies' function with different characteristics.*

### KEYWORDS

Cash flow, Information asymmetry, Operating profit, Stock return, Value-Relevance.

### INTRODUCTION

Operating profit is a matter that is measured based on the common accounting principles and procedures. Whereas obtaining the operating profit is accrual basis, so accruals items are accounted in it. Then, differences will be established between the operating profit and cash flow; on the other hand, one of the objectives of financial statements is providing data for prediction of the trade unit financial function that some believe that profit is appropriate for such a prediction.

One of the effective factors in decision making, is appropriate information related to the subject, while, if data transmission is distributed unequally between the peoples, it may result in different results for a matter. Thus, before the fact that the information was important for the decision maker, this is quality of information distribution, which should be evaluated accurately. When information asymmetry of a company's stock was increased, its intrinsic value will be different from the value that investors dedicated to it in capital market. Therefore, real value of the company's stock will be different from expected value of the shareholders.

Operating profit and cash flows are two competitive quantities for performance evaluation of the company, which are applied by financial analysts in stock evaluation; and are recognized as two related factors to decision making of the participants. But, actually there are different obstacles that decrease relevance of the variables. The main obstacle in this regard is information asymmetry between the shareholders and management, as well as profit management stimulations, applying by the managers.

Regarding some of the modern measurement methods of function in management accounting are based on cash flow's figures, they try to enjoy operating profit information; thus, a question has arisen here whether the additional information content in the accrual components of earnings improves performance measurement?

To shed light on this question, I examine the correlation of operating cash flows and operating profit with firm's total shareholder returns. In the present research, power of both figures in evaluation of function of the accepted companies in the stock exchange, is studied. Also, information asymmetry effect on explaining capability of stock market function by appliers of the financial statements, using related figures of operating profit and cash flows of the company, were assessed.

### LITERATURE REVIEW AND BACKGROUND RESEARCH

#### PROFIT

Profit is final product of accounting process that different groups, like stockholders, investors, management, staffs and government, use it as performance criterion of the business entity. Emphasizing on profit increases in such a way that sometimes the net profit is introduced as performance index of a business entity; on the other hand, loss and profit statement reports historical performance, while relevance of financial items is determined by its prediction value.

#### INFORMATION CONTENT OF OPERATING PROFIT

One of the main information resources for evaluation of the business entity's performance is profit, which is an appropriate index for decisions of the investors. The initial aim of financial accounting is providing useful information for the investors to predict performance of the business entity. Necessity of profit reporting, as a primary resource for investors' decision making, was provable and profit reporting assist the society's economy by different methods, like

providing a basis for calculation of taxes, a criterion for evaluation of success of a company's function, a criterion for determination of dividends, a criterion for management of dividend, a criterion for management of a business entity and so. Also, because value of a company relates to its present and future profits, determination of profit is very important (Financial Accounting Standards Board, 1985, 46).

#### PROFIT, CASH FLOWS AND STOCK PRICE

Securities like stock papers are valuable; because they have definite characteristics that are assessed by the investors. Information propagation changes stock price. If cash flows and profit result in facilitation of stock return prediction, then correlation of profit and cash flows are provided by return.

Previous researches demonstrated that which of accounting profit and cash flows are more related to stock return. These researches apply operating cash flows instead of total cash flows, since it seems that cash flows of investment (invested amounts and their return) are variable during time (Zimmerman, 1986).

Ball & Brown, in their study that was followed by other researches, evaluated relationship between unexpected profit and average of abnormal rate of return. Results show that there is a relationship between profit and return and profit and rate of non-operating return are correlated; also, profit provides information for the market. They repeated the same research with operating cash flows variable instead of operating commitment profit and declared that there is low relationship between the current cash flow and return (Zimmerman, 1986).

Haw and et al. (2001) investigated the information context of operating cash flows, obligation income and items in China capital market. The results reveal the higher income information context than operating cash flows. Also, in this study, additional information context of optional obligation items was confirmed in front of non optional obligation items.

Asheq Ali (1994) investigated income additional information context, flow capital obtained from operation and cash flows. In this research, he confirmed income additional information context over the flow capital obtained from operation and cash flows. Also, in this examination, flow capital additional information context obtained from income and cash flows operation was confirmed. But, two cases were observed about cash additional information context obtained from operation over other factors: while under studied firms had few changes in cash obtained from operation, additional information context was seen toward others; and while the under studied firms had very changes in cash obtained from operation, additional information context was not seen toward others.

#### INFORMATION ASYMMETRY

When information asymmetry of the company's stock has increased, its intrinsic value will be different from the value that investors dedicated for the stock in the capital market. Thus, real value of the stocks will be different from expected value of the stockholders. If there were peoples, between investors who are active in capital markets, with better information conditions, and for instance, were inform about notices of profits, they would be able to influence on the market's demand and supply and result in price gap. The main reason is information asymmetry in the capital market, by which the informed individuals of profit notice (and/ or any other important matters) are in better situation rather than others for decision making (Venkatesh, 1986).

In this case, increase of information asymmetry by expansion of difference between suggested range of buying and selling prices of the stocks are provided and brokers enjoy from this increase to compensate contrary selection risk. Generally, when new information of the companies' situation is propagated, the information will be analyzed by analysts, investors and other users and decide based on them about purchase and/or selling of stock. The information and reactions toward them influence on users' behavior, particularly potential and actual stockholders and increase and/or decrease price and transactions. Since, manner of the individuals' treatment with new information form prices' fluctuations; then, providing heterogeneous and confidential distribution of information, we observe different reactions of the stockholders because of information asymmetry in the capital market, which is resulted in false and misleading analyses of the market current situation (Venkatesh, 1986).

Lafond & Watts (2008) indicated that information asymmetry of the firm personnel (like managers) and investors out of firm lead to create conservativeness in financial statements.

Conservativeness decreases the managers' motivations and ability to change the accounting numbers, so it decreases information asymmetry and damages. Whatever there is more information asymmetry between the firm personnel and investors out of firm, therefore request for conservativeness will be more. They used Pin Score's compound index for measuring the information asymmetry and they also used asymmetry time criterion developed by Watts and Richudhary to measure conservativeness.

#### ACCOUNTING INFORMATION AND IMPORTANT FINANCIAL RATIOS

Banz believed that addition of the company's market value in regression of the return and stock beta result in better explanation of difference of average companies' stock return. Results show that average of small companies' stock return have high estimated beta and average of big companies' stock return have low beta (Banz, 1981).

Chan, Hamao and Lakonishok, declared that book value ratio with market value have a significant role in explanation of average of Japanese companies' stock return, moreover to positive relationship (Chan, Hamao and Lakonishok, 1991). Bhandari demonstrated that there is a positive relationship between leverage and average of return. He believed that the expected relationship between leverage and average is clear; based on his researches, if moreover to book value ratio, leverage degree was added to the market value, changes of the companies' return would be explained better (Bhandari, 2005).

Keim studied effect of size of the company and ratio of profit to price (E/P) on stock return. Companies, according to the market value, are classified as size, in ten portfolios that the smaller companies are in the first class, and the biggest ones are placed in the tenth class. Kim, applying regression, studied relationship and correlation of size and E/P return. He found that average of return have reversed relationship with market value and a direct relationship with E/P rate. In other words, low market value companies have higher return towards high market value companies and also, portfolio of the smaller companies, which have lower E/P rate, towards those with higher E/P rate, have higher return average (Keim, 1990).

Fama and French, regarding previous researches on the factors, have studied relationship of return average with five factors of beta risk, size, leverage, E/P ratio, and market to book value. Results demonstrate that there is a negative relationship between size of company and average returns. Also, they found that there is a positive relationship between ratio of book value with market value and average returns. They declared that size factor should be more concentrated and ratio of book value with market value have stronger role between average returns (Fama & French, 1992).

Ball & Brown (1967) and Bior & Dux (1972) defined operating cash flows as profit plus depreciation; they found that profit, towards cash flow, is stronger in explanation of stock return.

Ston & Olson (1992) studied relationship between operating profit and stock return. The study has been done for accepted companies in New York Stock exchange between 1968 to 1986. They assessed relationship between stock return and operating profit, hypothesizing that if the period was extended, mistakes would be decreased and accurate and real profit of the company could be calculated. They applied one to ten time intervals. The independent variable was EPS/P and the results demonstrated that in longer intervals correlation of two variables increased and explain higher profit.

Rapp (2010) study influence of information asymmetry on relevance of cash flows and accounting figures in explaining stock return of German stock companies. Results show that, increasing of information asymmetry will decrease accounting figures' power in explanation of companies' stock towards cash flows

#### RESEARCH METHOD AND STATISTICAL

This research is of correlation and regression type. Considering the information, it is done as aggregation of data analysis about type and number. Data historical information is used in the present paper, thus it is of simulated experimental type.

The research methodology is comparative-deductive in which theoretical foundations related to the study have been obtained through library studies and comparative methods. The related data was collected through observation of financial statements and the accompanying notes as found on [www.rdis.com](http://www.rdis.com).

Testing research hypotheses, OLS technique and regression method was used level of significant 95%. For data gathering, compressed files, published by Tehran Stock Exchange, and Tadbirpardaz Software were used. Eviews Software- Version 7- was applied for statistical tests.

Statistical population of the research includes all of the accepted companies in Tehran Stock Exchange for five years, as of 2005 to 2010, regarding the following restrictions, the statistical sample was selected:

1- The company was accepted in the Stock Exchange before 2005;

- 2- Required information of the research, about the companies from 2005 to 2010, was available;
  - 3- End of financial year of the company was 20 March, and did not changed during 2005 to 2010;
  - 4- The company's stock was transacted between 2005 to 2010;
  - 5- It was not included in investment and intermediary companies, because nature of these companies is different.
- After application of the above restrictions, 151 companies remained that were studied as statistical sample.

## RESEARCH HYPOTHESES

The following hypotheses are compiled according to the theoretical basis and research background.

**H1:** Operating profit explain stock market of the company better than net items of (operating) cash flows.

Although, theoretically, operating profit is superior to cash flows figures in explanation of stock market performance, practically, there are several obstacles. The main obstacle is information asymmetry of stockholders and management; also, there are various stimuli for profit management by the authorities.

Considering this view that operating profit has information content, this is logical that existence of information asymmetry relates to increase of information in commitment items. This view is summarized in the second hypothesis:

**H2:** Increasing information asymmetry, operating profit could explain return of stock market better (towards the case that only cash flows are considered).

Increasing of information asymmetry will result in increase of opportunistic profit management motivation; because there is low possibility that the outside stockholders punish it. So, adding discretionary information as accounting commitment figures will be valuable for management; this view is summarized as follows:

**H3:** Increasing information asymmetry, power of cash flow figures will increase in return of stock market (towards the case that only operating profit is considered).

## RESEARCH VARIABLES

Dependant Variable: in the present study, stock return is accounted as dependant variable, which is calculated as relation 1:

$$\text{stock return} = \frac{\text{Receivable cash profit} + \text{stock price at the beginning of period} + \text{priority right privileges} + \text{stock dividend}}{\text{stock price at the beginning of period}} \quad \text{Relation (1)}$$

Independent Variable: in the present study, operating profit and operating cash flow are independent variables that are defined as follows:

Operating Profit: Difference between income and expenses, in the purposed period, which was related to the company's main subject of activity

Operating Cash Flow: the input and output cash flows that are as results of the company's operating activities. Also, those cash flows that were not correlated directly with other cash flows levels are accounted as operating cash flows.

For controlling inflation effect on two variables of operating profit and cash flows, we divided these two variables to the average of that year's average assets.

Control Variables: in this research, they are size of company, beta index, ratio of market value to book value, ratio of income to value of each stock and financial leverage, which are calculated as relation 2:

$$\text{Size of company} = \log \frac{(\text{assets at the beginning of period} + \text{assets at the end of period})}{2} \quad \text{Relation (2)}$$

Beta: Refers to relationship between return change of a kind of securities or return of a big portfolio of market return that is established according to modern theory of securities portfolio; for calculation of it, we should determine relationship between rate of return on a stock and rate of return of market portfolio that demonstrate coefficient of a share price from percentage of total index of stock price; which is calculated as relation 3:

$$\beta_i = \frac{(\text{cov}(R_i, R_m))}{\text{var}_m} \quad \text{Relation (3)}$$

In which,  $R_i$  refers to company's return;  $R_m$  refers to return of market;

Market-To-Book Ratio: it is obtained from division of market value on book value of the company in each financial period.

Earnings-To-Price Ratio: it is calculated by division of each stock on market value of that stock in each financial period.

Financial Leverage: it is calculated by division of total debts of each period on total assets of that period for each company.

Moderator Variable: in the present research, role of information asymmetry influenced on relationship of dependant and independent variables that is accounted as follows:

To split the sample into subsamples, the following model is used based on the following model. This model was initially used by Chiyang and Wincatsh in 1986 to determine range of stock ask price and bid price. Then, others benefited from this model in their research. The said model is as relation 4:

$$\text{SPREAD}_{it} = \frac{AP - BP}{(AP + BP)/2} * 100 \quad \text{Relation (4)}$$

In which,

$\text{SPREAD}_{it}$  = difference range of stock asks price and bid price of  $i$  company's stock in  $t$  year;

(Ask price)  $AP_{it}$  = average of ask price of  $i$  company's stock in  $t$  year;

(Bid price)  $BP_{it}$  = average of bid price of  $i$  company's stock in  $t$  year;

Gathering the above model information, first, all dates of companies' predicted profit declaration to the market, were extracted from archive software of stock exchange issuers notice, and then the ask price and bid price, 30 days before declaration of the predicted profit, were gathered from Tadbirpardaz Software and Technology Company of Tehran Stock Exchange. In the next stage, the best offered buying and selling prices of companies was calculated for each day; the average of 30 day period will be accounted as index of the company for that year.

To separate the sample to two subsamples, at first, the offered buying and selling difference prices of each year were calculated. The companies with higher index than index of the average offered buying and selling difference prices is accounted as companies with high information asymmetry, and those with less or equal average offered buying and selling difference prices will be accounted as low information asymmetry.

## HYPOTHESES TESTING AND DATA ANALYSIS

Hypotheses testing of the present research have been done by the following two models. The first hypothesis was studied in both models, and the second and third hypotheses in the second model, were analyzed.

$$\text{RET}_{it} = \alpha + \beta_1 \text{EARA}_{it} + \beta_2 \text{CF}_{it} + \varepsilon_{it} \quad \text{Model (1) (main model)}$$

$$\text{RET}_{it} = \alpha + \beta_1 \text{EARA}_{it} + \beta_2 \text{CF}_{it} + \beta_3 \text{BETA}_{it} + \beta_4 \text{SIZE}_{it} + \beta_5 \text{MTB}_{it} + \beta_6 \text{ETP}_{it} + \beta_7 \text{LEV}_{it} + \varepsilon_{it} \quad \text{Model (2) (Generalized Model)}$$

### FIRST HYPOTHESIS TESTING

The first hypothesis stated that the operating profit explain stock market of the company better than net items of (operating) cash flows.

$H_0$  = Operating profit does not explain stock market of the company better than net items of (operating) cash flows;

$H_1$  = Operating profit explain stock market of the company better than net items of (operating) cash flows;

Judging about the first hypothesis, in tables 1 & 2 Adjusted R-squared, both main independent variables are compared with the dependent variable.

**TABLE 1: PANEL RESEARCH RESULTS OF THE FIRST HYPOTHESIS, APPLYING MODEL 1 (THE MAIN MODEL)**

Independent Variables	State 1		State 2		State 3	
Constant	-0.17	(-2.05)	0.33	(46.54)	-0.14	(-1.64)
Operating Profit	2.61	(6.31)	--	--	2.87	(6.68)
Cash Flow Operating	--	--	0.14	(4.13)	0.55	(2.12)
F-statistic	2.38		1.99		2.39	
Durbin-Watson stat	2.32		2.28		2.31	
Adjusted R-squared	0.253		0.19		0.258	

Table 1 shows Panel Data Regression results of Model (1)(the main model) in three different states, in which two figures are provided for each independent variable; the figure in parenthesis demonstrates significant level and the other figure represents variable coefficient. The first state, operating profit variable, second state, cash flow variable and the third state, both main variables of cash flow and operating profit, are considered coincidentally as explaining variables. As you see in Table 1, significant level of the three states are higher than 1.96, i.e. all of the variables are in significant reliance level of %95 and comparing Adjusted R-squared in the first state is 0.253, in the second state, it is 0.19; the first state (when the operating profit is considered as explaining variable) towards the second state (when cash flow is considered as explaining variable), has higher explaining capability. Thus, null hypothesis, based on the fact that the operating profit does not explain company's stock market better than cash flow items (operating) was not accepted, and this hypothesis is accepted.

**TABLE 2: PANEL RESEARCH RESULTS OF THE FIRST HYPOTHESIS, APPLYING MODEL 2 (THE GENERALIZED MODEL)**

Independent Variables	State 1		State 2		State 3	
Constant	7.30	(2.93)	5.86	(2.17)	9.42	(3.64)
Operating Profit	3.21	(7.18)	--	--	3.58	(7.73)
Operating Cash Flow	--	--	0.25	(01.98)	0.80	(3.03)
Size of Company	-0.57	(-3.05)	-0.37	(-1.84)	-0.73	(-3.72)
Beta Risk Index	0.003	(4.60)	0.003	(4.29)	0.003	(4.62)
Ratio of Market Value to Book Value	0.0005	(3.23)	0.0004	(2.42)	0.0005	(3.46)
Ratio of Profit to Stock Value	-0.24	(-0.86)	-0.23	(-0.79)	-0.17	(-1.06)
Financial Leverage	0.48	(1.13)	-0.70	(-1.67)	0.45	(-2.12)
F-statistic	2.68		2.12		2.39	
Durbin-Watson stat	2.19		2.09		2.24	
Adjusted R-squared	0.299		0.225		0.31	

Table 2 shows Panel Data Regression results of Model (2)(the generalized model) in three different states, in which two figures are provided for each independent variable; the figure in parenthesis demonstrates significant level and the other figure represents variable coefficient. In this model, operating profit and cash flows variables are two main variables of the company and size of the company, beta index, ratio of market value to book value, ratio of income to each stock value and company's financial leverage are secondary variables, as explaining variables. The first state, operating profit variable, second state, cash flow variable and the third state, both main variables of cash flow and operating profit, are considered coincidentally as explaining variables. As you see in Table 2, in the first state significant level of all of the explaining variables, except ratio of income to value of each stock and financial leverage, are higher than 1.96 and are in significant level of %95. In the second state significant level of all of the explaining variables, except size of company, ratio of income to value of each stock and financial leverage, are higher than 1.96, thus they are in significant level of %95. In the third state, significant level of all of the explaining variables, except ratio of income to value of each stock are higher than 1.96 and are in significant level of %95. Comparing Adjusted R-squared in the first state is 0.299, in the second state, it is 0.225; Adjusted R-squared in the first state is bigger, so it is more explanatory in operating profit. Thus, null hypothesis, based on the fact that the operating profit does not explain company's stock market better than cash flow items (operating) was not accepted (based on model 2 (the generalized model)), and this hypothesis is accepted.

**SECOND HYPOTHESIS TESTING**

The second hypothesis declares that by increasing information asymmetry, the operational profit could explain stock market return better.

H<sub>0</sub>= Capability of operating profit does not increase in explanation of stock return by increasing information asymmetry;

H<sub>1</sub>= Capability of operating profit increase in explanation of stock return by increasing information asymmetry;

**THIRD HYPOTHESIS TESTING**

The third hypothesis declares that by increasing information asymmetry, capability of cash flow increase in explanation of stock return.

H<sub>0</sub>= Capability of cash flow does not increase in explanation of stock return by increasing information asymmetry;

H<sub>1</sub>= Capability of cash flow increase in explanation of stock return by increasing information asymmetry;

**TABLE 3: PANEL RESEARCH RESULTS OF THE SECOND & THIRD HYPOTHESES, APPLYING PANEL REGRESSION**  
Model 2 (the generalized model) and Comparison of the Results in Two Samples by high & Low Information Symmetry

Subsamples	Low Information Asymmetry		High Information Asymmetry	
Independent Variables	Stock Return		Stock Return	
Operating Profit	2.81	(6.50)	1.19	(3.21)
Operating Cash Flow	1.02	(1.98)	2.67	(2.13)
F-statistic	2.45		2.61	
Durbin-Watson stat	2.33		2.19	
Adjusted R-squared	0.267		0.293	

Divided the sample, according to the model stated in the third chapter, to two subsamples. A sample with High Information Asymmetry and a sample with low Information Asymmetry towards the sample with high operating profit as % 27 volumes and the same ratio for sample with low operating profit is % 73. Judging about the second and third hypotheses in Table 3, coefficient of both main independent variables is compared with two different states.

Table 3 shows Panel Data Regression results of Model (2)(the generalized model) in two different samples (sample with high operating profit against sample with low operating profit), similar to Table 2, two figures are provided for each independent variable; the figure in parenthesis demonstrates significant level or P-value or Level Of and the other figure represents variable coefficient. Comparing, operating profit of the sample with low operating profit as 2.81 and the same sample with high operating profit as 1.19, it is obvious that increasing information asymmetry, the operating profit will decrease. Comparing coefficient of cash flows in the sample with low operating profit as 1.02 and the same for the sample with high operating profit as 2.67, it is clear that increasing information asymmetry, coefficient of cash flows will increase. Thus, H<sub>0</sub> (null hypothesis) in the second hypothesis is accepted about the fact that increasing of information asymmetry does not increase operational profit explanatory capability; and H<sub>0</sub> (null hypothesis) in the third hypothesis is not accepted about the matter that increasing of information asymmetry does not increase cash flows explanatory capability.

**DURBIN-WATSON TESTING**

These statistics estimate the presence or absence of autocorrelation in the Residual is used.

As shown in Tables 2 and 3 on any of the Durbin-Watson statistic between 7/1 to 3/2. Therefore, their lack of autocorrelation in the Residual is approved.



**DISCUSSION AND CONCLUSION**

Results of the testing are as follows:

Statistical results of the first hypothesis analysis by panel regression demonstrate that operating cash flow and operating profit variables have significant relationship with company's stock return. And comparison of the Adjusted R-squared showed that the operating profit could explain company's stock return better than net cash flows.

Results of the second hypothesis testing demonstrate that increasing of information asymmetry explain operating profit of the company's stock return better, is ignored (towards cash flows).

Results of the third hypothesis testing demonstrate that increasing of information asymmetry explain cash flows of the company's stock return better, is ignored (towards operating profit).

Results of the second and third hypotheses demonstrate that information asymmetry, as a moderating variable, influence on relationships between independent variables and operating profit and cash flows with dependant variable of stock return. Its influence is in such a way that in the companies with high information asymmetry, cash flows are explained better than operating profit of the company's stock return; but, in the companies with low information asymmetry, the result is vice versa.

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## CUSTOMER SATISFACTION SURVEY OF TRAINING AND DEVELOPMENT PROGRAMS FOR HUMAN RESOURCE DEVELOPMENT DEPARTMENT OF MANUFACTURING ORGANIZATIONS

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### ABSTRACT

*This study is about the level of customer (internal) satisfaction in various manufacturing organizations towards their training and development programs. Basically a survey is done in three organizations about the training and development programs and their impact on the employees behavior, skills, and education level. So to justify the relation between the manufacturing and their training and development programs and their importance in them this research is done. First of all, let's define what a manufacturing organization is like then contribution of them in our country's economy and then the training and development concept with its various aspects which I think should be necessary to be considered in this paper.*

### KEYWORDS

Training, Methods, feedback, performance.

### INTRODUCTION

The study of the level of customer (internal) satisfaction in various manufacturing organizations towards their training and development programs is required to be carried out now a days. The training and development programs of different companies has its impact on the employees behavior, skills, and education level. So it is required to justify the relation between the manufacturing and their training and development programs and their importance in them.

### OBJECTIVES OF THE STUDY

- To analyze the existing training practices, its effectiveness and recommend measures to improve the training practices in manufacturing organizations.
- To study the frequency of training, training methods and their effects on the trainees and recommend certain measures for improvement.
- To understand the present practices enforced in respect of training at the personnel department and recommend any changes if necessary.
- To take feedback and to measure the satisfaction level by calculating a satisfaction score of the employees.
- To differentiate between the satisfaction levels of different groups based on gender, age, tenure in the organization, position and department.

### LITRATURE REVIEW

Dr.Sarbjit, direction Apeejay College of engineering, Gurgaon, India, august 18, 2009. In today's fast moving economy and prevailing uncertainty all around us, the role of HRD is lot more than just identifying suitable manpower and meeting organizational training needs. Developing people's full capabilities and managing them well is the heart of any organization. This articles focus on three controlling elements for the success of any business that are people, time and cost. Paul Lewis, William J. Rothwell, Lindamillar, Ahad Osman-Gani, 14/2010. This article says that, the effective use of human resources is seen as a requisite, and the training and development of employees as paramount. The growth of training and development as an academic subject reflects its growth in practice. Department of psychology & institute of Molecular Biology, University of Oregon, Eugene, OR 97403; and †Sackler Institute for Developmental Psychobiology, Weill Medical College of Cornell University, New York, NY 10021, August 9, 2005. This article test training effects on different age group. They compared with different types of no training (control groups) in 4 years old and 6 years children and attention training (experimental group).

Lane Randale crocket California museum of science and industry, California museum foundation, 700 state drive, Los Angeles, California 90037, USA 2008 This article identifies useful and feasible methods to meet these needs. Finally, it suggested that informal science learning is understood as a collective entity. Main focus is on learning activities, and on methods.

L.B.Oio & D.A.Olanivan, 2008. This article examines the impact of training and development on the performance of home economics teaching schools important. The study revealed among others that and development has a positive impact on the performance of home economics teachers.

Barid, Liayd, Grith Darrell, Lunderson, John, and 2003. This article focuses on training and development strategies require remodeling due to globalization and fast moving business. In order to enhance performance with less cost and development certain as peers of business, learning opinions frameworks has been defined.

Roger G. Brown & Carole L. Jurkiewicz, The University of North Carolina at Charlotte reports the similarities and differences between three age cohorts of public employees—Generation X, Baby Boomers and Matures—on 15 motivational factors. While substantial differences are broadly observed between the generations outside the public sector organizational context, these age-based categories of public employees are nearly identical in the governmental workplace. The few differences found can be ascribed to life and career stages as opposed to cohort-specific sociological influences. The principal implications for recruiting, motivation, training, retention, and human resource processes are discussed

G. Ronald Gilbert, (G. Ronald Gilbert is at the Department of Management and International Business, Florida International University, Florida, USA.) In its research paper, measuring internal customer satisfaction, Identifies two empirically derived measures of internal customer support used to assess team effectiveness from the perspective of the team's internal customers. The measures, personal service and technical competence, are based on analysis of the responses of 465 individuals representing 150 internal customer teams. When compared, the expected (self) ratings of the members of internal intact work teams were more positive than those ratings actually attributed to them by their internal customers. The findings reveal members of work teams tend to overestimate the effectiveness of their team's performance when compared with the ratings the same teams receive from their internal customers. The measurement of internal customer satisfaction is a tool that can be a useful aid for managers of service quality and their work teams to help them more accurately measure the effectiveness of their units.

The development of an employee satisfaction model for higher education, Shun-Hsing Chen, (Department of Industrial Engineering, Chung-Yuan University, Chung-Li, Taiwan, Republic of China) Department of Industrial Engineering and Management, Chin-Min Institute of Technology, Chung-Li, Taiwan, Republic of China), Ching-Chow Yang, (Department of Industrial Engineering, Chung-Yuan University, Chung-Li, Taiwan, Republic of China), Jiun-Yan Shiau, (Department of Industrial Engineering, Chung-Yuan University, Chung-Li, Taiwan, Republic of China), Hui-Hua Wang, (Department of Applied Foreign Languages, Chin-Min

Institute of Technology, Chung-Li, Taiwan, Republic of China) Most studies on higher education focus on students as customers, and evaluate student levels of satisfaction/dissatisfaction with their programs, while generally neglecting teacher work satisfaction. Thus, this study evaluates how employee dissatisfaction with various investment items determines the improvement priority. There are at least two major issues that emerge when reviewing the employee development literature. First, while a number of employee development models have been proposed (e.g. Shonhiwa and Gilmore 1996; Jones and Jacobs 1995; Moravec (1994), few if any of them have actually been empirically validated. That is, few research. Studies have described the relationship between employee development programs, Learning outcomes and organizational outcomes, such as: product quality, rework .Costs or perceptions of customer service. Second, in most research studies, employee Development programs are usually embedded within other programs, such as performance management systems, performance reviews or incentive systems. As a result, when studies are found, the employee development aspect is more often considered more an ancillary aspect of the study, not necessarily the primary focus. Given these limitations, however, the following section presents selected studies that directly or indirectly illustrate the relationship between employee development and organizational performance.

McDonald and Smith (1995) conducted a study of 437 publicly traded companies .To demonstrate the relationship between performance management programs and Business performance. In this instance, performance management programs included the existence of explicit job goals, incentives and feedback mechanisms, along with ample learning opportunities to achieve the goals. The findings suggest that firms without performance management programs, and without employee development for that matter, tend to under-perform relative to industry financial averages, while those with performance management practices tend to perform at or above industry averages. The researchers also conducted a turnaround analysis, focusing only on those companies with performance management programs from up to three years before and three years after implementation of the systems. The researchers concluded that total shareholder return on average trailed industry standards by 5.1 per cent before implementation, but climbed to 19.7 per cent above average industry standards afterwards.

Koch and McGrath (1996) embedded employee development in the human resource management framework used to examine productivity in a study of 319 business units. The measure of employee development was limited to the sum of two measures: 1) the amount of formal training provided and 2) the extent to which promotions from within were used. Productivity was measured by dividing the business unit's net sales by the number of employees. The relationship of investment in employee development with improved productivity was not borne out. However, when the employee development index was factored in with other variables, such as more sophisticated human resource planning and evaluation, recruitment and selection strategies, there was a compounding effect on productivity, especially in those organizations where a relatively small workforce operated a large number of fixed assets, systems and equipment. Evidently, employee development was indirectly related to organizational performance, through other human resource systems.

Tafleur and Hyten (1995) described the impact of a variety of learning experiences on job performance. Factors in the treatment condition included task checklists, feedback, goal setting, training, job aids and bonuses for quality performance. The results showed that during the treatment phase a number of performance measures increased, including accuracy, timeliness and overall customer satisfaction. Interestingly, when the treatment was suspended, there was a noticeable decline in performance. When the treatment phase was reintroduced, measures of service quality increased

Tansky (1991) examined the quality of the employee development discussion that occurred between employees and their supervisors, and the attitudinal outcomes of the discussions. When employee development discussions were perceived to be fair, it was positively correlated with certain desired attitudes of employees, including goal commitment, organizational commitment and job satisfaction.

Jeffrey (1995) surveyed organizations that are recognized for their outstanding customer service and product quality. Two strategies in particular were consistently identified among the responding companies: 1) developing employees into professionals and 2) motivating employees to stay and excel. Saks (1996) examined the relationship between the amount and helpfulness of entry training and work outcomes for new-comers during organizational socialization. A sample of 152 newly hired entry-level professionals completed a questionnaire after the first six months of socialization. Supervisor ratings of job performance were obtained four months later. The results indicated that the amount of training received by newcomers was positively related to job satisfaction, commitment, intention to quit, ability to cope and several measures of job performance. Newcomers' perceptions of the helpfulness of training were also positively related to job satisfaction, commitment and intention to quit beyond that explained by training amount.

Holton (1994) examined a number of socialization outcomes that were preceded by new-hire training and awareness programs. Among the outcome measures were psychological success, intent to quit, organizational commitment and job satisfaction. New employee development tactics accounted for large portions of the variance, from 27.7 to 35 per cent, in each of the socialization outcomes.

Birdi et al. (1997) showed that overall job satisfaction and organizational commitment were significantly associated with prior participation in required training courses and work-based development activity.

Stephen Choo, (Towers Perrin-ISR, Sydney, Australia), Christine Bowley, (Department of Consumer and Employment Protection, Government of Western Australia, Perth, Australia) A review of the literature on franchising has revealed a significant lack of academic research on employee training in franchise systems. Further, most research in this area tended to focus on training for franchises as part of the overall package. This study seeks to address the shortfall of research in this area by investigating the influence of training and development on an employee's job satisfaction at one of Australia's fastest growing franchises.

## METHODOLOGY

### RESEARCH METHODOLOGY

Every project work is based on certain methodology, which is a way to systematically solve the problem or attain its objectives. It is a very important guideline and lead to completion of any project work through observation, data collection and data analysis.

According to Clifford Woody, "Research Methodology comprises of defining & redefining problems, collecting, organizing & evaluating data, making deductions & researching to conclusions."

Accordingly, the methodology used in the project is as follows: -

- Defining the objectives of the study
- Framing of questionnaire keeping objectives in mind (considering the objectives)
- Feedback from the employees
- Analysis of feedback
- Conclusion, findings and suggestions.

### SELECTION OF SAMPLE SIZE

In order to take a reasonable sample size and not to disturb the functioning of the organization, a sample size of reasonable strength of the Company has been taken in order to arrive at the present practices of training in the Company.

Accordingly, 81 officers have been selected at random from all the departments and 27 from each organization and feedback forms (questionnaire) have been obtained. The data has been analyzed in order to arrive at present training practices in the organizations.

### SAMPLING TECHNIQUE USED

The technique of Random Sampling has been used in the analysis of the data/Random sampling from a finite population refers to that method of sample selection, which gives each possible sample combination an equal probability of being picked up and each item in the entire population to have an equal chance of being included in the sample. This sampling is without replacement, i.e. once an item is selected for the sample, it cannot appear in the sample again.

Sample of 81 employees are used.

### RESEARCH INSTRUMENT

First, observation technique has been used in order to arrive at the research problem. To find out its solution, mode of various secondary data collection has been used to collect the necessary data.

**DATA COLLECTION**

To determine the appropriate data for research mainly two kinds of data was collected namely primary & secondary data as explained below:

**PRIMARY DATA**

Primary data are those, which were collected afresh & for the first time and thus happen to be original in character. However, there are many methods of collecting the primary data; all have not been used for the purpose of this project. The ones that have been used are Questionnaire, Informal Interviews, and observation.

**SECONDARY DATA**

Secondary data is collected from previous researches and literature to fill in the respective project. The secondary data was collected through Text Books, Articles, Journals, Websites

**STATISTICAL TOOLS USED**

The main statistical tools used for the collection and analyses of data in this project are: Pie Charts , Tables, Standard deviation, Mean, Frequency

**SCALE**

The scaling used in the questionnaire was Likert Scale, with 1 referring to strongly disagree and 5 referring to strongly agree. Likert scale is the most appropriate mechanism that can be used here because most of the respondents will find it easier to relate to the questions on that.

**SCOPE OF THE STUDY**

- Training Effectiveness is the process wherein the management finds out how effective it has been at training and developing the employees in an organization.
- This study gives some suggestions for making the present training and development system more effective.
- It gives the direction, how to deal differently with different employees.
- It identifies the training & development needs present among the employees.
- It is limited to study the satisfaction levels at manufacturing companies only.

**PLAN OF ANALYSIS**

The analysis consists of descriptive analysis of the results of the satisfaction survey. It also includes looking at various factors that affect the satisfaction level of different groups (divided on the base of gender, age, tenure, position and department)

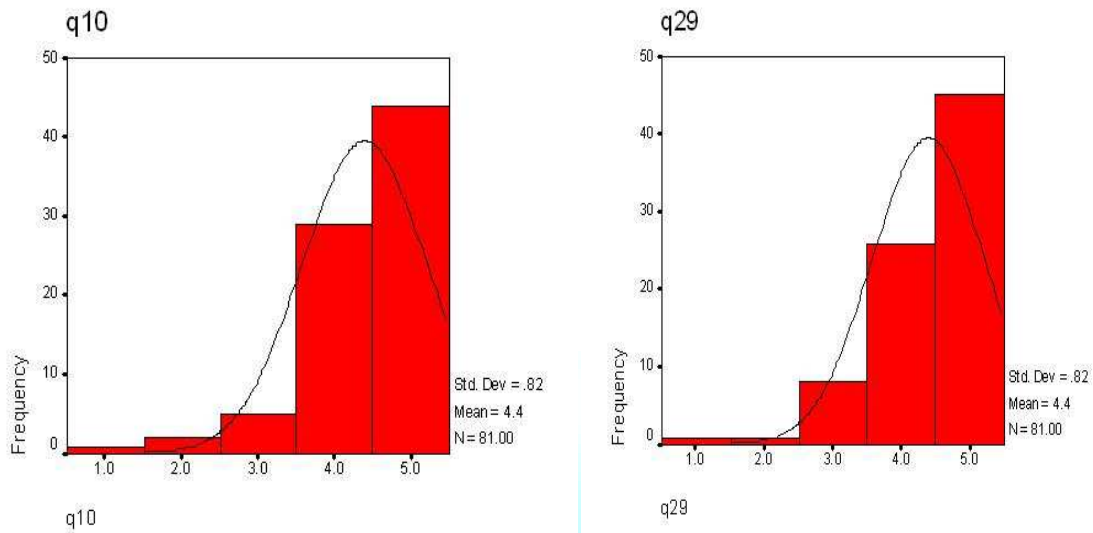
**ANALYSIS AND INFERENCES**

**OVERALL ANALYSIS OF THE CUSTOMER SATISFACTION SURVEY (EMPLOYEES)**

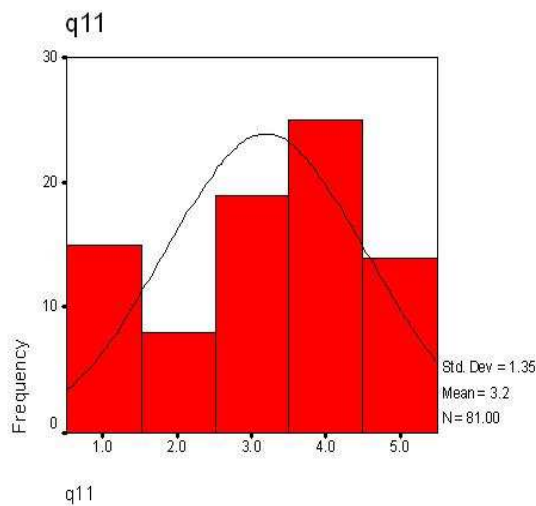
Descriptive statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
q1	81	1	5	3.43	1.313
q2	81	1	5	4.16	0.955
q3	81	1	5	3.94	1.197
q4	81	1	5	3.95	1.023
q5	81	1	5	3.42	1.023
q6	81	1	5	4.02	1.024
a7	81	1	5	3.84	0.941
q8	81	1	5	4.09	0.897
q9	81	1	5	4.02	1.129
q10	81	1	5	<b>4.4</b>	<b>0.817</b>
q11	81	1	5	<b>3.19</b>	<b>1.352</b>
q12	81	1	5	3.51	1.152
q13	81	1	5	3.59	1.116
q14	81	1	5	4.11	1.012
q15	81	1	5	3.77	1.121
q16	81	1	5	3.74	1.093
q17	81	1	5	3.62	1.21
q18	81	1	5	3.43	1.244
q19	81	1	5	3.78	1.025
q20	81	1	5	3.95	1.036
q21	81	1	5	3.74	1.01
q22	81	1	5	3.93	0.919
q23	81	1	5	3.6	1.158
q24	81	1	5	3.51	1.119
q25	81	1	5	4.05	0.865
q26	81	1	5	3.51	1.195
q27	81	1	5	3.89	1.095
q28	81	1	5	3.85	0.923
q29	81	1	5	<b>4.4</b>	<b>0.817</b>
q30	81	1	5	3.99	1.09

From the table above we can draw the following inferences:

- The employees are highly satisfied with the ambience of the auditorium during the training program (q10).
- The employees also strongly feel that they are personally responsible for their training/development (q29).
- The standard deviation for both of these issues is very less (.82) which means most of the employees have given a rating, which is near to the mean rating. So, there is not much variation in the responses of the employees regarding these two issues.

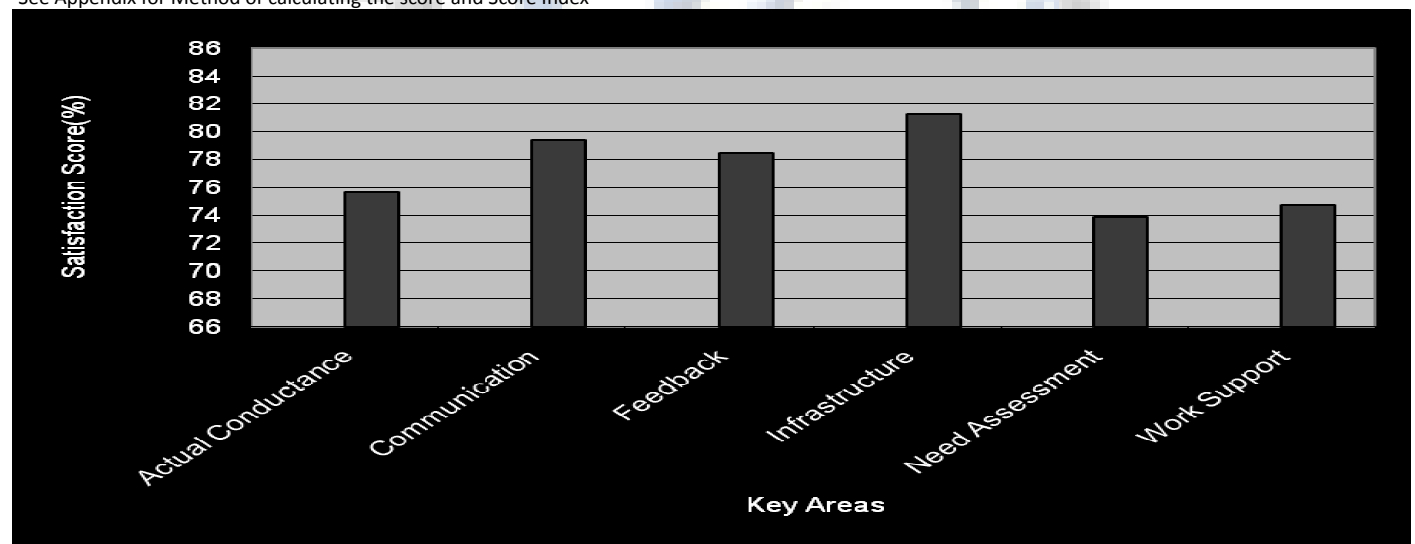


- The lowest satisfaction has been regarding the employee’s discussion with Department Head/Officer regarding their training and development needs (q11).
- We can see from the figure below that the ratings for this question is widely distributed. This is also evident from the high value of the standard deviation (1.35). This means although it has an average rating of 3.2, still a lot of employees have rated either very high or very low. So this is not a common problem to all the employees but is present only in **certain groups**.



Key Areas	Score (%)
Actual Conductance	75.65
Communication	79.4
Feedback	78.4
Infrastructure	81.3
Need Assessment	73.85
Work Support	74.75

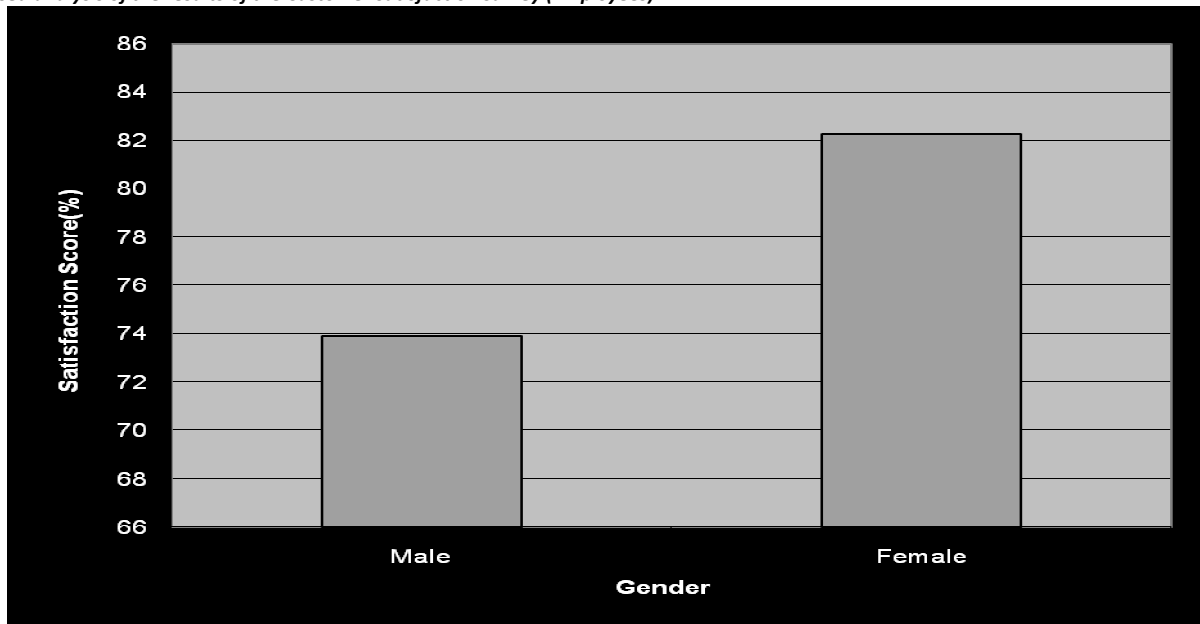
\*See Appendix for Method of calculating the score and Score Index



We can draw the following inferences from the above graph:

- The employees have an "Excellent" level of satisfaction regarding Actual Conductance, Communication, Feedback and Infrastructure.
- Their satisfaction level tends to be lower in areas of Need Assessment and Work Support but still they have a "Good" level of satisfaction
- The employees are highly satisfied with the infrastructure provided for the training programs.
- The employees have the least level of satisfaction regarding the need assessment for their training and development.

**Gender based analysis of the results of the Customer satisfaction survey (Employees):**



- Males have a lower level of satisfaction as compared to females.
- Females have not scored a single question below 66.67% Males have scored three questions below 66.67%

Gender	Overall (%)	AC (%)	C (%)	FB (%)	S (%)	NA (%)	WS (%)
Male	73.89655	72.89655	75.72414	75.31034	78.06897	70.27586	71.10345
Female	82.26087	79.30435	85.21739	82.78261	85.91304	79.65217	80.69565

\*See Appendix for Method of calculating the score and Score Index

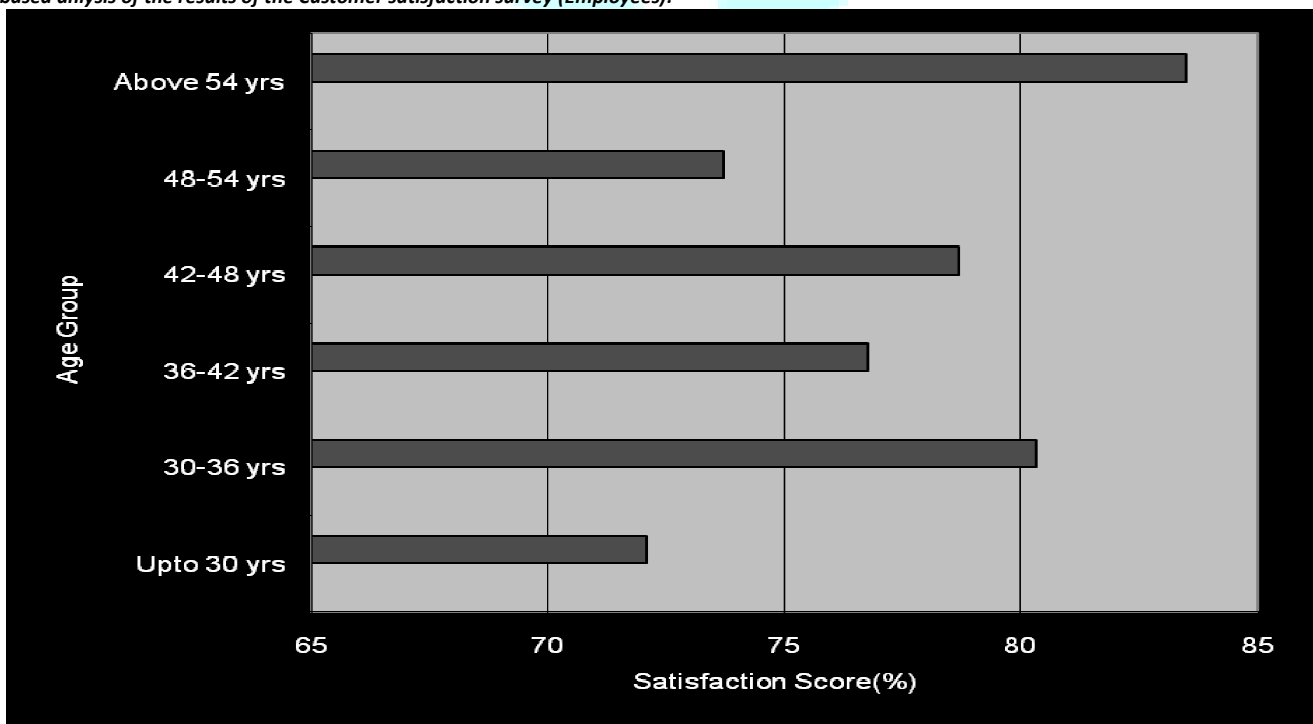
The major reasons for the lower level of satisfaction among the male employees are:

- Discussion between dept head and employees regarding Training and Development needs
- Interest/Support by department head in implementing the employee's learning at workplace.
- Coverage of the topics in the allotted time of the training program

The major reasons for a high level of satisfaction among female employees are:

- The belief that they are responsible for their training needs
- The ambience of the auditorium during the training program
- The timely intimation of training by the HRD

**Age based analysis of the results of the Customer satisfaction survey (Employees):**



- The overall satisfaction score is highest for the "Above 54" age group
- The overall satisfaction score is lowest for the "Up to 30 years" age group. The "Up to 30 years" age group is highly opinioned and has volatile satisfaction levels for different areas.

Age	Overall (%)	AC (%)	C (%)	FB (%)	IS (%)	NA (%)	WS (%)
Up to 30 years	72.08333	75	81.5	66.5	81	59.5	69
30-36 years	80.33333	74	81	82	86	82	77
36-42 years	76.75362	76.34783	79.30435	78.26087	81.04348	73.56522	72
42-48 years	78.66667	76.375	79.125	81.125	80.75	77.375	77.25
48-54 years	73.7037	72.44444	75.11111	76	81.77778	65.33333	71.55556
Above 54 years	83.5	76	86	83	82	87	87

\*See Appendix for Method of calculating the score and Score Index

The major reasons for a low level of satisfaction for the employees belonging to "Up to 30 years" age group are:

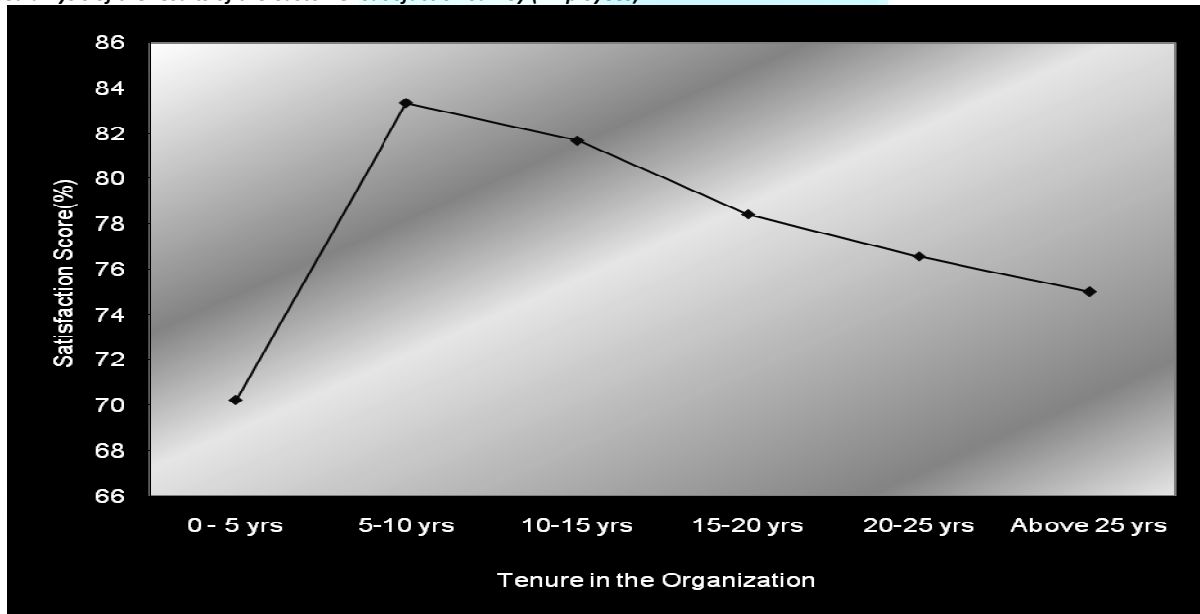
- ❖ Need assessment
  - Discussion between dept head and employees regarding Training and Development needs
  - Lack of awareness regarding who, how and when training needs are identified and sent to HRD
  - Less importance is given to training of employees within the organization
- ❖ Feedback
  - Unable to acquire skills to accomplish their work in the best way
  - Lack of benefit to the dept. from the training received

The major reasons for a high level of satisfaction for the employees belonging to "Above 54 years" age group are:

- ❖ Work Support
  - Cooperation from officer/colleagues during training
  - Department head takes interest in the employee's learning and provides necessary support for implementing it
  - Access to express their Training and Development needs
  - Department head provides the right environment for implementing new methods
- ❖ Need Assessment
  - Awareness regarding who, how and when training needs are identified and sent to HRD
  - The belief that they are responsible for their training needs
  - Importance given to training of employees within the organization
  - Needs identified in line with an employee's current as well as future job
- ❖ Communication
  - Method of inviting for the training
  - The timely intimation for attending the training
  - The provision of reminder call from HRD for attending the training program

Here we can see the **varied response** to "Need Assessment" area from the different age groups. The "Up to 30 years" age group has a very low level of satisfaction (59.5%) in this area whereas the "Above 54 years" age group has a very high level of satisfaction in this area (87%)

**Tenure based analysis of the results of the Customer satisfaction survey (Employees):**



- The overall satisfaction score is highest for the employees who have been working with organizations for "5-10" years
- The overall satisfaction score is lowest for the employees who have been working with organizations for "0-5" years. The satisfaction levels are lower for employees who are new to the organization.
- The satisfaction tends to increase after the initial 5 years till the employee completes 10 years in the organization and then shows a downward trend again.

Tenure	Overall (%)	AC (%)	C (%)	FB (%)	IS (%)	NA (%)	WS (%)
0 - 5 years	70.20513	69.53846	76.30769	67.38462	77.53846	63.07692	67.38462
5-10 years	83.33333	72	86	82	84	90	86
10-15 years	81.66667	72	88	86	90	76	78
15-20 years	78.4127	76	80.57143	80.19048	82.85714	75.61905	75.2381
20-25 years	76.55285	75.90244	77.36585	78.53659	78.92683	73.7561	74.82927
Above 25 years	75	76	74	78	86	72	64

\*See Appendix for Method of calculating the score and Score Index

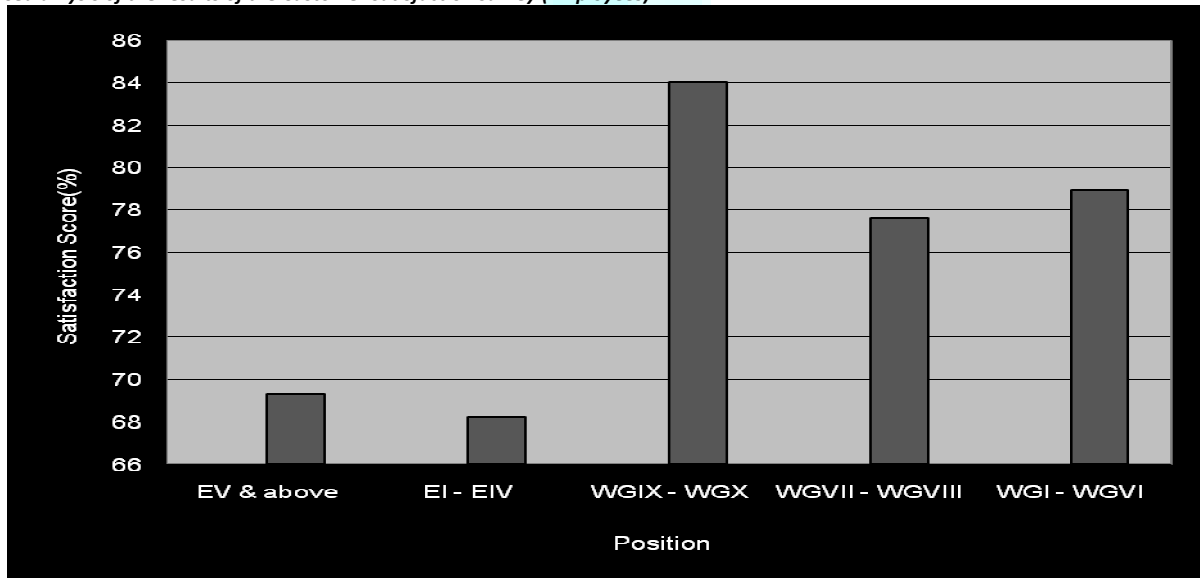
The major reasons for a low level of satisfaction of employees who have completed service of "0 - 5 years" are:

- ❖ Need Assessment
- Discussion between dept head and employees regarding Training and Development needs
- Lack of awareness regarding who, how and when training needs are identified and sent to HRD
- Less importance is given to training of employees within the organization

The major reasons for a high level of satisfaction of employees who have completed service of "5 – 10 years" are:

- ❖ Communication
- Method of inviting for the training
- The timely intimation for attending the training
- The provision of reminder call from HRD for attending the training program
- ❖ Need Assessment
- All aspects of need assessment
- ❖ Work Support
- Cooperation from officer/colleagues during training
- Department head takes interest in the employee's learning and provides necessary support for implementing it
- Access to express their Training and Development need Here we can again see the **varied response** to "Need Assessment" area from the employees having completed different years of service.

**Position based analysis of the results of the Customer satisfaction survey (Employees):**



- The overall satisfaction score is highest for the employees who have the wage group "WGIX - WGIX"
- The overall satisfaction score is lowest for the executives of "EI - EIV" level.
- The satisfaction levels are lower for employees at the executive level and higher for the employees coming under the Non executive level.

Position	Overall (%)	AC (%)	C (%)	FB (%)	S (%)	NA (%)	WS (%)
EV & above	69.33333	72.57143	68.57143	68.57143	77.71429	65.71429	62.85714
EI - EIV	68.20513	68.92308	74.76923	<b>64.92308</b>	75.38462	<b>60.30769</b>	<b>64.92308</b>
TC	-	-	-	-	-	-	-
WGIX - WGIX	84	79	83	<b>91.5</b>	<b>87</b>	79.5	84
WGVII - WGVIII	77.6036	76.43243	80.64865	79.67568	80.43243	75.02703	73.40541
WGI - WGI	78.91667	74.25	78.25	79.25	81.75	78.25	81.75

\*See Appendix for Method of calculating the score and Score Index

The major reasons for a low level of satisfaction of employees belonging to "EI - EIV" are:

- ❖ Need Assessment
- Discussion between dept head and employees regarding Training and Development needs
- Lack of awareness regarding who, how and when training needs are identified and sent to HRD
- Less importance is given to training of employees within the organization
- Needs identified not in line with an employee's current as well as future job
- ❖ Work Support
- Access to express their Training and Development needs
- Department head takes interest in the employee's learning and provides necessary support for implementing it
- Lack of opportunities to implement the acquired skills and knowledge
- ❖ Feedback
- Unable to acquire skills to accomplish their work in the best way
- Lack of benefit to the dept. from the training received

The major reasons for a high level of satisfaction of employees belonging to "WGIX - WGIX" are:

- ❖ Feedback
- All aspects of feedback
- ❖ Infrastructure
- All aspects of infrastructure

Here we can see the **varied response** to "Feedback" among the employees at different positions in the organization.





- The overall satisfaction score is highest for the "Product Assurance"
- The overall satisfaction score is lowest for the "Materials Management" department.

Div/Dep't.	Overall (%)	AC (%)	C (%)	FB (%)	IS (%)	NA (%)	WS (%)
HR/F&A	83.06667	76.4	88	84.8	85.6	83.2	80.4
MM	70.09524	68.57143	73.14286	69.42857	73.14286	66.28571	70
Manufacturing	75.67677	73.33333	79.39394	76.60606	80.72727	71.27273	72.72727
PA	83.8	81.2	86.8	84.4	86	84.4	80
D&E/MKTG	74.77778	81.33333	71.33333	76.66667	76	71.33333	72
QM/P&S	72.75	76	66.5	77.5	80.5	65.5	70.5

\*See Appendix for Method of calculating the score and Score Index

The major reasons for a low level of satisfaction of employees belonging to "Materials Management" department are:

- ❖ Need Assessment
- Discussion between dept head and employees regarding Training and Development needs
- Needs identified not in line with an employee's current as well as future job
- Less importance is given to training of employees within the organization

The major reasons for a high level of satisfaction of employees belonging to "Product Assurance" are:

- ❖ Communication
- The timely intimation for attending the training
- The method of inviting for the training
- Last moment changes are informed by the HRD
- The participation letter has complete information regarding the training program
- ❖ Infrastructure
- The ambience of the auditorium
- The assistance provided by HRD at anytime during the program

**CONCLUSION**

- The overall satisfaction score of the Customer Satisfaction Survey for the HRD is 77.225%. This shows the average satisfaction level of the employees at these manufacturing organizations is "Excellent".
- Although the overall satisfaction level is "Excellent" it does not mean that there are no areas that need to be improved. The satisfaction levels vary across different groups that have been divided based upon gender, age, tenure in the organization, position and department.
- The young employees (up to 30 years) have the lowest level of satisfaction when compared to other age groups. The areas that need to be improved upon to raise their level of satisfaction are Need Assessment and Feedback. As they are already satisfied with the other key areas, this will help to raise their overall satisfaction
- Need Assessment is one area which shows a varied response from different age groups. The "Up to 30 years" age group has a very low level of satisfaction (59.5%) in this area whereas the "Above 54 years" age group has a very high level of satisfaction in this area (87%). So, the Need Assessment of the young employees (up to 30 years) of the organization needs to be looked at.
- The satisfaction level tends to increase once an employee joins an organization. But this trend continues only till the time the employee completes a service of 10 years in the organization. After 10 years, the satisfaction levels tend to decrease gradually. The satisfaction level of employees needs to be maintained throughout their tenure.
- Need Assessment is one area which again shows a varied response from employees who have completed different years of service in the organization. The employees who have completed "0 - 5 years" have a low level of satisfaction (63.07692%) in this area whereas employees who have completed "5 - 10 years" age group have a high level of satisfaction in this area (90%).
- We need to look at the change in the "Need Assessment" for these two sets of employees and find out the reason for this increase in the satisfaction scores. This will help us to increase the satisfaction level of the employees who have completed "0 - 5 years" in the organization.
- The satisfaction level of the employees at the Executive level tends to be lower than the employees who come under the Non executive level. The areas that need to be improved upon to raise their level of satisfaction are Need Assessment, Work Support and Feedback.
- Feedback is one area that shows a varied response from employees who are at different positions in the organization. The employees under "EI - EIV" have a low level of satisfaction (64.92308%) in this area whereas employees under "WGIX - WGIX" have a high level of satisfaction in this area (91.5%). So special attention needs to be paid to executives and their requirements regarding Feedback.
- The varied response to "Need Assessment" clearly indicates that there is a disconnect between the employees and their Department heads. There seems to be a lack of communication between them regarding their training needs. This in turn leads to their poor development.

- Based on the research we can conclude that the HRD department needs to have a greater focus on male employees up to the age of 30 years at executive positions within the organization and need to increase their satisfaction levels. This will enable the HRD to further enhance the "Excellent" satisfaction level throughout the organization.

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## ACCESSING THE INTERNATIONAL CAPITAL MARKETS WITH DEPOSITORY RECEIPTS

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### ABSTRACT

*In today's era there is lot of competing between companies. A business needs capital for expansions, growth and existence. Due to liberalization, Globalization and Privatization companies needs hefty funds to retain in the market and the companies can raise funds from international markets. Companies that previously had to raise capital only domestically can now tap financial markets in the foreign countries. In order to do so, companies may list their stocks on foreign stock exchanges while investors may trade overseas. An examination of trends in global financial markets over past few years reveals that many companies are looking beyond their domestic financial markets to develop an investor base and to raise international capital. For foreign listing of their stocks, firms can choose between the direct listing of their equity stocks and listing of their Depository Receipt (DR) on the foreign exchange. Indian capital market is one of the fastest growing markets in the world and the momentum has gain a lot of potential in the recent years. There are many MNC operating in India but they have not raised capital form Indian market yet. Standard Chartered Bank PLC is the only company that has recently raised capital form Indian capital market through Indian Depository Receipt (IDR). In this research report an attempt is made to study the Standard Chartered Bank PLC IDR issue and the future prospect IDR.*

### KEYWORDS

Depository Receipt, Foreign exchange Multinational Companies.

### INTRODUCTION

In today's world economy trade is not restricted to the boundaries of the countries. Due to globalization there is trend towards internationalization of financial markets. India capital market is growing constantly at 8-9% ever since. The government abolishing the laws relating to outsourcing of capital. All the growing economy is adopting liberalized and outward looking policy initiatives with regard to their financial market. The companies that previously had to raise capital only domestically can now tap financial markets in the foreign countries. In order to do so, companies may list their stocks on foreign stock exchanges while investors may trade overseas. An examination of trends in global financial markets over past few years reveals that many companies are looking beyond their domestic financial markets to develop an investor base and to raise international capital by the end of December 2001, there were 2465 foreign companies listed on the major stock exchanges of the world.

A vast majority of foreign firms choose to cross-list their stock through the use of depository receipts (DRs), which have become the popular mode of financing. The 1990s saw an increased flow of DR programmes, especially from the emerging markets. In April 1992, the government permitted Indian companies to raise equity capital by issuing DR programmes in the international financial markets and of all the emerging markets, India has the maximum number of DR programmes.

### CONCEPTUAL FRAMEWORK

#### DEPOSITORY RECEIPT

A depository receipt is a negotiable instrument denominated in US dollars or Euro (or in a currency other than the domestic currency of the issuer company), which is issued to the investors in one or more foreign countries. There are two types of receipts

#### AMERICAN DEPOSITORY RECEIPT (ADR)

American Depository Receipts (ADRs) are offered to US investors by a U.S. bank that functions as a depository, having ADR being backed by a specific number of shares in the non-U.S. Company. ADRs can be traded on any of the US stock exchange (NYSE, NASDAQ, or AMEX) and over-the-counter.

#### GLOBAL DEPOSITORY RECEIPT (GDR)

A bank certificate issued in more than one country for shares in a foreign company. The shares are held by a foreign branch of an international bank. The shares trade as domestic shares, but are offered for sale globally through the various bank branches. A financial instrument used by private markets to raise capital denominated in either U.S. dollars or euro's.

### OBJECTIVES OF THE PROJECT

- To understand the concept and to analysis of Depository Receipt programme.
- To analyze the IDR offering by Standard Chartered PLC

### RESEARCH METHODOLOGY

The data used in this study has been taken from secondary source since this is a dynamic concept that keeps changing itself to adjust to the changing times.

### LIMITATIONS

Despite my best efforts, this project suffers from certain limitations which were beyond the control.

I have enlisted them as under:

- As a result of the topic being a dynamic one, I had to restrict ourselves to the largely in secondary sources.
- With the DR issuing companies being compelled to disclose detailed statistics only to their depository banks, we were unable to collect as much statistical data as we would have kill

### ANALYSIS OF THE IDR OFFERING BY STANDARD CHARTERED PLC

Standard Chartered Bank PLC (here in after called SCB) was formed in 1969 through a merger of two banks: The Standard Bank of British South Africa, founded in 1863, and the Chartered Bank of India, Australia and China, founded in 1853. Standard Chartered PLC, listed on both the London Stock Exchange and the Hong

Kong Stock Exchange, ranks among the top 20 companies in the FTSE 100 by market capitalization. The London headquartered Group has operated for over 150 years in some of the world's most dynamic markets, leading the way in Asia, Africa and the Middle East. Company operates through number of subsidiaries including Standard Chartered bank (SCBUK), one of the leading international and banking and financial services company. Standard Chartered bank is headquartered in UK where it is regulated by the FSA (financial services authority) but has significant operations in Asia region, which accounts for over 75% of its total profit before tax.

Standard Chartered Bank PLC listed its IDR on 11th of June 2010. The bank had issued a total of 24 crore IDR's with each IDR equal to 1/10th of a share. The price band was between Rs 100-Rs 115 and the price fixed was Rs 104.

Standard Chartered IDR Data	
Price Band	Rs 103 to 111 per IDR (estimated)
Discount to Retail investor	5% to Retail investors post allotment
Fresh issue by the Company	24,00,00,000 (24 Cr IDR'S) Each IDR IS 1/10 OF 1 Share
Fresh Issue Size	Rs 2472 crs based on closing price of 21 <sup>st</sup> May in London
Pre-Issue Share	202,94,35,637 Shares
Post-Issue Share	205,34,35,637 Shares
London closing price as on 21 <sup>st</sup> May 2010	1613 pence or Rs 1093.65
Market Capitalization post issue	Rs 2,24,572.99 crs based on closing price of 21 <sup>st</sup> My in London
QIBs	50% or 12,00,00,000 IDR's
Non- Institutional Buyers	18% or 4,32,00,000 IDR's
Retail individual Bidders	30% Or 7,20,00,000 IDR's
Anchor Investors	30% of QIB Portion or 3,60,00,000 IDR's
Employees Reservation	2% or 48,00,000 IDR's
Issue opens on Tuesday	25th May 2010
Issue closes on Friday	28 <sup>th</sup> May 2010
Primary Listing	London and Hong kong
Bid Lot Size	60 Shares ( Expected)

#### SUBSCRIBED DATA OF STANDARD CHARTERED IDR

Category	Shares offered	Shares Bid	Subscription Ratio
QIB	84000000	348394400	4.1476
NII	43200000	82150400	1.9016
Retail	72000000	18210200	0.2529
Employee	4800000	950000	0.1979
TOTAL	204000000	449705000	2.2

Each IDR represents 1/10th of a share. The closing price of the share on the London stock exchange was GBP 16.37 which corresponds to an exchange rate of 67.5695 to Rs 1106.11 or 110.61 per IDR. There is at the expected price to be declared of Rs 104 a discount of approximately 5.97%. Retail investors enjoyed a further 5% discount making it a discount of 10.68% to the closing price on the LSE as of Friday the 28th May.

It may also be mentioned that this is the first issue under the new guidelines laid down by SEBI for QIB's putting in 100% of the bid amount and also for listing within 12 days. This issue listed on 15th or 16th of June

#### CONCLUSIONS

SCB's IDR provides Indian investors a vehicle to invest in a global entity. As a result of its diversified presence and emerging market focus, the bank came out relatively unscathed from the sub-prime crisis and is now well poised to benefit from the ongoing recovery in the emerging economies. Hence, the bank is an excellent diversified multinational banking play with strategic positioning in high-growth emerging markets. At the lower end of the offer price band, the stock is offered at a 9% discount to its current market price at the Hong Kong Stock Exchange. 10 IDR equals to one share. IDRs can be converted into underlying equity shares only after one year and with the consent of the Reserve Bank of India. On such conversion, resident individual investors have to sell them within 30 days of the conversion. IDRs are not two-way fungible. Therefore, reconversion of equity shares into IDRs is not permitted. SCB's lower NIM was largely offset by trading gains. With most Asian central banks looking to raise rates, trading revenue seems to be vulnerable. As per above analysis of SCB and its IDR issue, it's good to invest in IDR of SCB Plc for an investor.

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### **ABSTRACT**

*Operation Flood and dairy co-operatives emerged in India as the largest rural employment scheme, enabling the modernization of the dairy sector to a level from where it can take off to meet not only the country's demand for milk and milk products but can also exploit global market opportunities. This study reviews the existing status of milk marketing and dairy co-operatives in India and provides recommendations to meet future challenges. The results of the study indicate that 80 percent of the milk produced by the rural producer is handled by an unorganized sector and the remaining 20 percent is handled by an organized sector. It is found that the dairy co-operatives play a vital role in alleviating rural poverty by augmenting rural milk production and marketing. Involvement of intermediaries; lack of bargaining power by the producers; and lack of infrastructure facilities for collection, storage, transportation, and processing are the major constraints which affect the prices received by producers in milk marketing. Milk quality, product development, infrastructure support development, and global marketing are found to be future challenges of India's milk marketing.*

### **KEYWORDS**

Bargaining, Employment, Marketing, Product development, Unorganized sector.

### **INTRODUCTION**

The national income is contributed by many sectors and among them occupies an important place the agricultural sector. In the agriculture sector, the dairy sector plays a vital role. The dairy sector of India has witnessed some major changes over the last two decades. As a result of concerted efforts towards total dairy development, our milk production has nearly trebled. "The milk has now become the largest single agricultural commodity with dairy industries estimated at more than Rs. 52,000 crores, a figure which is expected to reach Rs. 88,000 crores per annum by the next century"<sup>1</sup> In the beginning of next century. "The milk production of India which had stagnated at around twenty million tonnes for the past twenty years (1980 - 2000), began rising from 2000 onwards and crossed over 50 million tonnes mark in 2002. In 2007-2009 the milk output was around 59 million tonnes. The milk production is poised to reach the 76 million tonnes.

As a matter of fact, encompassing a wide geographical area and reflecting different political systems, differing level of economic development, social systems, changes in tastes, preferences and traditions, the approach to dairy development has varied widely from region to region in India. The prosperity of any land from time immemorial has been measured in terms of the flow of milk. History establishes that India was a land of milk before foreign innovations. After the break of the services union, India has become the second largest milk producer in the world next to the USA.

### **REVIEW OF LITERATURE**

The dairy sector is a very important productive activity in Indian agriculture, as milk is the second largest agricultural commodity contributing to GNP, next only to rice, and generates a regular flow of income to the farmer's family throughout the year. It is recognized as an important activity suitable for employment generation and value addition in the agricultural sector in the Indian economy in general and for rural families especially, small and marginal farmers and landless agricultural laborers in particular. But the success of dairy farms (or plants) largely depends on the effective management of operations like milk marketing, because marketing provides a stimulus to greater production and thereby increases demand, which provides its own incentive to increase supply. An efficient marketing system results in a higher proportion of producer profit in the consumer rupee, which influences the producer's decision to invest resources in a particular economic activity in a particular time period. An efficient marketing system also helps bring quality product to the consumers at the lowest possible cost.

Therefore the analysis of milk marketing channels, marketing costs, and the margins of market middleman are essential for dairy development at the micro level, and in formulating plans for improvements in the dairy sector through higher value addition and increased employment generation in agriculture, based on sound economic principles, at the macro level. In India dairy plants have different systems of milk marketing, namely non-cooperative and cooperative. But the marketing of milk and milk products in India is dominated by the unorganized sector, and the organized sector handles only about 14 % of total milk production (Gol, 2004). The dairy cooperatives are considered a vital channel for the improvement of production and the reduction of the cost of procurement, processing, and marketing of dairy products through the economy of scale approach, together with the provision of quality milk to the consumer at the lowest cost. It is also important to mention that dairy cooperatives accounted for the major share of processed milk in the country during 2007-08 (NDDB: 2007-08). Operation Flood (currently White food), launched in 1970 by the National Development Dairy Board and the world's largest dairy development programme, has been acclaimed as one of the most successful development cooperative programmes<sup>1</sup>. In spite of the significant contribution to milk production and marketing by cooperatives in India, many non-cooperative dairy farms have simultaneously been producing and marketing milk. But the study of milk marketing is less in relation to the study of milk production under both cooperative and non-cooperative system.

However there have been several studies of the marketing of liquid milk in both cooperative and non-cooperative Indian dairy plants (Rangaswamy and Dhaka, 2008; Pawar and Sawant, 1979; Devaraja, 2001; Rajendran and Mohanty, 2004; Sharma et al, 2007; Kanmony and Gnanadhas, 2004; Sujatha et al, 2004; Duhan et al, 2004; Singh and Dayal, 2004; Naik and Dalwai, 1998, Koshta and Chandrakar, 1998; Beohar, 1998; Singh and Rai; 1998). These studies show that there is great variation in the marketing efficiency of different cooperative and non-cooperative milk producing firms in different resource situations, due to variations in marketing costs and marketing margins. Keeping this in view, the present study is an attempt to examine empirically the price spread, marketing costs, marketing margins, marketing efficiency, and profit efficiency among market middlemen in cooperative and non-cooperative marketing channels in the domestic trade market of liquid milk in India

## OBJECTIVES OF THE STUDY

The following are the objectives of the present study:

1. To review the structure and functions of the Co-operative milk supply society
2. To find out the existing marketing practices and to identify the problems which it has to face in the marketing of milk.
3. To analyse the cost structure involved in the pricing of milk.
4. To assess the functioning of the society from the consumers point of view.
5. To offer suitable solutions to overcome the problems identified.

## HYPOTHESIS

The present study aims at testing the following hypothesis:

1. When there is reduction in the price of milk, the consumers will buy more.
2. The price charged by the society is not a reachable one.

## CONCEPTUAL DISCUSSION

The important concepts used in the present study are the Co-operative milk society, vendors, consumers and the appropriate government.

### I. CO-OPERATIVE MILK SUPPLY SOCIETY

In this study, the Co-operative milk supply society refers to the institution which is based on the Co-operative principles to distribute milk to the consumers.

### II. VENDORS

It includes any person who is engaged for distribution of milk to the consumers either in booths or by door to door delivery.

### III. CONSUMERS

For the present study, consumers refers to the persons who are actually the buyers of milk from to society.

### IV. APPROPRIATE GOVERNMENT

The appropriate government may be the central or the state government of Tamil Nadu government.

## RESEARCH DESIGN

### METHODOLOGY

#### I. SAMPLING DESIGN

A topic of this nature required the selection of a suitable place. In Tamil Nadu, the milk supply societies are concentrated more in Tuticorin district than in any other districts. In Tuticorin district, Kovilpatti milk supply society has been selected purposely since, it is the biggest society covering a vast area in Tuticorin District. Moreover, the researcher belongs to this area.

#### II. STATISTICAL TECHNIQUES

Progressive mean, standard deviation, chi-square test have been applied to analyze and interpret the data collected.

## PERIOD OF THE STUDY

The present study covers a period of one year 2008-2009 in order to ascertain the latest trends in the field.

## LIMITATIONS

The members and the private vendors have not been covered by this study due to the time and cost constraints. As there are large number of consumers in the society a limited sample has been taken by "Convenient Sampling method".

## ANALYSIS AND INTERPRETATION

The data for the present study was collected from the respondents through a questionnaire. Results were tabulated and analysed by using appropriate statistical techniques mentioned in the research methodology. The results from the statistical analysis and the objective-wise analysis of the study are presented in this section.

### A. Channels of Distribution of Milk

TABLE - 1.1

S.No	Channel	No of Booths	In Ltrs	Percent
1.	Through Booths	5	1000	23.53
2.	Through Vendors	28	3250	76.47
		<b>Total</b>	<b>4250</b>	<b>100</b>

Source: Primary Data

76.47% through vendors and the remaining 23.53% of milk through booths. For detailed analysis, the society shall take efforts to increase the number of booths so as to cover all the areas of the society.

### B. Timing of Milk Supply

TABLE - 1.2

S.No	Periods	Time
1	Morning	6.00 to 7.30pm
2.	Evening	4.00pm to 5.30pm

Source: Primary Data

It is suggested that the society shall try to supply milk according to the convenience of consumers also by introducing some flexibility in the time schedule.

### C. The opinion on timings of the supply of milk

TABLE 1.3

Timing	No of families	Percent
Satisfied	52	65
Not Satisfied	28	35
<b>Total</b>	<b>80</b>	<b>100</b>

Source: Primary Data

Table 1.3 depicts that 65% are satisfied with the present timing. The remaining 35% felt that present timings is inconvenient in the sense that they require milk at least half an hour earlier than then usual timings in the morning and half an hour later than the usual one in the evening.

D. Daily milk requirements of sample families

TABLE 1.4

Income	Family Classification	No. of Families	Milk Requirement in ltr	Average purchase in Ltr
Below 3000	Low Income	16	17	1.00
3001 – 5000	Middle Income	28	49	1.75
Above 5000	High Income	36	72.5	2.00
	<b>Total</b>	<b>80</b>	<b>138.5</b>	

Source: Primary Data

Table 1.3 shows that, there is a direct relationship between income and purchase of milk. It reveals that the high income families are purchasing averagely 2.00 liters of milk per day whereas the middle income families are buying averagely 1.75 liters daily and the low income families are purchasing nearly 1.00 liter per day. It shows that higher the income, higher is the daily consumption. So the society must concentrate on high income people and also it should take efforts to improve the daily consumption of the lower income people.

E. Rate Charged

TABLE 1.5

Rate	No of Families	Percent
Rate High	40	56.25
Rate Reasonable	35	37.5
Rate Low	5	6.25
<b>Total</b>	<b>80</b>	<b>100.00</b>

Source: Primary Data

It has been observed from the above table that only a merge percentage of sample families constituting 6.25% feel that the rate is low and 35 families representing 37.5% feel that the rate is reasonable which has been proved by the Chi – Square test as given, below and the remaining 40 families forming 56.25% are of the opinion that the rate is high. However, it is found through enquiry that, it is the practice of the society to raise the existing price first. Whenever the price is raised by the Society, immediately it is followed by the private vendors. Instead of acting as a price controller the society seems to act as a price fixer now-a-days. It is not good trend.

COMPUTATION OF VALUE OF CHI – SQUARE

TABLE 1.6

Observed Frequency	Expected Frequency	(O-E)	(O-E) <sup>2</sup>	$\frac{(O-E)^2}{E}$
40	26.67	13.3	178	6.67
35	26.67	8.33	69	17.62
5	26.67	-12.67	470	2.54
<b>80</b>		<b>8.96</b>	<b>717</b>	<b>26.88</b>

Source: Primary Data

Degree of Freedom = (r-1)  
 = 3-1  
 = 2

For 2 d.f, Chi – square value = 5.99 (table value)

Since the calculated value of Chi-Square is more than the table value, the hypothesis viz, “the prices charged by the society is not a reasonable one” is rejected.

F. Reduction in the price of Milk

Since the price factor is a decisive one in any purchase, an analysis has been made regarding the impact of price reduction if resorted to on the level of their purchase and put forth in Table 1.7

THE IMPACT OF PRICE REDUCTION ON THE PURCHASE OF MILK

TABLE 1.7

Rate reduced by ( paises )	No of families nearly to buy			No. change in Families
	½ ltr	1 litre	1.5 litre	
0-10	-	-	-	80
10-20	3	-	-	77
20-30	5	3	2	67
30-40	22	11	-	34

Source: Primary Data

From the above table, it is evident that out of 80 families, 46 families are willing to purchase as additional quantity of milk if the price is reduced by 10 to 40 paises per litre. This means that there is a great impact on the slight reduction in price. It shows that the purchase is not standardized. This has again been proved by the application of statistical technique namely standard deviation as given below. Since, the mean value is more than the calculated standard deviation value, the hypothesis, viz., “the consumers will buy more there is a reduction in price” is accepted. The impact of price raise has not been analysed since 56.25% of the sample families already feel that the price is very high as reported in table 1.6. If the increased price considered, the purchases might be affected. Hence, it is suggested that the society shall take all efforts to maintain this existing price at least.

CALCULATION OF STANDARD DEVIATION

THE IMPACT OF PRICE REDUCTION ON THE PURCHASE OF MILK

TABLE 1.8

Class Interval	Frequency ( f )	Mid Value ( m )	D= $\frac{m-5}{5}$	Fd	Fd <sup>2</sup>
0-10	0	5	0	0	0
10-20	3	15	2	6	36
20-30	10	25	4	40	1600
30-40	33	35	6	196	39204
	46		12	244	40840

Source: Primary Data

Value of std deviation = 146

## G. Behaviour of the Co-operative Staff

TABLE 1.9: OPINION OF THE STAFF

Behaviour	No. of Families	Percent
Courteous	44	55
Moderate	20	25
Rough	16	20
<b>Total</b>	<b>80</b>	<b>100</b>

Source: Primary Data

The growth of any business depends on the efficiency of the staff members. At present, there are 38 staff members working in the society. An overall idea regarding the behaviour of staff towards the consumers is analysed and presented in table 1.9

It is heartening to note from the above table that a vast majority of the sample families, representing 55% feel that the behaviour of staff is only courteous and it moderate in the case of 20 families. Only a very low percentage 20% of families feels that they rough service. So, to improve the behaviour of staff, it is suggested that a complaint book shall be placed both in the office and at the booth and it must be made known to every consumers.

**MAJOR FINDINGS**

1. As far as the Kovilpatti Co-operative milk supply society is concerned, the management is vested with a board, which consists of nine members elected by the general body as per the election procedures. In addition to the procurement and sale of milk, making arrangements with the nationalized banks for issuing loans to members. Selling green fodder to its members at subsidized prices and providing employment are the other functions of the society.
2. The current study has given due importance to the marketing practices of the society. At present, the society procures milk both from its members and the chilling centre in order to meet the demand and requirements of the consumers in Kovilpatti.
3. A careful analysis of the selling price shows that the price has increased from Rs. 12.00 in 2005-2007 to Rs24.00 in 2008-2009, thus representing an increase of Rs 12.00. On personal enquiry, it was found that it is due to the fact that the rate charged by the chilling centres has considerably increased during that period.
4. The pricing policy of the society is divided into two stages, namely policy regarding purchase price and selling price. Regarding the purchase policy, it is found that the society is following the two axis pricing system for its procurement from the members. Under this system, the society is making payment on the basis of Fat & SNF contents in the procured milk.
5. Regarding the sales policy, it is found that the society is not having any scientific policy, it is found that the society is not having any scientific policy. All the costs incurred are not independently and scientifically maintained by the society. Hence, an attempt has been made by the researcher to find out the actual cost on scientific lines by adopting the single or unit output costing.

**SUGGESTIONS**

1. To increase the numbers of milking members and to procure more milk from members. It is suggested that the area of operation of the society shall be extended to a radius of at least 12 kms.
2. It is also recommended that the society shall make their procurement rates known to all residing in the area of operation so as to attract more suppliers of private dealers and thereby achieve the target of the required number of milking members.
3. In order to tackle out the problems related to the payment of high price to the chilling centers, it is advised that the society shall take efforts to take payment on the basis of the Fat and SNF contents so that the society can have an effective control over its procurement price.
4. Again, the study suggests that the society shall try to supply milk according to the convenience of consumers also by introducing some flexibility in their distribution time schedule.
5. Regarding the reduction in price of milk the present study would like to suggest that the society shall try to reduce its existing price at least by a very small margin since the price reduction has much impact on the level of their purchases.
6. The Success of any business depends on the attitude and preferences of the consumers.

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**IMPACT OF ORGANIZATION CULTURE ON EMPLOYEE MOTIVATION AND JOB PERFORMANCE**

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**ABSTRACT**

*The success and growth of an organisation depends on how effectively and efficiently does it employee performs and culture is a means through which employees learn and communicate what is acceptable or unacceptable in an organisation in the light of its values and norms. This paper seeks to explore relationship between organization culture and job performance. It was hypothesized that impact of organizational cultural factor does not differ significantly across the organization outcome as perceived by the employees working in the organization. Researcher tries to develop the organizational culture variable construct that affects the employees for enhancing work motivation and his performance. 229 respondents working with different manufacturing, trading and service organization in Dehradun District of Uttarakhand state were surveyed. There was evidence to suggest that there is significant difference in the mean of different organizational cultural factor across the organisational outcome as perceived by the employees. Hence appropriate organizational cultural variable should be promoted in the organization to enhance the employee's productivity and in turn improving organisational performance.*

**KEYWORDS**

Organisation Culture, Employees productivity, Organisation performance.

**INTRODUCTION**

Employees are the basic building blocks of an organisation. The success and growth of an organisation depends on how effectively and efficiently does it employee performs and culture is a means through which employees learn and communicate what is acceptable or unacceptable in an organisation in the light of its values and norms. Organization culture is the set of assumptions, beliefs, values and norms that are shared by an organisation member. Organisation culture being unique and distinctive prescribes some specific modes of behaviour for its employees. It sets a framework within which individual and group behaviour takes place. The match between employees and the organization is very important as there is greater likelihood that they will demonstrate commitment to organizational goals. Motivation is the complex force starting and keeping a person at work in an organisation. Performance is the extent to which an individual is carrying out assignment or task. Job performance is the net effect of an employee's effort as modified by abilities and roles or task perceptions. The research paper aims to study the impact of organization culture on employee motivation and job performance in Dehradun region of Uttarakhand state. The present study focus on assessing organization culture and its impact by studying the demographic profile of respondents as well as their perception of various organizational culture variables in their organization.

**RATIONALE OF THE STUDY**

Organizations need continuous commitment from their employees to develop and fulfill their objectives. Management would like its employees to identify with the values, norms and artefacts of the organization, hence the need for organizational culture. Management needs to explain and imbibe its culture in its employees; this will enable the employee to get familiar with the organizational system. It is the proper understanding of the organizational culture that the performance of the employee in the organization. To operate successfully across cultures, it is important to be able to recognize cultural differences and be adaptable (Deter, Schroeder, and Mauriel, 2000). Organisational culture finds expression through the thoughts, intentions, actions and interpretations of members of the organization (Hallett, 2003).

Academic interest in corporate culture is evidenced by the level of attention it has received over the last few decades. The relationship between corporate culture, motivation and job performance has been the subject of abundant research in several fields, including strategic management, organisational behaviour, and industrial organizations. While this topic is rich in studies, many researchers concur on the fact that there is no agreement on the precise nature of the relationship between corporate culture, motivation and job performance. Despite the plethora of studies on corporate culture in the last few decades, there is no widely accepted causal relationship between corporate culture, motivation and job performance. The empirical evidences emerging from various studies about the effect of corporate culture on motivation and job performance have so far yielded mixed results that are inconclusive and contradictory. Because of these contradictory results, the question of whether corporate culture improves or worsens employee's motivation and job performance is still worthy of further research such as the one being undertaken in this study.

**LITERATURE REVIEW**

Forehand and von Gilmer (1964) suggest that culture is the set of characteristics that describe an organization and distinguish it from others. Organizational culture has been defined as the "normative glue" that holds an organization together (Tichy, 1982). Denison (1990) identifies four basic views of organizational culture that can be translated into four distinct hypotheses:

- ◆ The consistency hypothesis – the idea that a common perspective, shared beliefs and communal values among the organizational participants will enhance internal coordination and promote meaning and a sense of identification on the part of its members.
- ◆ The mission hypothesis – the idea that a shared sense of purpose, direction, and strategy can coordinate and galvanize organizational members toward collective goals.
- ◆ The involvement/participation hypothesis – the idea that involvement and participation will contribute to a sense of responsibility and ownership and, hence, organizational commitment and loyalty.

◆ The adaptability hypothesis – the idea that norms and beliefs that enhance an organization's ability to receive, interpret, and translate signals from the environment into internal organizational and behavioural changes will promote its survival, growth, and development.

Schein (1990), in a more comprehensive fashion, defines culture as values and behaviours that are believed to lead to success and are thus taught to new members. Schein (1992) suggests that organizational culture is even more important today than it was in the past.

Morgan (1997) describes culture as “an active living phenomenon through which people jointly creates and recreates the worlds in which they live.”

For Morgan, the three basic questions for cultural analysts are:

- What are the shared frames of reference that make organization possible?
- Where do they come from?
- How are they created, communicated, and sustained

Ravasi and Schultz (2006) state that organizational culture is a set of shared mental assumptions that guide interpretation and action in organizations by defining appropriate behavior for various situations.

Robert A. Cooke, PhD, defines culture as the behaviors that members believe are required to fit in and meet expectations within their organization. The Organizational Culture Inventory measures twelve behavioral of norms that are grouped into three general types of cultures:

- Constructive Cultures, in which members are encouraged to interact with people and approach tasks in ways that help them meet their higher-order satisfaction needs.
- Passive/Defensive Cultures, in which members believe they must interact with people in ways that will not threaten their own security.
- Aggressive/Defensive Cultures, in which members are expected to approach tasks in forceful ways to protect their status and security

Various studies indicate that companies with strong cultures are more likely to be successful, but only under a particular set of conditions. The effect of organizational culture depends partly in its strength. Corporate culture *strength* refers to how widely and deeply employees hold the company's dominant values and assumptions. In a strong organizational culture, most employees across all subunits hold the dominant values. These values are also institutionalized through well-established artefacts, thereby making it difficult for those values to change. Furthermore, strong cultures tend to be long-lasting; some can be traced back to company founder's values and assumptions. In contrast, companies have weak culture when the dominant values are short-lived and held mainly by a few people at the top of the organization.

There has been a great deal of anecdotal evidence and some empirical evidence regarding the performance effects of organizational culture. Denison (1990) found empirical support for the participation/involvement view of culture – higher levels of employee participation were correlated with better organizational performance. There is also strong anecdotal support indicating that the primary cause of failure of most major change efforts (such as TQM and reengineering) has been the failure to successfully change the organizational culture (CSC Index 1994; Caldwell 1994; Goss et al. 1993; Kotter and Heskett 1992).

Kotter and Heskett (1992) have attempted to make this intriguing, but admittedly inconclusive, anecdotal evidence more systematic and empirical. They had financial analysts identify the firms they considered most successful and then describe the key factors discriminating these firms from those that were less successful. Seventy-four of the seventy-five analysts indicated the organizational culture was a key factor.

The general explanation for this is that these companies failed to change with the times – perhaps the very strength of their culture and their past success prevented them from quickly and successfully adapting to new environmental requirements (Christensen 1997). This paradox suggested the need for more longitudinal investigations of the effects of organizational culture. Growing evidence that excellent companies do not remain excellent for long also suggests that the traditional notion of a strong culture may need to be replaced with a more discerning understanding of the types and role of culture and the need to change culture over the life cycle of the organization. For example, perhaps a strong consistent culture is useful in the beginning start-up phase of an organization but a mature organization may need to become more differentiated as well as more oriented to change and learning. What is important for long-term organizational success may not be a particular type of organizational culture per se but the ability to effectively manage and change the culture over time to adjust to changes in the situation and needs of the organization? This understanding has pointed to the need for a more dynamic understanding of culture and the role of organizational leaders in ensuring that the culture contributes both to the organization's current and future success.

Organizational culture has been linked to economic performance and organization viability/ success (Denison & Mishra, 1995; Pothukuchi, Damanpour, Choi, Chen, and Park 2002; Sorensen, 2002; Devis, 2007). Organizational culture has also been shown to be important for successful new product/process innovation and organizational change (Plakhotnik and Tonette, 2005; Umiker, 1999).

Although little empirical research exists to support the link between organizational culture and organizational performance, there is little doubt among experts that this relationship exists. Organizational culture can be a factor in the survival or failure of an organization - although this is difficult to prove considering the necessary longitudinal analyses are hardly feasible. The sustained superior performance of firms like IBM, Hewlett-Packard, Procter & Gamble, and McDonald's may be, at least partly, a reflection of their organizational cultures.

A 2003 Harvard Business School study reported that culture has a significant impact on an organization's long-term economic performance. The study examined the management practices at 160 organizations over ten years and found that culture can enhance performance or prove detrimental to performance. Organizations with strong performance-oriented cultures witnessed far better financial growth. Additionally, a 2002 Corporate Leadership Council study found that cultural traits such as risk taking, internal communications, and flexibility are some of the most important drivers of performance, and may impact individual performance. Furthermore, innovativeness, productivity through people, and the other cultural factors cited by Peters and Waterman (1982) also have positive economic consequences.

Denison, Haaland, and Goelzer (2004) found that culture contributes to the success of the organization, but not all dimensions contribute the same. It was found that the impacts of these dimensions differ by global regions, which suggests that organizational culture is impacted by national culture. Additionally, Clarke (2006) found that a safety climate is related to an organization's safety record.

Adkins and Caldwell (2004) found that job satisfaction was positively associated with the degree to which employees fit into both the overall culture and subculture in which they worked. A perceived mismatch of the organization's culture and what employees felt the culture should be is related to a number of negative consequences including lower job satisfaction, higher job strain, general stress, and turnover intent.

It has been proposed that organizational culture may impact the level of employee creativity, the strength of employee motivation, and the reporting of unethical behavior, but more research is needed to support these conclusions.

Organizational culture also has an impact on recruitment and retention. Individuals tend to be attracted to and remain engaged in organizations that they perceive to be compatible. Additionally, high turnover may be a mediating factor in the relationship between culture and organizational performance. Deteriorating company performance and an unhealthy work environment are signs of an overdue cultural assessment.

## OBJECTIVES OF THE STUDY AND METHODOLOGY

This study seeks to explore relationship between organization culture and its impact on employee's motivation and job performance. The objective of the study was to study the organization culture as perceived by the employees working in the organization. Another objective was to study the impact of organization culture on job performance. Researcher tries to develop the organizational culture variable construct that affects the employees for enhancing work motivation and his performance. For this 229 respondents working with different manufacturing, trading and service organization in Dehradun District of Uttarakhand state were selected for the sample. In order to collect the data for this study, the survey questionnaire method was adopted. An interview schedule was also developed based on the analysis of the responses in the survey questionnaire. The questionnaire and interview schedule were validated to ensure that the instruments were appropriate for their purposes. The reliability of the questionnaire was 0.876 indicating that the questionnaire would measure what it was purported to measure. Before the questionnaire was distributed to the sample, it was piloted on twenty five students to obtain feedback on the clarity of the items. A few minor errors were detected. After the errors were corrected, the questionnaire was administered to the sample. The responses to these

parameters were gathered, coded, tabulated and analyzed. To test the hypothesis various statistical techniques like Mean, standard deviation, factor analysis and  $\chi^2$  test and ANOVA was applied.

**TABLE 1: DEMONSTRATES THE BREAKDOWN OF THE SAMPLE BY DEMOGRAPHIC CATEGORIES**

	Categories	Count	Percentage
Age	Upto 25 Years	12	5.2
	From 25-35 Years	70	30.6
	35-50 Years	73	31.9
	50 to 60 Years	74	32.3
Gender	Male	191	83.4
	Female	38	16.6
Marital Status	Married	164	71.6
	Unmarried	65	28.4
Education Level	Under Graduate	57	24.9
	Graduate	133	58.1
	Post Graduate	39	17.0
Monthly Income	Upto Rs15000PM	7	3.1
	Rs15001 to Rs30000PM	54	23.6
	Rs30001 -Rs50000PM	83	36.2
	Above Rs50000PM	85	37.1

The data presented in the above table indicates that sample is dominated the respondents who are in the age group of 25-50 Years as together it was indicated by 62.5% respondents in the sample. Respondents of male category accounts for 83.4%. married category respondents account 71.6% respondents in the sample. It is seen in the study that sample leads of the respondents educated upto graduation and earning above Rs 30000PM.

**TABLE 2: NATURE OF ORGANISATION**

SI NO	Nature of organization	No of respondents	Percentage
A	Manufacturing	77	33.6
B	Trading	46	20.1
C	Service organisation	106	46.3
D	Total	229	100.0

Although organizational culture had been the subject of social science but its managerial application called the intense concern of industrial leaders and managers. Subsequently, much research has indicated that organizations within an industry share distinct cultural values and that the culture-performance relationship. Building on the assumption that industries place unique cultural requirements; an attempt was directed to know the nature of organisation which employees is associated with. The study indicates that little more than one third employees in the sample are from the manufacturing organisation. Trading organisation account for 20.1% employees. Majority of the respondents in the sample (46.3%) are from the services organisation.

**TABLE 3: PERIOD OF ASSOCIATION**

SI NO	Period of Association	No of respondents	Percentage
A	0- 3 Years	34	14.8
B	4-5 Years	42	18.3
C	6 to 10 Years	16	7.0
	Above 10 Years	137	59.8
D	Total	229	100.0

Organizational culture values varied significantly among the firms. The variation in cultural values had a significant effect on the rates at which the newly hired employees voluntarily terminated employment. The relationship between the employees' job performance and their retention also varied significantly with organizational culture values. The cultural effects were stronger than the combined exogenous influences of the labor market and the new employees' demographic characteristics. The cultural effects are estimated to have resulted in over six million dollars' difference in human resource costs between firms with different cultural values. Implications for research on person-organization fit are discussed. The study reveals that sample is dominated by those respondents who are associated since last ten years from the organisation.

**FACTOR ANALYSIS**

Factor analysis is a method of data reduction. It does this by seeking underlying unobservable (latent) variables that are reflected in the observed variables. The purpose of factor analysis is to discover simple patterns in the pattern of relationships among the variables. In particular, it seeks to discover if the observed variables can be explained largely or entirely in terms of a much smaller number of variables called factors. In our case suppose each of 229 employees, who are all familiar with different kinds of organizational culture factor motivating him to enhance their performance, rate each of 15 variables on the question. We could usefully ask about the number of dimensions on which the ratings differ.

**TABLE NO 4: RELIABILITY STATISTICS**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.916	.919	15

In order to accurately capture the respondent's perception reliability analysis is carried out. So first reliability analysis was carried out with the help of Reliability Test Here, the reliability is shown to be good using all 15 items because alpha is .916 (Note that a reliability coefficient of .60 or higher is considered "acceptable" in most social science research situations.

**TABLE 5 KMO AND BARTLETT'S TEST**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.847
Bartlett's Test of Sphericity	Approx. Chi-Square
	2598.579
	df
	105
	Sig.
	.000

Method: Principal Component Analysis.

The above table indicates KMO and Bartlett's test of sphericity. This measure varies between 0 and 1, and values closer to 1 are better. The Bartlett's Test of Sphericity tests the null hypothesis that the correlation matrix is an identity matrix. These tests provide minimum standard which should be passed before a factor analysis (or a principal components analysis) should be conducted

## ANALYSIS AND DISCUSSION

Understanding organizational culture and its relationship with employees motivation and job performance has been of major interest for social as well as managerial organisation. Most of the operational decisions are employees perception toward organizational cultural issue. These decisions are also influenced by exogenous factors such as economic conditions and government policies, and market interaction among the major stake holders. The empirical study indicates that employees retention and job motivation based on their own personal attributes such as age and education, and their professional aspiration as well as organizational structure, infrastructure and its past performance. Organization designs their work structure in order to optimize their performance. Keeping these into consideration, an attempt was made to assess the issues related to organizational culture and its impact on employees behavior. For this respondents were asked to give their views on a rating scale on the following statements such as There is little variation in style of dress among employees, We can and do make 'mid-course' corrections easily, Top executives in this company are innovative and approachable, People at all levels of the organisation are continuously trying to build or rebuild a 'better mouse-trap', There is an openness to suggestions from people at all levels of the organisation, Our products and services reflect the awareness of a diverse consumer base., When problems emerge, there is a willingness to fix them, Our HR department is creative in finding new ways to attract top talent among diverse groups, Rewards are given out to suit the preference of the recipients, In my organisation, change is viewed as a challenge and an opportunity, Organisational policies are reviewed annually to assess effectiveness, Performance evaluations in this organisation measure an employee's adaptation to change., My boss values new ideas and implements them quickly., "We've always done it that way" is a philosophy that describes my company's response to new ideas., Our strategic plan is evaluated once a year and revised as needed, . For this purpose, respondents were asked to rate the various statement on a scale of 1 to 4 in order of their preference. The exploratory factor analysis was used in order to identify the various elements of organizational culture and its relationship with motivational and job performance issues. Principal Component analysis was employed for extracting factors and orthogonal rotation with Varimax was applied. As latent root criterion was used for extraction of factors, only the factors having latent roots or Eigen values greater than one were considered significant; all other factors with latent roots less than one were considered insignificant and disregarded. The extracted factors along with their Eigen values are shown in Table 6. The factors have been given appropriate names on the basis of variables represented in each case. The names of the factors, the statements, the labels and factor loading have been summarized in Table 6. There are three factors each having Eigen value exceeding one for motivational factors. Eigen values for three factors are 7.345, 1.852 and 1.325 respectively. The index for the present solution accounts for 70.143% of the total variations for the motivational factors. It is a pretty good extraction because we are able to zero-in on the number of choice factors (from 15 to 3 underlying factors), we lost 29.857 % of information content for choice of variables. The percentages of variance explained by factors one to three are 48.966%, 12.345% and 8.832% respectively. Large communalities indicate that a large number of variance has been accounted for by the factor solutions. Varimax rotated factor analysis results for motivational factors are shown in table 5 which indicates that after 3 factors are extracted and retained the communality is .871, for variable1, .823 for variable 2, 0.769 for variable 3 and so on. It means that approximately 87.7% of the variance of variable1 is being captured by extracted factors together. The proportion of the variance in any one of the original variable which is being captured by the extracted factors is known as communality (Nargundkar, 2002).

TABLE 6: PRINCIPAL COMPONENT ANALYSIS WITH ROTATED COMPONENT

Factors	Communality			
	1	2	3	
There is little variation in style of dress among employees.	.912			.871
We can and do make 'mid-course' corrections easily.	.857			0.823
Top executives in this company are innovative and approachable	.812			.769
People at all levels of the organisation are continuously trying to build or rebuild a 'better mouse-trap'.	.788			.646
There is an openness to suggestions from people at all levels of the organisation.	.744			.604
Our products and services reflect the awareness of a diverse consumer base.	.672			.726
When problems emerge, there is a willingness to fix them.	.606			.782
Our HR department is creative in finding new ways to attract top talent among diverse groups.	.594			.523
Rewards are given out to suit the preference of the recipients.		.836		.720
In my organisation, change is viewed as a challenge and an opportunity		.775		.672
Organisational policies are reviewed annually to assess effectiveness.		.688		.627
Performance evaluations in this organisation measure an employee's adaptation to change.		.681		.640
My boss values new ideas and implements them quickly.		.664		.749
"We've always done it that way" is a philosophy that describes my company's response to new ideas.		.626		.586
Our strategic plan is evaluated once a year and revised as needed			.879	.784
<i>Eigen Values</i>	7.345	1.852	1.325	
% of Variation	48.966	12.345	8.832	
Cumulative % of Variation	48.966	61.311	70.143	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 8 iterations.

TABLE 7: PRINCIPLE COMPONENTS AND ASSOCIATED FACTORS

Organisation openness in managing diversity (F 1)	Policy of promoting innovation and change management (F 2)	Policy of evaluation of strategic plan (F 3)
There is little variation in style of dress among employees.	Rewards are given out to suit the preference of the recipients.	Our strategic plan is evaluated once a year and revised as needed
We can and do make 'mid-course' corrections easily.	In my organisation, change is viewed as a challenge and an opportunity	
Top executives in this company are innovative and approachable	Organisational policies are reviewed annually to assess effectiveness.	
People at all levels of the organization are continuously trying to build or rebuild a 'better mouse-trap'.	Performance evaluations in this organisation measure an employee's adaptation to change.	
There is an openness to suggestions from people at all levels of the organisation.	My boss values new ideas and implements them quickly.	
Our products and services reflect the awareness of a diverse consumer base.	"We've always done it that way" is a philosophy that describes my company's response to new ideas.	
When problems emerge, there is a willingness to fix them.		
Our HR department is creative in finding new ways to attract top talent among diverse groups.		

Principal components & associated Variables (Ref: Table 7) indicates that first factor (F1) is the **Organisation openness in managing diversity**. This factor is the combination of There is little variation in style of dress among employees, We can and do make 'mid-course' corrections easily, Top executives in this company are innovative and approachable People at all levels of the organization are continuously trying to build or rebuild a 'better mouse-trap', There is an openness to suggestions from people at all levels of the organisation, Our products and services reflect the awareness of a diverse consumer base, When problems emerge, there is a willingness to fix them, Our HR department is creative in finding new ways to attract top talent among diverse groups, And accounts 48.966% variance of the total variances. The second Factor (F2) is the **Policy of promoting innovation and change management** which is the combination of various factor like Rewards are given out to suit the preference of the recipients, In my organisation, change is viewed as a challenge and an opportunity, Organisational policies are reviewed annually to assess effectiveness, Performance evaluations in this organisation measure an employee's adaptation to change, My boss values new ideas and implements them quickly, "We've always done it that way" is a philosophy that describes my company's response to new ideas, and accounts 12.345% variance of total variance. Third factor (F3) is the **Policy of evaluation of strategic plan** which is the combination of outcome of the variable Our strategic plan is evaluated once a year and revised as needed And account 8.832% variance of the total variances.

TABLE 8: DIFFERENT OUTCOME OF ORGANIZATIONAL CULTURE AS PERCEIVED BY EMPLOYEES

SI NO	Period of Association	No of respondents	Percentage
A	It has increased my work satisfaction	67	29.3
B	Improved communication with supervisor	51	22.3
C	Relationship with workgroup better	59	25.8
D	It has helped me in improving my productivity	37	16.2
E	Organisation profitability has increased substantially	3	1.3
F	Others	12	5.2
	Total	229	100.0

Apart from identifying key organizational factor, an attempt was made to assess the outcome of organizational culture as perceived by the employee. It is seen in the table that 29.3% employees are of the opinion that it has increased my work satisfaction 22.3% of the employee were of the opinion that it has improved communication with their supervisor. 25.8% employees revealed that Relationship with workgroup has become better, 16.2% feels that it has helped them in improving their productivity 1.3% feels that Organisation profitability has increased substantially. 5.2% employees indicated other benefits as outcome of organizational culture.

TABLE 9: MEAN OF DIFFERENT ORGANISATIONAL CULTURAL FACTOR ACROSS THE PERCEIVED OUTCOME

Outcome	Organisation openness in managing diversity	Policy of promoting innovation and change management	Policy of evaluation of strategic plan
It has increased my work satisfaction	3.1194	3.1716	2.9403
Improved communication with supervisor	2.5784	3.0327	2.3725
Relationship with workgroup better	2.6377	2.8842	2.7797
It has helped me in improving my productivity	3.2500	3.1441	3.1892
Organisation profitability has increased substantially	2.9583	3.0000	2.3333
Others	1.7500	2.5000	3.0000
Total	2.8221	3.0247	2.8079

It is seen that mean rating of organizational outcome in improving productivity has scored highest mean among the entire variable. This signifies that majority of the employees are of the opinion that organizational culture is helpful in improving employees productivity and in turn helpful of improving organizational productivity.

TABLE 10: ONE WAY ANOVA ACROSS OUTCOME OF ORGANIZATIONAL CULTURE AS PERCEIVED BY EMPLOYEES

		Sum of Squares	df	Mean Square	F	Sig.
<b>Organisation openness in managing diversity</b>	Between Groups	31.579	5	6.316	21.458	.000
	Within Groups	65.638	223	.294		
	Total	97.217	228			
<b>Policy of promoting innovation and change management</b>	Between Groups	6.448	5	1.290	3.702	.003
	Within Groups	77.689	223	.348		
	Total	84.138	228			
<b>Policy of evaluation of strategic plan</b>	Between Groups	17.385	5	3.477	4.304	.001
	Within Groups	180.161	223	.808		
	Total	197.546	228			

After comparing the mean one way ANOVA was carried out to test the hypothesis that impact of organizational cultural factor does not differ significantly across the organization outcome as perceived by the employees working in the organization. From the table it is clear that calculated value of F is greater than the tabulated value of F (2.37) at ( $p < 0.05$ ) level of significance in the case of all the factors under consideration. Hence null hypothesis is rejected indicating that there is significant difference in the mean of different organizational cultural factor across the organisational outcome as perceived by the employees.

To conclude, it can be said that organizations culture has emerged as one of the most important factor which need to be looked after carefully. The success and growth of an organisation depends on how effectively and efficiently does it employee performs and culture is a means through which employees learn and communicate what is acceptable or unacceptable in an organisation in the light of its values and norms. It is seen that significant difference exists in the mean of different organizational cultural factor across the organisational outcome as perceived by the employees. The different organizational culture factor like **Organisation openness in managing diversity, Policy of promoting innovation and change management, Policy of evaluation of strategic plan should be analysed carefully and promoted** in the organization to enhance the employees productivity and in turn improving organisational performance.

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**VALIDITY OF EFFICIENT MARKET HYPOTHESIS IN THE INDIAN STOCK MARKET**

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**ABSTRACT**

The concept of EMH states that security prices reflect all information freely available. This information can be either the historical stock prices or publicly available information or even inside information related to the company. There exists conflicting views with regard to the impact of all the information available on the stock prices. Some are of the opinion that abnormal returns can be obtained in the long run by analyzing all kinds of information available while others argue it is not possible. So this research article is being conducted "To check whether historical share prices, publicly available information and inside information have an impact on the current and future market prices of securities. In short, to check the validity of Efficient Market Hypothesis in the present Indian scenario" The scope of this research is limited to companies listed on National Stock Exchange. Ten companies have been selected as a sample on a convenience sampling technique to test the weak and semi-strong form of hypothesis, whereas 300 companies and 35 mutual fund schemes have been taken as a sample for the purpose of testing strong form of hypothesis. Data has been collected mainly from secondary sources such as websites and journals for this purpose. The tests that have been conducted for the purpose of testing the hypothesis are run test and Auto correlation test (in case of weak form hypothesis), T-test (in case of semi-strong form hypothesis) and ANOVA (in case of strong form hypothesis). This concludes that abnormal returns cannot be earned by having only historical stock prices and publicly available information and abnormal return can be earned by having private information.

**KEYWORDS**

Efficient Market Hypothesis, Return, Semi-strong form hypothesis, Strong form hypothesis, Stock Market, Weak form hypothesis.

**INTRODUCTION**

The EMH was developed by Professor Eugene Fama at the University Of Chicago Booth School Of Business as an academic concept of study through his published Ph.D. thesis in the early 1960s at the same school. It was widely accepted up until the 1990s, when behavioral finance economists became mainstream. Empirical analysis have consistently found problems with the efficient markets hypothesis, the most consistent being that stocks with low price to earnings (and similarly, low price to cash-flow or book value) outperform other stocks. Alternative theories have proposed that cognitive biases cause these inefficiencies, leading investors to purchase overpriced growth stocks rather than value stocks. Although the efficient markets hypothesis has become controversial because substantial and lasting inefficiencies are observed, it remains a worthwhile starting point. Markets are said to be efficient if the market value of shares are an unbiased representation of their intrinsic values. Any deviation from the intrinsic value is said to be purely random. So, according to the concept of EMH, it is not possible to earn supernormal profits in the long-run as we cannot identify stocks which are consistently over-valued or under-valued. In a market that is essentially characterized by a large number of rational and profit seeking investors who compete with one another freely, the prices should reflect all the available and expected information. An efficient market is one that rapidly absorbs new information and adjusts the prices swiftly. Researchers and analysts who have worked on the efficiency of stock market have realized that no stock market is absolutely efficient. This paper deals with testing the validity of the Efficient Market Hypothesis (EMH) in the Indian stock market. The concept of EMH states that security prices reflect all information freely available. This information can be either the historical stock prices or publicly available information or even inside information related to the company.

**ASSUMPTIONS OF EFFICIENT MARKET HYPOTHESIS**

- Investors are rational.
- Markets are rational.
- There are no taxes – or, more specifically, taxes play no part in financial decision-making. There are no transaction costs.
- An investor is indifferent between a dollar in dividends and a dollar in capital gains.
- A company (and its investors) is indifferent between a Rupee of additional debt and a Rupee of additional equity.

**OBJECTIVES OF THE STUDY**

There exists conflicting views with regard to the impact of all the information available on the stock prices. Some are of the opinion that abnormal returns can be obtained in the long run by analyzing all kinds of information available while others argue it is not possible. Thus there exists a research gap. The objectives of this paper is as follows-

- To determine whether historical share prices have an impact on current and future market prices.
- To determine the impact of publicly available information on share prices.
- To analyze whether the availability of inside information helps in earning higher return in the long run.
- To check the validity of Random-walk theory in the Indian market.

**SCOPE OF THE STUDY**

- This study is restricted to only those stocks which are listed in NSE.
- Time frame of the study is 10 weeks.
- Sample size of 10 is considered for testing Weak form and Semi-strong form of hypothesis and Sample size of 300 stock returns and 75 mutual funds are considered for testing Strong form of hypothesis.

**HYPOTHESIS**

To check the validity of the market, following hypothesis is made.

**For Weak form:**

$H_0$ - Historical and future share prices are independent.

**For Semi strong form:**

$H_0$ - There is no significant difference between share prices before and after announcement of information.

**For Strong form:**

$H_0$ - Inside information has no impact on share prices.



**SAMPLING DESIGN & DATA COLLECTION**

Sampling unit - Companies listed on National Stock exchange (NSE). 10 companies for weak and semi-strong form hypothesis, 300 companies and 35 mutual fund schemes for strong form hypothesis are selected for the study. Convenience sampling technique is used.

Data collected for the purpose of testing all the above form of hypothesis are secondary data. The secondary data collected is from the website www.nseindia.com and other journals. Auto correlation test, T-Test, Run test, ANOVA has been used for the data analysis.

**ANALYSIS & DESIGN**

**WEAK FORM HYPOTHESIS**

The random walk hypothesis is a financial theory stating that stock market prices evolve according to a random walk and thus the prices of the stock market cannot be predicted. It has been described as 'jibing' with the efficient market hypothesis. Economists have historically accepted the random walk hypothesis. They have run several tests and continue to believe that stock prices are completely random because of the efficiency of the market. The first part of this research aims at finding out whether there is any relationship between historical share prices and future share prices. If there is no relationship, then technical analysis, which is a technique of ascertaining future share prices from past and present share prices using charts and graphs. For this purpose run test and Auto correlation tests have been used.

**AUTO CORRELATION TEST**

A number of researchers like Fama, Fischer, Jensen etc in the USA and many experts in India have conducted tests for auto correlation of the price changes. These tests are run to find correlation between present price changes and the price changes in past period, with a lag of one day to a few days. This test is used to test whether markets are efficient or not in the Weak form. This is also known as Auto Correlation.

This test is conducted by correlating the stock returns from the first day to n<sup>th</sup> day and from second day to n+1<sup>th</sup> day. If the correlation is very high, then it means that the stock returns for the coming period is predictable.

For this purpose, returns are calculated as follows:

$$\text{RETURN} = \frac{P_1 - P_0}{P_0} \times 100$$

After returns are calculated for all 365 days, returns from 1 to 364<sup>th</sup> day are correlated with returns from 2<sup>nd</sup> to 365<sup>th</sup> day.

If historical and future share prices are correlated, then the values will form almost a straight line, when plotted on a graph indicating that they move in the same direction. If there is no correlation or a very low correlation, then the values will be plotted on a random basis without having any significant pattern.

A sample of auto correlation is shown for one of the under the study companies, for 121 days, with a lag of one day along with the final results for all the ten companies is

**COMPUTATION OF AUTO CORRELATION**

COMPANY	AUTO CORRELATION
APOLLO	-0.11642
HERCULES	-0.1022
JM FINANCIAL	-0.00305
KARUR VYSYA	-0.1556
MOTILAL	-0.02004
STATE BANK OF INDIA	0.002656
TAKE SOLUTIONS	-0.01725
TANLA	-0.03707
TEXMA	0.055191
TRICOMA	0.022726

It has been observed that the stock movement predictability is very low for all the companies. In fact, for seven companies, negative auto correlation values which imply that future stock return changes move in the opposite direction of current stock return changes.

**RUNS TEST**

These tests are conducted by replacing absolute numbers by signs. These merely count the number of runs, namely consecutive price changes or signs in the same direction and their repetition at a later date.

$$Z_{cal} = \frac{|u - u_r|}{\sigma_{ur}} \quad \sigma_{ur} = \sqrt{\frac{2 n_1 n_2 (2 n_2 n_2 - n_1 - n_2)}{(n_1 + n_2)^2 \cdot (n_1 + n_2 - 1)}}$$

$$u_r = \frac{2 n_1 n_2}{n_1 + n_2} + 1$$

Where n<sub>1</sub> represents number of positive price changes

n<sub>2</sub> represents number of negative price changes

u<sub>r</sub> represents mean of the sample

u represents number of runs

$\sigma_{ur}$

Represents standard deviation of the sample

Following is the summary of the results obtained after conducting run test for the ten companies under consideration for the financial year 2008-09:

Sl. No	COMPANY	RUNS	PLUS	MINUS	MEAN	STD.DEV
1	APOLLO	125	110	132	121	7.697604
2	HERCULES	111	103	138	118.9585	7.581845
3	JM FINANCIAL	104	91	151	114.562	7.282892
4	KARUR VYSYA	116	110	135	122.4425	7.728527
5	MOTILAL	115	116	126	121.7934	7.748711
6	STATE BANK OF INDIA	161	144	159	152.1287	8.667661
7	TAKE SOLUTIONS	113	99	143	118	7.504356
8	TANLA	108	100	142	118.3554	7.527247
9	TEXMA	114	106	136	120.1405	7.642238
10	TRICOMA	115	96	146	116.8374	7.429292

Using the above mean, standard deviation and number of runs values, run test is conducted to see if there is any relationship between historical and future share prices.

### TESTING OF HYPOTHESIS

$H_0$ - Historical and future share prices are independent

$H_A$ - Historical and future share prices are dependent

Sl. No	COMPANY	Z-Cal Values
1	APOLLO	0.519642
2	HERCULES	1.04968
3	JM FINANCIAL	1.450248
4	KARUR VYSYA	0.805391
5	MOTILAL	0.876712
6	STATE BANK OF INDIA	1.023493
7	TAKE SOLUTIONS	0.66628
8	TANLA	1.37572
9	TEXMA	0.803494
10	TRICOMA	0.246956

Z tabulated value is 1.645 which is higher than Z calculated value in all the cases. So, the null hypothesis is accepted. Hence, it can be concluded that historical share prices are not related to future share prices.

### SEMI-STRONG HYPOTHESIS

The semi strong form of efficient market hypothesis says that the current market prices will reflect instantaneously all publicly available information about the corporations being studied. Furthermore, the semi-strong form says that efforts by analysts and investors to acquire and analyze public information will not yield consistently superior returns to the analyst. Examples of the type of public information are corporate reports, corporate announcements and information relating to corporate dividend policy, forthcoming stock splits, annual earnings per share, initial public offering, bonus issue of shares etc. Hence, according to the semi-strong form of hypothesis, analysts would have great difficulty trying to profit using fundamental analysis.

The tests that will be conducted in this section test whether in fact all the publicly available information and news announcements such as dividend declaration and information about stock splits. Furthermore, these tests attempt to analyze if an analyst using such data when they become available to him can successfully use this information to obtain superior investment returns. A great majority of the semi-strong efficient tests conducted provide strong empirical support for the hypothesis. However, there have been some notable exceptions to this support. Most of the reported results show that stock prices do adjust rapidly to announcement of new information. Further, some studies indicate that investors are unable to utilize this information to earn consistently above average returns.

**EVENT STUDY:** A scheme based upon trading on an information event is usually tested with an event study. Event studies are conducted to test whether it is possible to earn risk-adjusted returns by trading on information like earnings announcements, stock splits, bonus issues and acquisition announcements.

**PORTFOLIO STUDY:** A scheme based upon trading on an observable characteristic is usually tested with a portfolio study. Portfolio studies are conducted to test whether it is possible to earn risk-adjusted returns by trading on an observable characteristic of a firm like Price-earnings ratio, price-book value ratio and dividend yield.

### TESTING OF HYPOTHESIS

$H_0$ - There is a no significant difference between share prices before and after declaration of dividend

$H_A$ - There is a significant difference between share prices before and after declaration of dividend

COMPANY	T test Calculated Values
Godrej Consumer Product	0.010285
Havells India	0.385242
HCL Info systems	0.158371
Mastek	0.238641
Mphasis	0.285312
SAIL	0.225537
SBI	0.071409
Tata Investment Corp	0.202263
Educomp Solutions	0.348241
TVS Motors	0.176347

T tabulated value is 1.833 at 5% level of significance. It is found that calculated value of T to be lesser than 1.833 in all the above cases. So, Null Hypothesis is accepted. Hence it can be concluded that there is no significant difference between share prices before and after declaration of dividend.

### STOCK SPLIT

A stock split or stock divide increases or decreases the number of shares in a public company. The price is adjusted such that the before and after market capitalization of the company remains the same and dilution does not occur. It is often claimed that stock splits, in and of themselves, lead to higher stock prices; research, however, does not bear this out. What is true is that stock splits are usually initiated after a large run up in share price. Momentum investing would suggest that such a trend would continue regardless of the stock split. In any case, stock splits do increase the liquidity of a stock; there are more buyers and sellers for 10 shares at Rs.100 than 1 share at Rs. 1000.

Other effects could be psychological. If many investors believe that a stock split will result in an increased share price and purchase the stock the share price will tend to increase. Others contend that the management of a company, by initiating a stock split, is implicitly signaling its confidence in the future prospects of the company.

In a market where there is a high minimum number of shares, or a penalty for trading in so-called odd lots (a non-multiple of some arbitrary number of shares), a reduced share price may attract more attention from small investors. Small investors such as these, however, will have negligible impact on the overall price.

Table showing details regarding the stock splits by the ten companies under consideration during the financial year 2008-09

SL. NO	COMPANY	DATE OF STOCK SPLIT	RATIO OF STOCK SPLIT
1	Bajaj Electric	28-01-2010	10:2
2	HBL Power	24-11-2009	10:1
3	Bharti Airtel	24-07-2009	10:5
4	Hind Nat Gls	12-11-2009	10:2
5	Educomp Sol	27-10-2009	10:2
6	Vishal Info	27-02-2009	10:1
7	GMR Infra	01-10-2009	2:1
8	Birla Cotsyn	23-10-2009	10:1
9	Gammon Infra	26-10-2009	10:2
10	Take Solutions	18-09-2008	10:1

### TESTING OF HYPOTHESIS

$H_0$  - There is a no significant difference between share prices before and after announcement of stock split.

$H_A$  - There is a significant difference between share prices before and after announcement of stock split.

COMPANY	T-test values
Bajaj Electric	0.209473
HBL Power	0.05081
Bharti Airtel	0.498327
Hind Nat Gls	0.243536
Educomp Solutions	0.372319
Vishal Information Systems	0.393453
GMR Infra	0.301717
Birla Cotsyn	0.154367
Gammon Infra	0.131549
Take Solutions	0.113235

T tabulated value is 1.833 at 5% level of significance. It has been found that calculated value of T to be lesser than 1.833 in all the above cases. So Null Hypothesis is accepted. Hence it can be concluded that there is no significant difference between share prices before and after announcement of stock split.

### STRONG FORM HYPOTHESIS

The Strong form efficient market hypothesis holds that all available information, whether public or private, is reflected in the stock prices. Obviously, this represents an extreme hypothesis and it would be surprising if it were true.

To test the strong form efficient market hypothesis, many researchers analyzed the returns earned by certain groups (like corporate insiders, specialists on stock exchanges and mutual fund managers) who have access to information which is not publicly available and/or ostensibly possess greater resources and abilities to intensively analyze information which is in the public domain. Empirical evidence broadly suggests the following:

- Corporate insiders (who may benefit from access to inside information) and stock exchange specialists (who have monopolistic access to buy and sell order position) earn superior rates of return, after adjustment for risk.
- Mutual fund managers do not, on an average, earn superior rate of return. As Malkiel put it, "No scientific evidence has yet been assembled to indicate that the investment performance of professionally managed portfolios as a group has been any better than that of randomly selected portfolios".

To test for strong-form efficiency, a market needs to exist where investors cannot consistently earn excess returns over a long period of time. Even if some money managers are consistently observed to beat the market, no refutation even of strong-form efficiency follows: with hundreds of thousands of fund managers worldwide, even a normal distribution of returns (as efficiency predicts) should be expected to produce a few dozen "star" performers.

### MUTUAL FUND

A mutual fund is a professionally managed type of collective investment scheme that pools money from many investors and invests it in stocks, bonds, short-term money market instruments, and/or other securities. The mutual fund will have a fund manager that trades the pooled money on a regular basis. As of early 2008, the worldwide value of all mutual funds totals more than \$26 trillion.

Mutual funds offer several advantages over investing in individual stocks. For example, the transaction costs are divided among all the mutual fund shareholders, which allows for cost-effective diversification. Investors may also benefit by having a third party (professional fund managers) apply expertise and dedicate time to manage and research investment options, although there is dispute over whether professional fund managers can, on average, outperform simple index funds that mimic public indexes. Yet, the Wall Street Journal reported that separately managed accounts (SMA or SMAs) performed better than mutual funds in 22 of 25 categories from 2006 to 2008.

The EMH theory propagates that the current market prices reflect the past market prices, freely available information and also insider information. Hence according to EMH it is not possible to earn excess returns even by carefully analyzing the historical prices and other information. So, this research is being conducted with the objective to test whether the returns provided by diversified equity funds of various mutual funds (which consider technical analysis, fundamental analysis and also insider information) exceed the returns offered by randomly constructed portfolios. For this purpose 30 mutual fund schemes have been randomly selected and their performance over the past financial year will be compared to that of randomly selected portfolios which consists of stocks of NSE listed companies.

The following table gives an extract of Annualized returns of selected 30 Mutual Fund Schemes for the year 07-03-2009 to 07-03-2010.

SL.NO	MUTUAL FUND SCHEME	%ANNUAL RETURN
1	Sundaram BNP Paribas CAPEX OppReg-D	103.5526
2	Tata Service Industries	150.8565
3	Birla Sun Life India Opportunities	150.2713
4	Franklin India High Growth Companies	150.2092
5	Morgan Stanley A.C.E.	149.2565
6	HDFC Equity	148.5887
7	Bharti AXA Tax Advantage Eco	148.2609
8	DSPBR Technology.com Reg	148.0922
9	Bharti AXA Tax Advantage Reg	147.7174
10	Sundaram BNP Paribas CAPEX OppReg-G	147.5904
11	Franklin Pharma	147.191
12	Tata Life Sciences & Tech	147.2233
13	UTI Transportation and Logistics	147.0219
14	Religare Banking	146.3415
15	Reliance Regular Savings Equity	146.087
16	L&T Opportunities	145.3999
17	Sundaram BNP Paribas Financial Services Opportunities Ret	145.2599
18	JP Morgan India Smaller Companies	144.4853
19	UTI Banking Sector Reg	143.5461
20	Kotak PSU Bank ETF	143.3772
21	ICICI Prudential Banking and Financial Services Ret	143.0442
22	IDFC Premier Equity Plan A	141.7032
23	JM Core 11 Series 1	139.8907
24	Templeton India Growth	139.6978
25	HDFC Mid-Cap Opportunities	139.2857
26	ING Dividend Yield	139.0453
27	HSBC Midcap Equity	138.8584
28	Birla Sun Life Tax Relief 96	126.062
29	HDFC Infrastructure	137.5271
30	Canara Robeco Equity Tax Saver	116.2963

Following is one of the samples out of the 10 random portfolios that were created containing 30 stocks each:

STOCK NAME	% ANNUAL RETURN
STATE BANK OF INDIA	118
SBM	114
ICICI BANK	235
AXIS BANK	274
BANK OF BARODA	208
PUNJAB NATIONAL BANK	199
HDFC BANK	122
ORIENTAL BANK OF COMMERCE	200
UNION BANK OF INDIA	127
BANK OF INDIA	75
ING VYSYA BANK	164
KARUR VYSYA BANK	120
J& K BANK	200
CANARA BANK	185
HSBC	369
VIJAYA BANK	140
ANDHRA BANK	160
BANK OF MAHARASTRA	170
BANK OF RAJASTHAN	108
ALLAHABAD BANK	262
CITY UNION BANK	156
DENA BANK	193
DEVELOPMENT CREDIT BANK	160
YES BANK	492
INDUSLAND BANK	462
KARNATAKA BANK	111
SYNDICATE BANK	120
STATE BANK OF BIKANER	158
STATE BANK OF TRAVANCORE	220
UCO BANK	160

Following is the average of annualized returns that were obtained from the 10 random portfolios created:

PORTFOLIOS	% AVERAGE ANNUAL RETURN
1	145.6452
2	166.6
3	194.1935
4	192.7333
5	147.267
6	176.2
7	167.2
8	500
9	185.4
10	141

Here single factor ANOVA is calculated using inbuilt function of Microsoft Excel. Level of Significance is taken at 5%.

$H_0$ : There is no significant difference in returns earned by mutual funds and random portfolios.

$H_A$ : There is a significant difference in returns earned by mutual funds and random portfolios.

#### SUMMARY

Groups	Count	Sum	Average	Variance
Column 1	10	2016.239	201.6239	11360.81816
Column 2	30	4261.74	142.0579862	105.1005841

#### ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	26610.74	1	26610.73565	9.603544917	0.003645612	4.098171731
Within Groups	105295.3	38	2770.928431			
Total	131906	39				

Since  $F_{cal}$  value is lesser than  $F_{tab}$  value i.e.  $9.6035 < 4.09812$ , we reject the null hypothesis. Therefore we can conclude that there is a significant difference in returns earned by mutual funds and random portfolios.

## FINDINGS

### FOR WEAK FORM HYPOTHESIS

- The stock movement predictability is very low for all the companies. In fact, for seven companies we find negative auto correlation values which imply that future stock return changes move in the opposite direction of current stock return changes.
- As stock predictability is low, there is a lot of risk and deviation involved if we try to predict future share prices using past data. Hence, it is not possible to earn abnormal returns consistently in the long run.
- From conducting Run test, it has been found that historical share prices are not related to future share prices.
- As past and current stock prices are not related to future stock prices, it can be concluded that the market discounts all past prices of shares.
- It can be concluded that Indian stock market is efficient in its weak form as we cannot earn superior returns using historical information of shares.

### FOR SEMI-STRONG HYPOTHESIS

- There is no significant difference between share prices before and after declaration of dividend.
- Hence, Market readily discounts information regarding dividend announcement and these changes are reflected in the new market prices.
- There is no significant difference between share prices before and after announcement of stock split.
- Hence, it is not possible to take advantage of availability of information regarding stock split.
- Therefore it can be said that markets are efficient in the semi-strong form and hence it is not possible to earn abnormal returns in the long run using publicly available information, such as, company fundamentals etc.

### FOR STRONG FORM HYPOTHESIS

- Mutual funds earn abnormal returns as compared to random portfolios.
- Therefore, there is a significant difference in returns earned by mutual funds and random portfolios.
- Therefore, it can be concluded that markets are efficient in the strong form.
- Investors can earn abnormally high return if they have access to insider information.
- There is a direct relationship between risk and return from the above analysis.

In a market that is essentially characterized by a large number of rational and profit seeking investors who compete with one another freely, the prices should reflect all the available and expected information. But in this report it has been observed that share prices readily discount all historical share prices and publicly available information. But it does not reflect insider information readily and therefore there is a possibility of making abnormal returns in such cases. It can be concluded that historical share prices are not a major determinant of future share prices. Also, announcement of various information relating to the companies are not much useful for making profits. The only way to earn superior returns on a consistent basis would be to either invest in mutual funds or transact with the help of insider information.

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**ANALYSIS OF PERCEPTIONS OF INVESTORS TOWARDS MUTUAL FUNDS: AN EMPIRICAL INVESTIGATION**

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**ABSTRACT**

*This research attempts to study the investors' preference and performance level of Mutual Funds in the present market. A survey has been used to collect primary data, 246 questionnaires were used to interpret the result. The study is based on survey conducted in Ahmedabad and Gandhinagar in month of September – November 2011. Questionnaire items were developed through a two stage process involving a review of literature and two pilot study of focus group to identify the attributes for assessing mutual fund industry. SPSS and Microsoft Excel have been used to analyze and interpret the data. It is concluded from the finding of the research that the awareness level regarding mutual funds is very less in area covered for study. The people are not aware of the advantage that they can get by investing in mutual funds nor are they aware of the basic functioning of mutual funds.*

**KEYWORDS**

Customer preference, performance level of MFs, Mutual Fund.

**INTRODUCTION**

India is one of the fastest growing economies in the world due to which the income level of people in India is increasing and along with it the savings and investments are also growing. Due to liberalization and deregulation which was announced in New Industrial Policy 1991, allowed the entry of new players and created environment for efficient allocation of resources. One of the important industries in emerging financial market is the mutual fund industry. The mutual fund industry has played a significant role in the development of capital market, growth of corporate sectors and financial intermediation. The government has also announced the regulatory measures for the growth of mutual fund industry and protection of investors in mutual funds. In this study researchers have attempted to study mutual fund industry in India, comparison of mutual fund companies and schemes offered by them and investment behavior of investors.

**LITERATURE REVIEW**

Selecting a mutual fund which is able to offer high returns with acceptable risks is a complex task. Literature shows that there are number of factors that determine the performance of mutual funds. Some literature seem to find that there is only a slight positive relationship between previous performance and current returns (Blake et al., 1993; Bogle, 1992; Brown and Goetzman, 1995; Brown et al., 1992). Others seem to be more conclusive about the relationship (Grinblatt and Titman, 1992; Hendricks et al., 1993). Goetzman and Ibbotson (1994) go as far as to show that a two year performance is predictive odd performance over the successive two years. It is no surprise that prior returns are the most important source of new money that flows into mutual funds (Carhart, 1997; Gruber, 1996; Ippolito, 1992).

Blake et al. (1993), Carhart (1997), Elton et al. (1996) and Liljebloom and Loflund (2000) for example, explain that there is an inverse relationship between the expense ratio and mutual fund performance. Ang et al. (1998) explain that cost increases when fund managers follow an active trading style, as they would require a large research team. Golec (1996) in fact suggests that investors should avoid funds with a high expense ratio. Elton et al. (1993) and Ippolito (1989) find evidence that funds with a lower transaction cost outperform those with higher fees. Nevertheless, Chen et al. (1992) finds a positive relationship between performance and expense ratio. Chen et al. 1992; Ang et al., 1998; Golec, 1996). Grinblatt and Titman (1989), however, found an inverse relationship between fund size and performance.

Michael C. Jensen (1967) derived a risk-adjusted measure of portfolio performance (Jensen's alpha) that estimates how much a manager's forecasting ability contributes to fund's returns. As indicated by Statman (2000), the e SDAR of a fund portfolio is the excess return of the portfolio over the return of the benchmark index, where the portfolio is leveraged to have the benchmark index's standard deviation. S.Narayan Rao, et al., evaluated performance of Indian mutual funds in a bear market through relative performance index, risk-return analysis, Treynor's ratio, Sharpe's ratio, Sharpe's measure, Jensen's measure, and Fama's measure. Bijan Roy, et al., conducted an empirical study on conditional performance of Indian mutual funds. This paper uses a technique called conditional performance evaluation. This paper measures the performance of various mutual funds with both unconditional and conditional form of CAPM, Treynor- Mazuy model and Henriksson-Merton model. Mishra, et al., (2002) measured mutual fund performance using lower partial moment. In this paper, measures of evaluating portfolio performance based on lower partial moment are developed. Risk from the lower partial moment is measured by taking into account only those states in which return is below a pre-specified "target rate" like risk-free rate. Kshama Fernandes (2003) evaluated index fund implementation in India.

**RESEARCH OBJECTIVES**

- To study the investors preference towards mutual funds.
- To know the performance level of Mutual Funds in the present market.
- To comparatively analyze the funds selected for the study in the present market.
- To know the different preference of selecting Scheme of MUTUAL FUND according to demographic profile of investors.

**RESEARCH HYPOTHESIS**

- There is no association between the Age of the investors and the Awareness for the Mutual Funds.
- Investors' give equal ratings to the factors associated with mutual funds.

**SAMPLE SIZE DETERMINATION**

A survey is being planned to determine what proportion of people in a certain region are aware about mutual funds. It is believed that the proportion cannot be greater than 0.20. A 95 percent confidence interval is desired width  $d=0.05$ .

Sample size was determined using following formula.

$$n = \frac{z^2 pq}{d^2}$$

Here  $Z = 1.96$ ,  $p = 0.20$ ,  $q = 0.80$ ,  $d = 0.05$ ,

$$n = \frac{(1.96)^2(0.20)(0.80)}{(0.05)^2} \quad n = 245.8624 \approx 246$$

**METHODOLOGY**

This is an analytical study based on the primary data collected through scientifically developed questionnaire. The questionnaire has been personally administered on sample size of 246, chosen on a convenient basis from the city of Gandhinagar and Ahmedabad. A survey has been used to collect primary data and 246 questionnaires were distributed and in final analysis also 246 questionnaires were used to interpret the result. A literature review was undertaken to identify what parameters to consider in research. It outlines the previous research with respect to customer preference in the Mutual fund industry. Second, in-depth interviews were held with customers to establish the evaluation criteria and the factors which result in customer preference. Third, a questionnaire was constructed and piloted. Questionnaire was prepared keeping in mind the various outcomes possible. Care was taken to minimize the possibility of wrong interpretation and biased views. The five-point likert scale was used to analyze the different variables and their relationship. For the analysis of data statistical methods are applied with the aid of SPSS (Statistical Package for Social Science) software, version 16.0 and excel.

**CHARACTERSTICS OF THE SAMPLE****TABLE 1: CHARACTERSTICS OF THE SAMPLE**

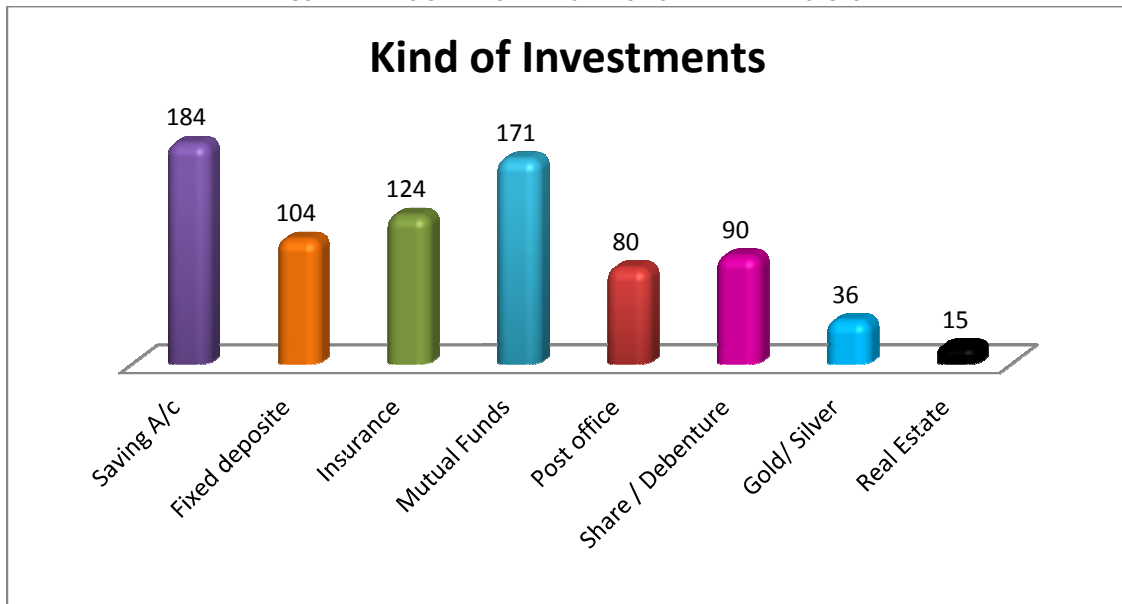
	Category	Frequency
Age	18-23	46
	24-29	63
	30-35	49
	35-40	41
	40+	47
	Total	246
Monthly Income	10,000-20,000	58
	20,001-30,000	73
	30,001-40,000	41
	40,000+	74
	Total	246
Occupation	Student	33
	Professional	109
	Businessman	27
	Housewife	17
	Govt. employee	32
	Others	28
	Total	246
Education Level	Undergraduate	8
	Graduate	78
	Postgraduate	160
	Total	246
Gender	Male	183
	Female	63
	Total	246



**FINDINGS AND ANALYSIS**

**KINDS OF INVESTMENTS WHICH IS MADE BY INVESTORS**

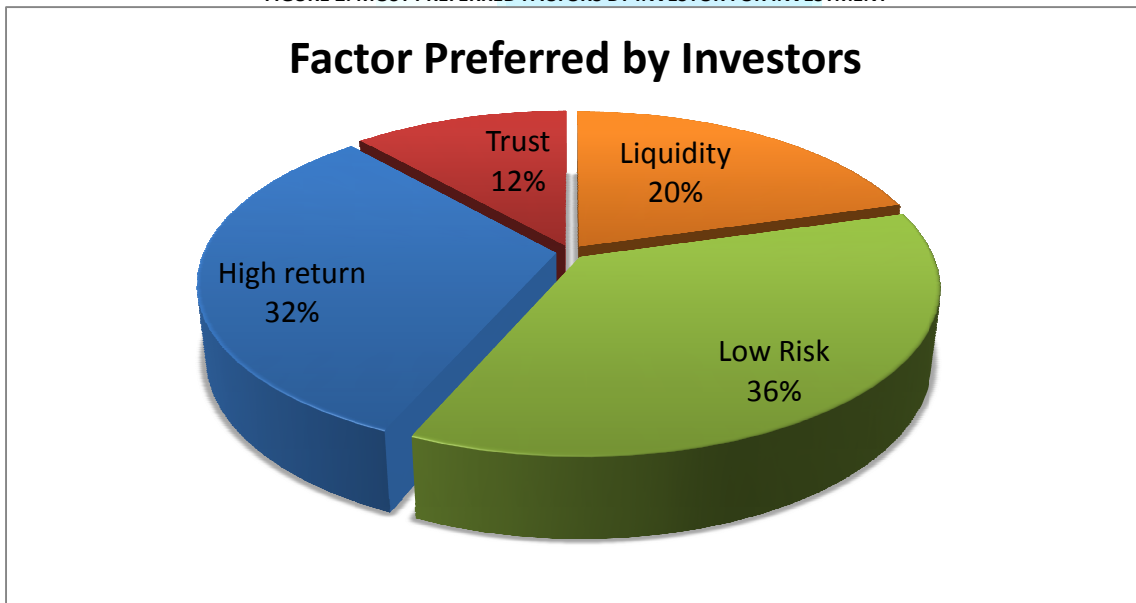
**FIGURE 1: KINDS OF INVESTMENTS WHICH IS MADE BY INVESTORS**



From the chart it is clearly seen that most of the people want safe investments. Saving A/c, Mutual funds, Insurance and F.D. are most preferred investment avenues by respondents. Real estate investment is not preferred by the investors. (It is multiple response question)

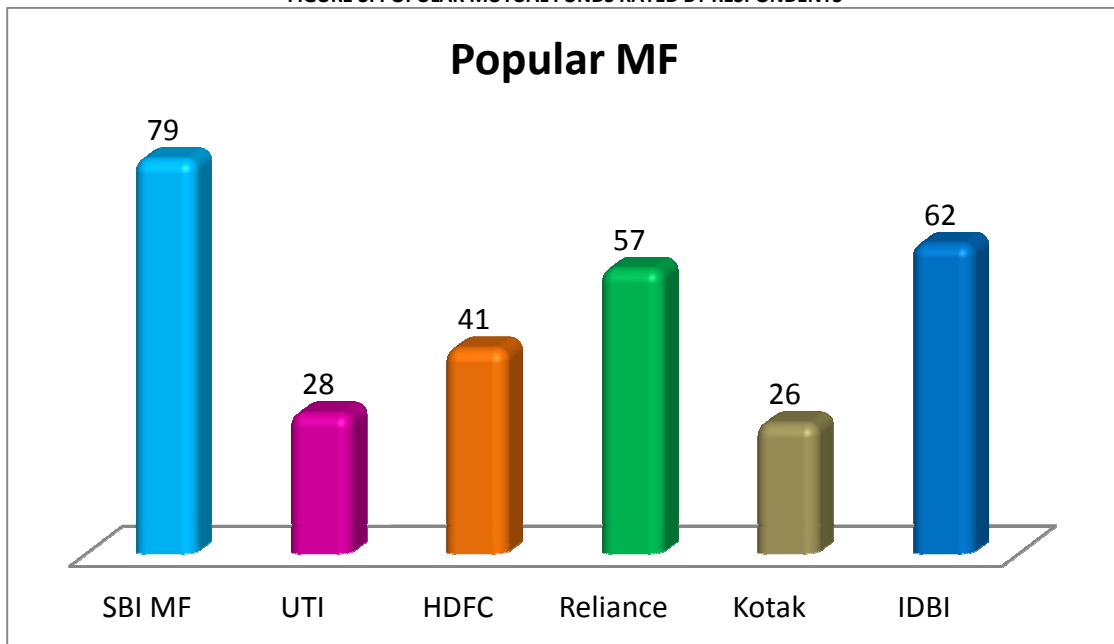
**MOST PREFERRED FACTORS BY INVESTOR FOR INVESTMENT**

**FIGURE 2: MOST PREFERRED FACTORS BY INVESTOR FOR INVESTMENT**



From the above chart it is clearly seen that the factor which is most influential in investment decision is Low risk. It is followed by High return. It can be concluded that most of the people are not ready to take a high risk but they demand higher returns.

FIGURE 3: POPULAR MUTUAL FUNDS RATED BY RESPONDENTS



Here there is no much difference in the popularity of the mutual funds. Almost all the mutual funds are equally popular. Among investors most favourable is SBI mutual funds followed by IDBI and Reliance.

**HYPOTHESIS TESTING**

**1. Awareness towards mutual funds and Age**

Cross tabulation: Are you aware about mutual funds? \* Age

TABLE 2: CROSS TABULATION: ARE YOU AWARE ABOUT MUTUAL FUNDS? \* Age

	Age					Total
	18-23	24-29	30-34	35-40	40+	
Aware	8	26	12	4	11	61
	17.4%	41.3%	24.5%	9.8%	23.4%	24.8%
Not Aware	38	37	37	37	36	185
	82.6%	58.7%	75.5%	90.2%	76.6%	75.2%
Total	46	63	49	41	47	246
	100%	100%	100%	100%	100%	100%

**CHI-SQUARE TEST**

TABLE 3: CHI-SQUARE TEST

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.546	4	0.004
Likelihood Ratio	15.737	4	0.003
Linear-by-Linear Association	1.372	1	0.241
N of Valid Cases	246		

a. = 0 cells (.0%) have expected count less than 5.  
 The minimum expected count is 10.17

It can be inferred from the above table that there is a **Strong association** between the Age of the investors and the Awareness for the mutual Funds. The Asymptotic Significant value is 0.004, which is less than 0.05; this means that the H<sub>0</sub> is rejected.

**2. Investors' give equal ratings to the factors associated with mutual funds.**

TABLE 4: INVESTORS' RATINGS TO THE FACTORS ASSOCIATED WITH MUTUAL FUNDS

Advantages	Sig. 2-tailed	<	>	0.05
Security of original capital	0.027	<	>	0.05
Wealth accumulation	0.199	>	<	0.05
Comfort factor	0.000	<	>	0.05
Tax efficiency	0.000	<	>	0.05
Life Cover	0.001	<	>	0.05
Income	0.000	<	>	0.05
Simplicity	0.000	<	>	0.05
Communication	0.139	>	<	0.05
Ease of withdrawal	0.008	<	>	0.05

Most of all the investors give different weighted to the different advantages associated with hedge funds.

## 3. Investors' Preference for MF Company(Rank Analysis)

TABLE: 5 INVESTORS' PREFERENCE FOR MF COMPANY

	1	2	3	4	5	6	7	Weighted Average Score	Weighted Average Mean	Rank
Reliance MF	47	45	47	39	28	22	18	832	3.3821	3
ICICI Prudential	6	12	11	74	77	32	34	1174	4.7724	5
Kotak	54	67	51	27	11	19	17	737	2.9959	2
UTI	15	9	22	22	31	65	82	1306	5.3089	7
HDFC	10	13	31	34	41	43	74	1246	5.0650	6
SBI	71	53	62	17	14	18	11	686	2.7886	1
IDBI	41	51	11	13	48	50	32	992	4.0325	4

Researchers have asked the investors that what come first in their mind while think of investing in mutual funds. From the above weighted average mean it can be said that SBI comes first, followed by Kotak with second rank and it is followed by Reliance MF with third rank. So that from this data it can be concluded that these are the schemes which are most popular among investors.

**LIMITATIONS AND FUTURE RESEARCH DIRECTIONS**

The research is just a small step in understanding the constructs Customer preference and awareness. The causal relationships have not been investigated. The present study is based on a small sample size and areas covered are Ahmedabad and Gandhinagar only, therefore the results of this study cannot be generalized. However, this study provides an opportunity for the researchers to use larger sample size and arrive at generalization. Sample is Ahmedabad-Gandhinagar focused; the participants in this study may possess attributes and behavior that may differ from those in other parts of state.

Mutual Fund is such a wide area of research that no single study can cover different dimensions related to it. Even primary surveys for studying the perceptions of investors towards mutual funds from time to time is not a regular feature in India, Hence there is much potential of research on a bigger scale covering wider area. Future researcher could make several extensions of the current study by studying perception of institutional investors towards mutual funds. Future research could examine a wider respondent base across the cities of Gujarat state with more diversified sample and can increase the number of respondents in the research.

**CONCLUSIONS**

The awareness level regarding mutual funds is very less in area covered for study. The people are not aware of the advantage that they can get by investing in mutual funds nor are they aware of the basic functioning of mutual funds. People in India prefer to invest in government securities and fixed deposits of nationalized banks were they can have complete safety of their funds though they get less returns. The people willing to take risk invest in equity markets, land, gold etc. Access to financial consultant for the management of the funds is costly so very few people prefer to have their own financial consultant for the management of their funds. People generally see the past performance of the mutual funds for investing their money in it which is not the right way to analyze the funds portfolio. Generally people want higher returns from their investment but their willingness to take risk is not that higher as compared to their expectation? Out of the responded surveyed only 18% of the responded were willing to take higher risk in order to get higher returns and the rest 82% of the investor were not willing to take the higher risk though they were expecting higher return which was illusionary.

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**CUSTOMERS' EXPERIENCE WITH SMALL SCALE RETAIL STORES – AN EMPIRICAL STUDY****DR. K. RAMA MOHANA RAO****PROFESSOR****DEPARTMENT OF COMMERCE AND MANAGEMENT STUDIES****ANDHRA UNIVERSITY****VISAKHAPATNAM****DR. K. RATNA MANIKYAM****LECTURER****DEPARTMENT OF COMMERCE****SRI A.S.N.M. GOVERNMENT COLLEGE****PALAKOL****ABSTRACT**

*One of the major challenges for retailers, irrespective of their size of operations, is to create experiences to the customers differently to that of competitors. It is not sufficient to meet the expectations of the customers; one has to find out ways to delight customers with a proper mix of service performances. Retailers need to work for improvements in quality performances for creating shopping experience, buying experience, service experience and relationship experience. This paper presents the customers' perceptions on the experiences related to the four specified areas. The findings are expected to benefit the small scale retailers to identify the areas that require further improvements and help in providing customer satisfaction and building loyal customer base.*

**KEYWORDS**

Shopping Experience, Buying Experience, Service Experience, Relationship Experience, and Service Performance.

**INTRODUCTION**

Retail sector plays a vital role in the economic development of any country, particularly in a populous country like India. Small scale retailing is predominant in India with more than 14 million retailers spread over all parts of the country. The small scale retailing constitutes 95 per cent of the total retail trade activity. The employment opportunities on large scale and its role in economic development keeps retailing at a prominent place in Indian economy. The changes after 1991 liberalization policy paved way for the growth of organized retailing. The changes in many facets of business environment are forcing the small scale retailers to modernize and improve their operations to satisfy the customers and to retain them against the serious competitive threats from the fast growing organized retailers.

The major challenge in retailing is to provide valuable experiences to the customers continuously all the time. The customer experience management begins with customer pre visit preparation to the retail store to post purchase satisfaction. Many moments take place in between the two stages and all those moments contribute to customer experience. The retailer needs to identify the moments that are capable of creating experience to the customer and then plan and organized the moments in such a way that each moment provides optimum value to the customer. It requires great amount of critical information, management commitment, dedicated and knowledgeable work- force and an efficient process flow and system backup. Creativity, innovation, adaptability and ability to take measured risks are some of the essential qualities required for affectivity customer experience management.

The customer experience from a retail store can be broadly be classified into four heads. They are shopping experience, buying experience, service experiences and relationship experience. Each of these experiences contributes to the overall customer experience from a retailer. These experiences are not mutually exclusive but complementary to each other. Retailers need to work for achieving excellence in all the four areas to maximize the value of customer experience. These experience areas provide competitive edge to the retailer and become core competences if managed effectively, consistently and continuously.

**REVIEW OF LITERATURE**

Research on retailing particularly small scale retailing is not carried out to the level it deserves. The following are the studies selected for review which are related closely to the concept under study.

The study undertaken by **Yogesh Upadhyay and Shiv Kumar Singh (2008)**<sup>1</sup> found the upper hand of hypermarkets as far as hedonic aspect of consumer perceived value is concerned. **Keval Sheth, Rohit Divekar, R. Srinivasan and R. K. Srivastava (2009)**<sup>2</sup> stated that unorganized retailers cannot compete with big retailers on head-to-head basis. They must either target a different market or offer something different to customers. Since the major retailers aim at the mass – consumption middle class, small scale retailers can successfully target lower income group. The study found that market orientation and small scale retailers' performance are positively related. The customer service focus of small scale retailers is the key determinant of success compared to other components of market orientation. The study by **Sasikumar and Regina Sibi Cleetus (2008)**<sup>3</sup> revealed that there is serious impact of corporate retailing on small scale retailers. Many small scale retailers were displaced due to corporate entry in retail as per the study. **Asit Gope and Arindam Ghosh (2009)**<sup>4</sup> in their study suggested the retailers, to remain competitive in the market. They must offer price advantage to attract customers. As per the researchers opinion the retail market is the next growth frontier for corporate India and it offer an opportunity for the large players to build highly customized retail business consist of multiple categories by 2015.

**John Egan (2008)**<sup>5</sup> identified customer satisfaction as the outcome of relational strategies and a prerequisite for loyalty and retention. **Maria-Eugenia Ruiz-Molina, Irene Gil-Saura and Gloria Berenguer-Contró (2008)**<sup>6</sup> identified that confidence benefits and special treatment benefits have major influence on customer loyalty towards the retailer. The benefits related to purchase risk reduction and confidence are the most influencing factors on customer loyalty. In order to improve corporate image retailers need to concentrate their efforts in offering guarantees for their products along with communication campaigns. According to researchers special treatment benefits may positively influence consumer loyalty.

**Yang-Im Lee and Peter R.J. Trim**<sup>7</sup> found that a successful retailing strategy will be embedded within a customer-driven general business strategy. Marketing managers should plan to develop and sustain long-term trust-based working relationships, which take into account organizational and national values. Successful partnership arrangements depend on mutuality and resilience, as well as trust. Marketing intelligence is a vital ingredient in the formulation and implementation of plans to achieve these goals. **Suresh Garinella (2005)**<sup>8</sup> opined that bigger stores do not have a personal touch; modernization of conventional shops would help conventional Indian retail outlets to cope with changing times and customer requirements.

According to **H. Venkateswarlu and Ranjani (2007)**<sup>9</sup> the survival of retail malls is not very easy, and it would take long time for survival of malls because breaking cultural and demographic barriers is extremely difficult. Until then, small scale retailers would play a dominant role in Indian retailing. **Grete Birtwistle and Linda Shearer**<sup>10</sup> reaffirmed that retail image and store positioning are factors which influence consumer loyalty and retail success.

**OBJECTIVE**

The objective of the present study is to ascertain the total customer experiences with small scale retailers.

**HYPOTHESES**

The null hypotheses set for the study is as following:

1. Ho: The factors such as sufficient product choices, adequacy of information, qualitative information, information access, pressure from salesman and evaluation assistance do not influence the shopping experience of the customers.
2. Ho: The factors such as fair price, fair negotiation process, free from deception and dishonesty, convenience, honest and courteous treatment and availability of sufficient inventory do not influence the buying experience of the customers.
3. Ho: The factors such as quality of the sales force, accessibility of salesperson, timeliness of the service, ability to understand customer problems, supporting shopping and buying and after sales services do not influence the service experience of the customers.
4. Ho: The factors such as recognize the regular customers, preferential treatment, hospitality, price concession, credit facility and quick and positive response do not influence the relationship experience of the customers.

**RESEARCH METHODOLOGY**

To test the set hypotheses an opinion survey was conducted in the state of Andhra Pradesh.. The study covers small scale retail units in different retail categories. For the purpose of the study, five retail categories were selected based on the number of retailing units established in Andhra Pradesh. The five categories selected for the study are food and grocery, textile and apparel, electrical and electronics, jewellery, and footwear. To elicit the opinion of the customers on shopping, buying, service and relationship experiences with small scale retail establishments, a sample of 450 customers are selected from the three regions of the state viz, Coastal Andhra, Telangana and Rayalaseema. Scaling technique was used to measure the opinions and weighted scores are calculated for analysis and interpretation.

**SHOPPING EXPERIENCE**

**Ho: The factors such as sufficient product choices, adequacy of information, qualitative information, information access, pressure from salesman and evaluation assistance do not influence the shopping experience of the customers.**

Shopping experience of the respondents was measured in terms of sufficient product choices, adequacy of information, qualitative information, information access, pressure from salesman and evaluation assistance provided by the sales persons. The overall assessment of the factors contributing to shopping experience related to small scale retail outlets was presented in Table 1. It reveals that 'sufficient product choices (score: 7680) got the highest rating followed by adequacy of information (score: 7567 and information access (score 7546). The mean value of all the six variables varied between 2.80 and 3.41. In terms of percentage to MPS the values of each variable varied between 56.09 per cent and 68.27 per cent. The study revealed that all the variables got more than 50 per cent value rating by the respondents in respect of shopping experience from small scale retail outlets under study.

**TABLE - 1: SHOPPING EXPERIENCES WITH SMALL SCALE RETAILERS**

Particulars	Score	WM	% to MPS
Sufficient product choices	7680	3.41	68.27
Adequacy of information	7567	3.36	67.26
Qualitative information	7482	3.32	66.51
Information access	7546	3.35	67.08
Pressure from salesman	6310	2.80	56.09
Evaluation assistance	6852	3.05	60.91

Source: primary data

The top three rated shopping experiences of the respondents in relation to small scale retail shops of the five categories under the study were shown in Table 2. The study revealed that the top three rated shopping experiences are not similar among the five categories. However, some experiences are commonly figured in top three ratings. 'Sufficient product choices' is the factor that figured in top three ratings of all the categories except jewellery category. 'Information access' is the factor that found a place in top three ratings of all the categories. 'Adequacy of information' is another identified shopping experience in four of the five categories (this factor was not found in top three ratings in the case of textile and apparel category). 'Qualitative information' is the factor identified with textile and apparel and jewellery categories.

**TABLE - 2: TOP THREE RATED SHOPPING EXPERIENCES WITH SMALL SCALE RETAIL SHOPS**

FactorRatings	Food & Grocery	Textile & Apparel	Electrical & Electronics	Jewellery	Footwear
1	Sufficient product choices	Sufficient product choices	Information access	Qualitative information	Adequacy of information
2	Information access	Qualitative information	Sufficient product choices	Adequacy of information	Information access
3	Adequacy of information	Information access	Adequacy of information	Information access	Sufficient product choices

Source: primary data

**As the findings of the study reveal that the factors such as sufficient product choices, adequacy of information, qualitative information, information access, pressure from salesman and evaluation assistance influence the shopping experience of the customers, the null hypothesis is rejected.**

**BUYING EXPERIENCE**

**Ho: The factors such as fair price, fair negotiation process, free from deception and dishonesty, convenience, honest and courteous treatment and availability of sufficient inventory do not influence the buying experience of the customers.**

The buying experience of the respondents with the small scale retail shops are ascertained by using six variables which include fair price, fair negotiation process, free from deception and dishonesty, convenience, honest and courteous treatment, and availability of sufficient inventory. Table 3 depicts the overall rating of the respondents on buying experience related the small scale retail outlets selected for the study. The study revealed convenience (score: 7796) is the top rated buying experience followed by fair negotiation process (score: 7279) and fair price (score: 7110). The mean value of each variable varied between 2.98 and 3.46 and the percentage to MPS varied between 59.64 per cent and 69.30 per cent.

**TABLE -3: BUYING EXPERIENCES WITH THE SMALL SCALE RETAIL SHOPS**

Particulars	Score	WM	% to MPS
Fair price	7110	3.16	63.20
Fair negotiation process	7279	3.24	64.70
Free from deception and dishonesty	6902	3.07	61.35
Convenience	7796	3.46	69.30
Honest and courteous treatment	6709	2.98	59.64
Availability of sufficient inventory	6927	3.08	61.57

Source: primary data

The top three rated buying experiences of the respondents related to small scale retail shops were presented in Table 4. 'Convenience' is the factor that found in all the five categories as one of the top three factors influencing buying experience of the respondents. 'Fair negotiation process' is the other buying experience identified by the respondents. This factor found place in top three positions in food and grocery, textile and apparel, electrical and electronics and footwear categories. 'Fair price' is the highly rated factor in food and grocery, and jewellery categories. 'Free from deception and dishonesty' is the identified buying experience in textile and apparel, and footwear categories. 'Availability of sufficient inventory' is specially rated in electrical and electronics category while 'honest and courteous treatment' is the buying experience specially identified with jewellery category.

TABLE - 4: TOP THREE RATED BUYING EXPERIENCES WITH SMALL SCALE RETAIL SHOPS

Factor Ratings	Food & Grocery	Textile & Apparel	Electrical & Electronics	Jewellery	Footwear
1	Fair price	Convenience	Convenience	Fair price	Convenience
2	Convenience	Fair negotiation process	Fair negotiation process	Convenience	Fair negotiation process
3	Fair negotiation process	Free from deception and dishonesty	Availability of sufficient inventory	Honest and courteous treatment	Free from deception and dishonesty

Source: primary data

As the findings of the study reveal that the factors such as fair price, fair negotiation process, free from deception and dishonesty convenience, honest and courteous treatment and availability of sufficient inventory influence the buying experience of the customers, the null hypothesis is rejected.

**SERVICE EXPERIENCE**

**Ho: The factors such as quality of the sales force, accessibility of sales person, timeliness of the service, ability to understand customer problems, supporting shopping and buying and after sales service do not influence the service experience of the customers.**

The service experience of the respondents with the small scale retail units has been assessed by using the variables such as quality of the sales force, accessibility of sales person, timeliness of the service, ability to understand customer problems, supporting shopping and buying, and after sales service. The data related to service experiences of the respondents in small scale retailing outlets were presented in Table 5. The study revealed that 'accessibility of sales person' is the service experience that is rated by most of the respondents. This factor got a score of 7825 which represents 69.56 per cent to MPS (mean value 3.48). 'Quality of the sales force' and the support extended by the sales persons in shopping and buying are the two service experiences occupied second and third positions respectively as per the ratings of the respondents. All the factors secured the mean value of > 3. The mean values among the variables varied between 3.09 and 3.48. The scores as percentage to MPS of the variables varied between 61.14 per cent and 69.56 per cent.

TABLE - 5: SERVICE EXPERIENCE WITH SMALL SCALE RETAILERS

Particulars	Score	WM	% to MPS
Quality of the sales force	7792	3.46	69.26
Accessibility of salesperson	7825	3.48	69.56
Timeliness of the service	7024	3.12	62.44
Ability to understand customer problems	7235	3.22	64.31
Supporting shopping and buying	7676	3.41	68.23
After sales service	6946	3.09	61.74

Source: primary data

Table 6 presents the top three service experiences rated by the respondents. 'Accessibility of sales person' is in the top three service experiences related to all categories of retail outlets except in the case of jewellery category. 'Support of the sales force in shopping and buying' is the factor that was perceived in all the categories under the study. 'Quality of the sales force' is other factor which is perceived by the respondents in food and grocery, textile and apparel, jewellery and footwear. 'After sales service' is the experience perceived in the case of electrical and electronics and jewellery categories. Thus, it can be inferred that there are similar perceptions as far as service experience is concerned in food and grocery, textile and apparel, and footwear categories. Two out of the three factors are common between electrical and electronics and jewellery categories.

TABLE - 6: TOP THREE RATED SERVICE EXPERIENCES WITH SMALL SCALE RETAIL SHOPS

Factor Ratings	Food & Grocery	Textile & Apparel	Electrical & Electronics	Jewellery	Footwear
1	Accessibility of sales person	Accessibility of sales person	Accessibility of sales person	After sales service	Accessibility of sales person
2	Quality of the sales force	Quality of the sales force	After sales service	Supporting shopping and buying	Supporting shopping and buying
3	Supporting shopping and buying	Supporting shopping and buying	Supporting shopping and buying	Quality of the sales force	Quality of the sales force

Source: primary data

As the findings of the study reveal that the factors such as quality of the sales force, accessibility of sales person, timeliness of the service, ability to understand customer problems, supporting shopping and buying and after sales service influence the service experience of the customers, the null hypothesis is rejected.

**RELATIONSHIP EXPERIENCE**

**Ho: The factors such as recognize the regular customers, preferential treatment, hospitality, price concession, credit facility and quick and positive response do not influence the relationship experience of the customers.**

The relationship experience is assessed by using variables includes, Recognize the regular customers, Preferential treatment, Hospitality, Price concession, Credit facility and Quick and positive response. The data related to relationship experiences of the respondents were presented in Table 7. 'Recognize the regular customers' is the factor secured highest score of 8190 (mean value 3.64) which represents 72.80 per cent to MPS. 'Preferential treatment' and 'quick and positive response' are the two relationship experiences rated high in the order by the respondents. The mean values of the six variables varied between 2.50 and 3.64. The scores of the variables as percentage to MPS varied between 49.99 per cent and 72.80 per cent. 'Credit facility' is the factor that secured the lowest rating.

TABLE - 7: FACTORS CONTRIBUTING TO RELATIONSHIP EXPERIENCE WITH THE SMALL SCALE RETAILERS

Particulars	Score	WM	% to MPS
Recognize the regular customers	8190	3.64	72.80
Preferential treatment	7219	3.21	64.17
Hospitality	6758	3.00	60.07
Price concession	6863	3.05	61.00
Credit facility	5624	2.50	49.99
Quick and positive response	7182	3.19	63.84

Source: primary data

The top three rated relationship experiences of the respondents in the five retail categories were presented in Table 8. The study revealed that 'recognition of the regular customers' is the top rated perception of the respondents in all the categories. 'Quick and positive response' is perceived in food and grocery, textile and apparel, electrical and electronics as a response to customer relationship. 'Preferential treatment' is perceived in electrical and electronics, jewellery, and footwear categories as an outcome of relationships. 'Price concession' is the relationship experienced by the respondents in textile and apparel and footwear categories. 'Credit facility' is the relationship benefit perceived in food and grocery category while 'hospitality' is found in jewellery category.

TABLE - 8: TOP THREE RATED RELATIONSHIP EXPERIENCES WITH SMALL SCALE RETAIL SHOPS

Factor Ratings	Food & Grocery	Textile & Apparel	Electrical & Electronics	Jewellery	Footwear
1	Recognize the regular customers	Recognize the regular customers	Recognize the regular customers	Recognize the regular customers	Recognize the regular customers
2	Quick and positive response	Price concession	Preferential treatment	Preferential treatment	Preferential treatment
3	Credit facility	Quick and positive response	Quick and positive response	Hospitality	Price concession

Source: primary data

As the findings of the study reveal that the factors such as recognize the regular customers, preferential treatment, hospitality, price concession, credit facility and quick and positive response influence the relationship experience of the customers, the null hypothesis is rejected.

TABLE 9: FACTOR SCORES OF CONSUMER EXPERIENCES

Experience	Score	WM	% to MPS
Shopping experience	7240	3.22	64.36
Buying experience	7121	3.17	63.30
Service experience	7408	3.30	65.85
Relationship experience	6973	3.10	61.98
Total customer experience	7186	3.32	63.87

Source: primary data

## CONCLUSION

The findings of the study rejected the entire null hypothesis and established the fact that the small scale retailers are providing valued experiences to the customers. Though the rating of the customers is positive on all the four measured experiences, the overall score represents 63.87 per cent to the maximum possible score as shown in Table 9. It indicates that there is a lot of scope for further improvement in providing experiences to customers. Further the table reveals that the service experience in small scale retailing got relatively high score while relationship experience got the lowest it reveals that the small scale retailer need to focus more on quality in customer relationships. The customer experience management requires an organized effort from retailers, continual review and committed effort of the management for improvements qualitatively.

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**INDIAN SPICES EXPORTS: THEIR GROWTH AND INSTABILITY**

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**ABSTRACT**

*India is the largest producer, consumer and exporter of spices in the world. India is expected to emerge as the global processing hub of spices in the coming 10 years. Export instability is one major problem faced by this sector. The analysis of growth and instability of Indian spices exports during the last five decades has revealed that they grew much faster than the overall agricultural exports and achieved some stability in the post Economic Reforms period. The emerging challenges and major concerns of the sector are also identified in the paper.*

**KEYWORDS**

Agricultural Exports, Economic Reforms, Export Instability, Instability Indices, Trend Growth Rates.

**INTRODUCTION**

Spices constitute an important group of agricultural commodities which are used for flavouring and are the main ingredients for any tasty food. The other uses of spices are in medicine, cosmetics, colouring, rituals etc. People have used spices since earliest times. There are references about spices in the Vedic literature and in the Old Testament. Even today we depend on spices and herbs for many of our newest medicines, chemicals and flavours. India is considered as the home of spices and its spice trade has history that spans over 3500 years. Because of the varying agro climatic conditions India produces a wide range of spices: Pepper, Chillies, Cardamom, Turmeric, Ginger, Garlic, Coriander, Cumin, Fennel, Fenugreek, Spice oils and Oleoresins, etc.

The production of spices in India during 2010-11 is around 5.3 million ton and the total area under spices cultivation is about 2.9 million hectares. Almost all the states and union territories of the country produce one or the other spice and are being cultivated by millions of small and marginal farmers. On average 8 percent to 10 percent of the total spices production is exported and the rest is domestically consumed. Even with this modest share of total production being exported, India is currently earning a foreign exchange between Rs. 5000 to Rs.6000 crores per annum. During the year, 2010-11 spices export from India has registered an all time high both in terms of quantity (5.25 million tons) and value (Rs.6840 crores). Currently India is in a formidable position in the World Spice Trade with 48% share in volume and 44% in value and is expected to emerge as the global processing hub of spices in the next 10 years.

Although Indian spices exports have been growing steadily in quantity and value during the last fifty years, Instability in export earnings is a major problem retarding the export performance of this sector. The Economic Liberalisation Policies and formation of WTO during the nineties have profound impact on Indian agricultural exports in general and on Spices Exports in particular. The Agreement on Agriculture(AOA), The Agreement on Sanitary and Phyto Sanitary(PS) Measures, The Technical Barriers to Trade(TBT), Safeguards and Subsidies and Countervailing Measures (SCM) are some of the outcomes of WTO having implications on Indian Spices Exports both in terms of growth and instability. In this context the present paper is an attempt to assess the growth and instability in Indian Spices sector during the period 1960-2010 and explore the possibility of structural break in the growth performance of the sector in the post Economic Reforms period.

The paper is organized as follows. Section 2, gives an overview of the growth experience of Indian Spices sector. Section 3 contains the review of relevant literature and section 4 spells out the objectives and section 5 outlines the methodology for estimating growth rates and instability indices. Section 6 mentions the data sources. The results are then analysed in section 7. Section 8 contains summary and observations.

**OVERVIEW OF INDIAN SPICE TRADE (1960-2010)**

India exports spices from times immemorial and is the largest producer, consumer and exporter of spices in the world. India at present commands a formidable position in the World Spice Trade with 48% share in volume and 44% in value. India exports about 180 varieties of spices to over 150 countries around the world. Mint products account for the bulk of spice exports from India, followed by chillies, oils and oleoresins and pepper. The Major importers are USA, EU, Japan, Malaysia, China, Pakistan, UAE, South Africa and Japan. In 2010-11 the export of spices from India has been 525,750 tons valued Rs.6840.71 crores (US \$ 1502.85 Million) as against 502,750 tons valued Rs.5560.50 crores (US \$ 1173.75 Million) in 2009-10. Because of strong domestic market India could exports on average about 8 to 10 percent of its spices production. Spices constitute about 1.2% of the total Indian Merchandise Exports during the year 2007-08. The share of spices in export earnings from agricultural and allied products is about 8% during the same year.

Over the last fifty years (1960-2010) the spices exports of India show positive trend both in terms of volume and value (fig 1). During the year 1960-61 India exported 45,653 tons of Spices and earned about Rs. 163.6 crores. Spices exports remained almost flat during the first two decades of the five decades under consideration. The positive growth trend in spices exports is quite visible during the eighties and it seems that the Economic Reforms Period (1990- 2010) gave boost to Indian spice trade. Indian exports of spices was about 68,872 tons in the year 1980-81 and it rose to 1,09,636 tones in the year 1990-91. By 2000-01 India is able to export 2,35,917 tons of spices valued at Rs.1940 crores. However the growth in exports is not steady and is accompanied by instability as seen by the ups and downs in the trend curves (fig.1) The commodity composition of Indian spice export basket over the last fifty years (table.1) clearly shows a shift towards value added spice products from raw spice products. This is in tune with the global trend of higher price realization for value added products. Keeping this in mind India wants to emerge as the global processing hub for spices. However there are lot developments in the international markets for spices in the post WTO scenario which have profound impact on Indian spice trade. Emergence of new suppliers like Vietnam, Guatemala, China and the qualitative restrictions imposed on spices imports by the western countries are the things which are of great concern for us. Since India is not only the largest producer of spices but also the leading consumer, future export quantities of spices will vary depending on the crop and the domestic demand.

**REVIEW OF LITERATURE**

A number of studies have been carried out on the growth and instability of exports. Few of them will be reviewed here. Studies of Coppock, (1962), Massell, (1964) and Macbean, (1966) laid foundation for empirical investigation of export instability. Later studies by Naya (1973), Kalaf (1974) and Kingston (1976) explored the determinants of export instability. But recent studies like that of Love (1985), Paudyal<sup>1</sup> (1988), Tegegne (2000) Campa (2004) using time series data on an individual country basis resorted to cointegration analysis for the validity of the results. In Indian context the papers of Sen, Pronab (1989) and Pancharukhi (1999) provides the methodological framework for measuring export instability and growth. Goyal, S.K, R.N.Pandey and J.P.Singh (2000) studied the trends in growth and instability of Indian agricultural exports with exponential growth trends and Coppock's Instability indices. C.Sarada, T.Ravisankar, M.Krishnan, and C.Anandanarayanan (2006) studied the growth prospects and causes of export instability in Indian sea food exports in a time series framework. Kaundal, K.K and Sharma, Manoj (2006) in their study on Indian agricultural exports in the post reforms period estimated the trend growth rates and instability indices for various components of agricultural exports. Geetha Mathur V.C (2008), analysed the causes of instability in Indian agricultural exports in the post WTO scenario. Studies on growth and instability of total spices exports from India are not available and therefore are not reviewed here.



## OBJECTIVES OF THE STUDY

The present paper makes a modest attempt:

1. To discuss the trends in growth and instability of Indian spices exports both by volume and value during the period (1960-2010) and also during the pre Reforms Period 1960-1991 and Post Reforms Period, 1991-2010.
2. To ascertain the possibility of structural break in the growth and instability of Indian Spices Trade in the post Economic Reforms period. (1991-2010)
3. To identify the future growth prospects and challenges of Indian spice trade.

## RESEARCH METHODOLOGY

The trends in growth and instability and the association between growth and instability of Indian spices exports were analyzed in terms of trend growth rates and instability indices for the period 1960-61 to 2010-11. The compound growth rates and export instability indices of value/volume of spice exports were obtained by fitting exponential trend equation as it is proved to be the best fit to the data and the significance of growth rates were tested by applying  $t$ -test. Before calculating compound growth rates and instability indices the time series data of each spice item under study was smoothened by applying first order exponential smoothing model to remove certain unusual fluctuations during specific years. The Compound Annual Growth Rate (CAGR) for a variable  $Y_t$  can be obtained by fitting a log linear trend equation of the type:

$$\ln(Y_t) = \alpha + \beta t + \epsilon_t, \text{ and then, CAGR} = (\text{antilog } \beta - 1) \times 100$$

Export instability in this study is defined as the fluctuations around the estimated time trend path and is measured by the coefficient of variation of the estimate. Year to year instability in exports is measured as the average percentage deviations of the observed values of export proceed from an exponential growth path. To identify changes in growth and instability the study period (1960-61 to 2010-11) is split as sub-period I (1960-'61 to 1991-'92) and sub-period II (1992-93 to 2010-11), which broadly corresponds to the pre and post Economic Reforms period respectively. Trend equations were obtained for the whole period as well as for the two sub-periods. To detect the possibility of structural changes in the wake of Economic Reforms initiated during the year (1991-'92), the Chow's Structural Break Test is carried out for the trend equations belonging to the whole period.

## DATA SOURCES AND PROCESSING OF DATA

The study is based on the secondary time series data obtained from Spices Statistics published by Spices Board, Ministry of Commerce and Trade, Government of India, Cochin and Monthly Statistics of Foreign Trade of India, DGCI, Government of India, Kolkatta. The growth rates were obtained by processing the data using econometrics software, GRETL.

## ANALYSIS OF RESULTS

The trend growth rates and instability indices of export volume and export value of Indian spices for the period 1960-61 to 2010-11 and also for the various decades of the referred period were presented in table.2. The results of Chow's Structural Break test for both export quantity and export value was presented in Table 3. From these results the following inferences may be drawn.

- 1) Over the past 50 years period under study i.e., 1960-2010, total spices exports grew at an annual compound growth rate of 12.83 per cent in terms of value and at 5.01 per cent in terms of volume. This growth performance of Indian spices exports is remarkable considering the fact that total agricultural exports from India grew only at an annual compound growth rate of 9 per cent in terms of value and at 4.2 percent in terms of volume (Economic Survey 2010, GOI) during the same period. This shows the growth potential of the spices exports in the coming years.
- 2) The growth rates of total spices exports during the Post - Reforms period (1992 – 2010) are much higher at 7.61 percent for volume and 16.42 percent for value compared to the pre-reforms period, when they recorded growth rates of 3.61 percent for volume and 10.34 percent for value. Thus, it may be inferred from the estimated results that export growth performance of total spices improved during the Reforms period. This structural break in growth rates is confirmed by the Chow's test (Table 3). The test clearly reveals a break in growth rates in 1991-92, with the null hypothesis of no structural break rejected at an F-value of 3.31 (probability 0.003) for export value and 35.40 (probability 0.000) for export volume. Thus we may infer from the estimated results that export growth performance of total spices improved significantly during the post-Reforms period, especially in export value.
- 3) Over the past 50 years period under study i.e., 1960-2010, total spices exports grew at an annual compound growth rate of 12.83 per cent in terms of value and at 5.01 per cent in terms of volume. This growth performance of Indian spices exports is remarkable considering the fact that total agricultural exports from India grew only at an annual compound growth rate of 9 per cent in terms of value and at 4.2 percent in terms of volume (Economic Survey 2010, GOI) during the same period. This shows the growth potential of the spices exports in the coming years.
- 4) The growth rates of total spices exports during the Post - Reforms period (1992 – 2010) are much higher at 7.61 percent for volume and 16.42 percent for value compared to the pre-reforms period, when they recorded growth rates of 3.61 percent for volume and 10.34 percent for value. Thus, it may be inferred from the estimated results that export growth performance of total spices improved during the Reforms period. This structural break in growth rates is confirmed by the Chow's test (Table 3). The test clearly reveals a break in growth rates in 1991-92, with the null hypothesis of no structural break rejected at an F-value of 3.31 (probability 0.003) for export value and 35.40 (probability 0.000) for export volume. Thus we may infer from the estimated results that export growth performance of total spices improved significantly during the post-Reforms period, especially in export value.
- 5) Considering both growth and instability together results show that Indian spices exports during the last five decades witnessed comparatively rapid growth in value than in volume and at the same time instability is higher in export value compared to export volume. Thus it is clear that export price over the years is the major factor responsible for both growth and instability of Indian spices exports.
- 6) The acceleration in growth and deceleration in instability in the Post Economic Reforms period (1992-2010) compared to Pre Reforms Period (1992-2010) for both export volume and export value of Indian Spices is an interesting inference that can be drawn from the results. The reasons for this phenomena needs to be further investigated.
- 7) Coming to decadal trends in growth and instability of Indian spices exports, the first decade (1960-70) witnessed negative growth in export volumes even though instability is minimum. However export value registered a healthy growth rate of about 7.7 percent with considerable fluctuations. The next decade, 1970-80 seems to have reverted the trend in growth of export volumes as export value continued its upward growth trend accompanied by volatility. A sharp fall in growth rate of export volumes and continued upward trend in export value is the feature of the decade, 1980-90.
- 8) The first decade of the Post Economic Reforms period, 1992-2000 seems to put the growth rate of both export volume and export value on higher trajectory even though export instability continued. The second decade of the post Economic Reforms period experienced the continuation of high growth export volume but a sharp decline in growth of export value. One important feature of this period is that there is some stability in export revenues.
- 9) On the whole it is evident that spices exports over the years have shown positive growth trend both in terms of volume and value, the latter being on a higher trajectory. Economic Reforms period seems to have given a fillip to this process. Export Instability initially is confined to export value but now export volumes are also experiencing this problem.

## MAJOR CONCERNS AND EMERGING CHALLENGES

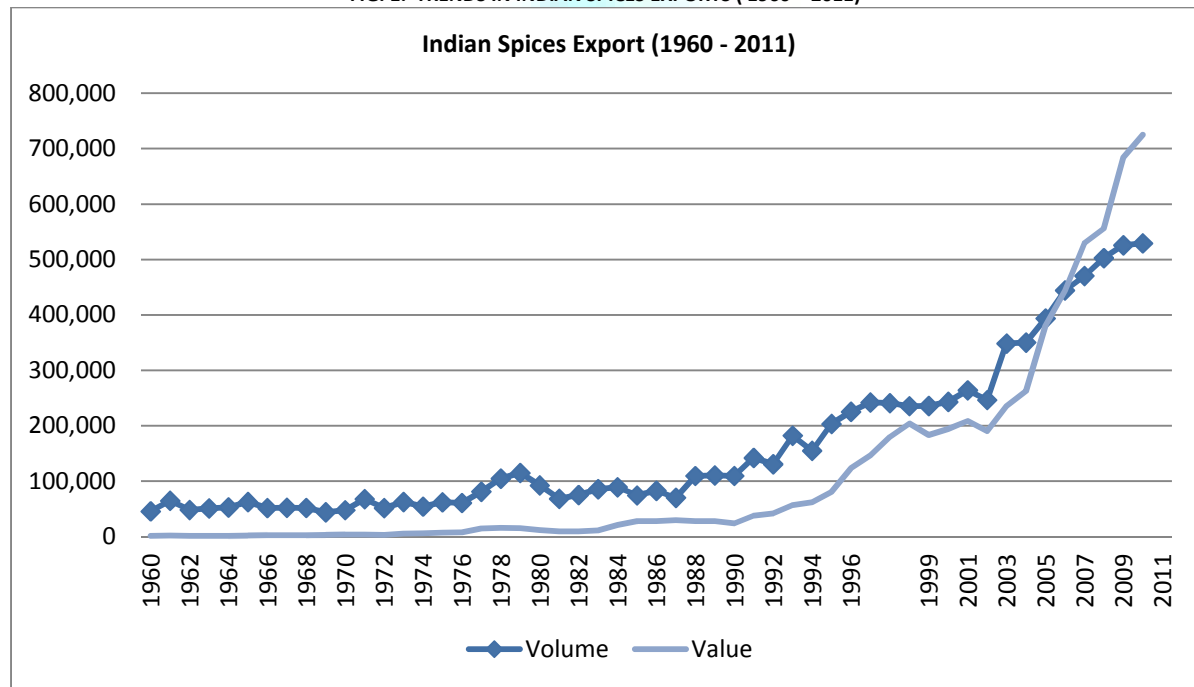
- a. Given that there is a vast domestic market for spices, export of spices is basically undertaken to dispose of the excess of domestic supply over domestic needs rather than as a specialized activity. That is exports of spices are mainly dependent on crop and domestic consumption rather than on international market signals.
- b. High commodity concentration and geographical concentration of Indian spices exports is a major concern for future growth and stability.

- c. Gradual erosion of price competitiveness of Indian spices in International markets due to low productivity and high cost of production is a major concern at present.
- d. The physical condition and hygienic standards of Indian spices are far below the international standards. Export competitiveness of Indian spices could diminish either because of explicit bans or the costs of compliance with the new standards such as Sanitary and Phytosanitary Agreements.
- e. Emergence of new competitors at the global level with no or very little domestic consumption are posing a major challenge to India's hitherto formidable position in spice trade.
- f. Export related infrastructure bottlenecks are a major constraint for future growth of spices exports.

**SUMMARY AND OBSERVATIONS**

India exports spices from times immemorial and for a very long time has been among the leading spice exporting countries of the world. Today, India is the largest producer, consumer and exporter of spices in the world. Although Indian spices exports have been growing steadily in volume and value during the last fifty years, Instability in export earnings is a major problem retarding the performance of this sector. Empirical analysis of Indian spices exports during the last five decades reveals that exports witnessed a comparatively rapid growth in value than in volume and at the same time instability is higher in export value compared to export volume. It seems that export price over the years is the major factor responsible for both growth and instability of Indian spices exports. Domestic factors have been hitherto influencing the spices exports. Future growth of this sector depends on finding solutions to the domestic determinants of spices exports and emerging international challenges in the post WTO scenario.

**FIG. 1: TRENDS IN INDIAN SPICES EXPORTS ( 1960 – 2011)**



**FIG. 2: INDIA'S SHARE IN WORLD SPICE TRADE (2010-11)**

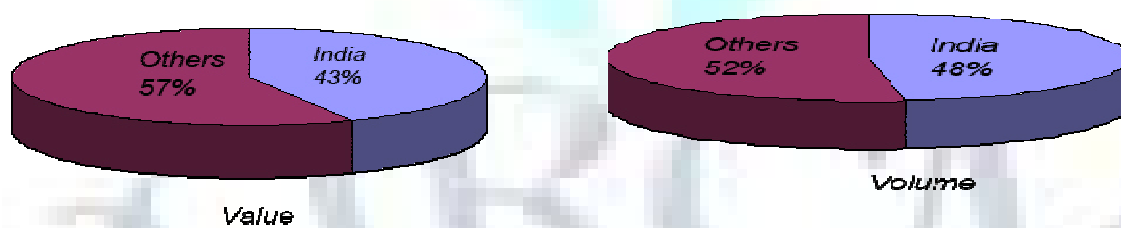


TABLE 1: TRENDS IN COMMODITY COMPOSITION OF INDIAN SPICES EXPORTS (BY VALUE) (1960 – 2007) (Percent of Total)

Spice	1960	1970	1980	1990	2000	2006	2010
Pepper	51.1	39.3	33.2	42.1	20.2	8.0	11.3
Cardamom(L)	2.0	0.3	0.4	2.02	1.3	0.47	1.80
Cardamom(S)	11.0	28.5	29.2	4.48	4.61	0.60	0.54
Chilli	10.0	2.79	4.75	11.3	12.5	22.6	24.7
Ginger	5.1	6.72	3.15	4.85	1.46	1.11	0.63
Turmeric	1.5	9.87	6.75	6.39	6.3	4.61	3.53
Fennel	0.09	0.07	0.08	0.08	0.11	0.21	0.11
Coriander	1.25	0.25	1.07	1.67	2.03	2.08	2.98
Cumin	1.22	2.12	8.34	1.25	9.72	5.63	6.57
Celery	1.27	5.20	1.33	1.75	0.76	0.36	0.29
Garlic	0.70	0.72	2.10	1.06	0.69	0.60	0.50
Spice oils	-	0.30	2.27	13.2	21.4	14.2	12.6
Curry Powder	2.21	2.9	2.06	2.72	2.34	2.43	2.51
Mint Products	-	-	-	3.52	8.45	30.7	28.8
Others	12.4	2.01	5.70	3.65	8.22	6.36	3.80
Total	100	100	100	100	100	100	100

Source: Author’s Calculations based on Spices Board data.

TABLE 2: DECADAL GROWTH RATES AND INSTABILITY INDICES OF INDIAN SPICES EXPORTS (1960-2010)

Period	Export Volume		Export Value	
	Growth Rate*	Instability Index	Growth Rate*	Instability Index
1960-'61 to 1969-'70	-0.37	1.2	7.74	4.1
1970-'71 to 1979-'80	6.81	2.6	11.6	6.8
1980-'81 to 1989-'90	1.78	1.5	9.24	5.1
1990-'91 to 1999-'00	7.87	2.3	23.78	6.3
2000-'01 to 2009-'10	8.34	2.2	11.73	3.5
<b>1960-'61 to 2010-11</b>	<b>5.01</b>	<b>6.5</b>	<b>12.83</b>	<b>18.71</b>
<b>1960-61 to 1991-92</b>	<b>3.61</b>	<b>6.1</b>	<b>10.34</b>	<b>17.29</b>
<b>1992-93 to 2010-11</b>	<b>7.61</b>	<b>3.3</b>	<b>6.42</b>	<b>7.01</b>

\*Compound Annual Growth Rate,

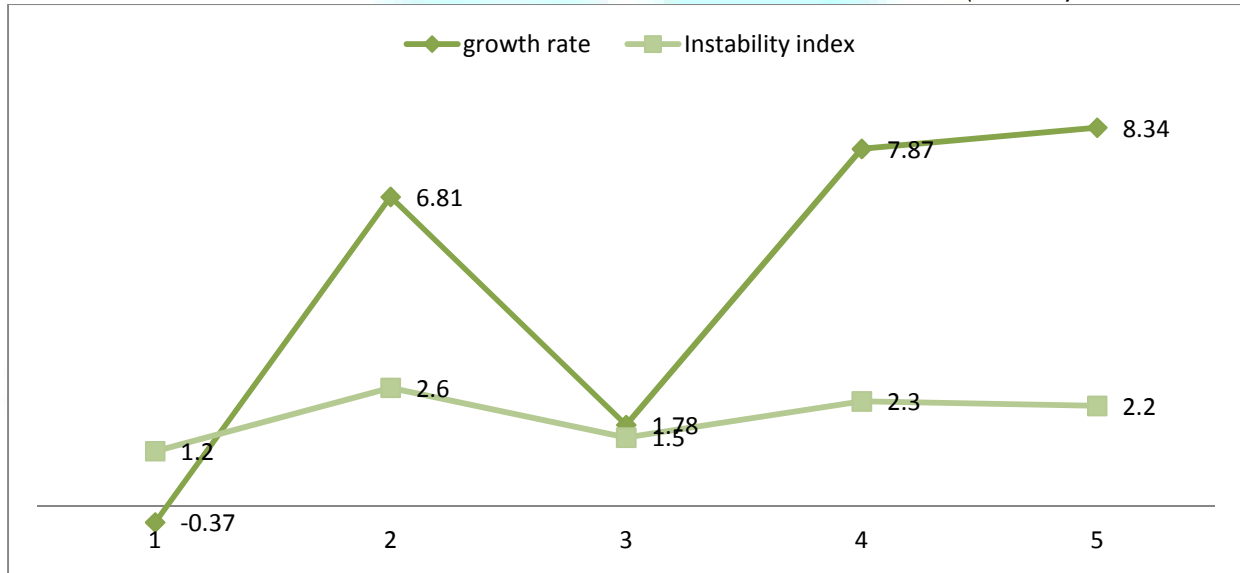
**Note:** All growth rates are statistically significant at 5% level.

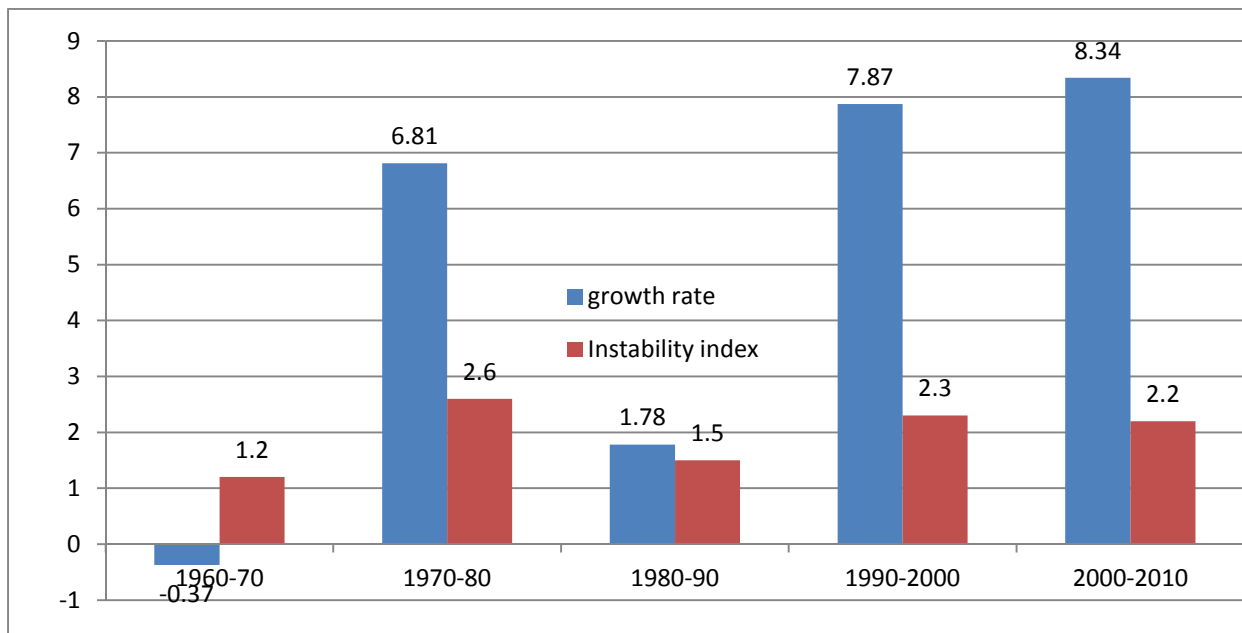
TABLE 3: INDIAN SPICES EXPORTS (1960-61 to 2010-11), CHOW BREAK POINT TEST: 1991, No of Observations: 51

Export Volume		Export Value	
F-Stat	P-Value*	F-Stat	P-Value*
35.48	0.000	3.31	0.000

\* P- value is the exact level of significance

FIG. 3: DECADAL GROWTH RATES AND INSTABILITY INDICES OF INDIAN SPICES EXPORTS (1960-2010)





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**STOCK PRICE RESPONSES TO THE ANNOUNCEMENT OF BUYBACK OF SHARES IN INDIA**

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**ABSTRACT**

*In this paper an attempt has been made to examine the short term market reaction to the buyback announcement on stock price in India. A number of studies have examined the effect of buyback on share price behaviour and empirical evidence from the prior studies report that negative long run abnormal returns following the buyback announcement in U S, U K and Canada. Market reaction in the UK differs from that in the US for short term market. In this direction an empirical study has been carried out to know the Indian stock markets reaction to Buy-back of shares. This study is confined shares buyback of listed companies for the period 1996 to 2006. The sample consists of 106 companies, which are listed in the BSE. The adjusted daily stock prices and BSE 200 index are collected for each of the firms from day - 331 to + 30. If the share price data is not available due to non-trading, such companies are eliminated. In order to analyze the impact of the announcement of buyback of shares on stock price, the event period is centered on the announcement date of buyback of shares. The announcement date is designated as day "0" in the event period and used 61 days event period, i.e. 30 trading days before the announcement of the buyback of shares to 30 trading days after the announcement of the buyback of shares, 0 being the day of the announcement of the buyback of shares. The methodology of the study involves use of market model which was developed and suggested by Sharpe (1963). The effect of stock prices is measured in an event period using the abnormal return associated with this event. The researcher computed the Expected Returns (ER), Abnormal Returns (AR), Average Abnormal Returns (AAR) and Cumulative Average Abnormal Returns (CAARs) to examine the stock price reaction. To measure the stock price response to the buyback of shares announcement, it is necessary to segregate the returns attributed to the market movement and those that are not attributed to the market movement, but to buyback announcement. This adjustment is made using the market model. The estimation period used was -31 days to -330 days. If there is no trading in the market on the announcement day, the immediate next trading day is considered as event-day for those firms. To examine the statistical significance of the average abnormal returns z-statistic is constructed and the hypothesis that the AAR is equal to zero is tested. The study reveals, buyback announcement have not provided any additional information to the market. Market has not found any news in the announcement as revealed by the continuing trend that started before the announcement. In the nutshell, study shows negative and insignificant abnormal returns for majority of the days in the event period.*

**KEYWORDS**

buyback of shares, stock exchange, market reactions.

**INTRODUCTION**

The buyback of shares provides a flexible financial mechanism to adjust the capital structure and financial position of a company when warranted. It is a tool to enhance the shareholder value. It can also be used to defend the company from hostile takeovers. The share buyback is a virtuous tool in the hands of the company. Company's primary objective, here is not to boost its share price but rather to distribute excess cash to shareholders in lieu of dividend. The buying shareholders will benefit since the company generally offer a price higher than the current market price of the share. The share price of a number of companies may be undervalued. This may be especially true for the developing capital markets. Companies may buy back shares at higher prices to move up the current share price. **Primary objectives of this study are the stock price reaction to the announcement of share buyback in India.**

Shareholders often wonder as to why a company would buy back its shares. In fact, they are left confused regarding their course of action in such an event: should they return the shares for cash or keep holding on to them? There could be several reasons behind a buyback. However, these reasons are analyzed from two angles.

**Share holders:** More often than not, buyback is intended at benefiting the common shareholders of the company. A company could believe that its shares are worth more than their existing market price. In that case, it would like to lend some support to the stock- it offers to buy back its share at a price higher than the existing market price. The result is that the company's share price moves up towards the buyback offer price. A company often uses buyback to boost its stock's price in depressed market conditions. Companies can also use buyback to reward their shareholders. When there are few investment opportunities for a company and it has surplus cash, it could decide to reward its shareholders by giving cash for shares.

A company has to pass a special resolution in its general meeting to go ahead with a buyback. However, this is not required if the buyback amount is less than 10 per cent of company's paid up capital and free reserves. Therefore, we have to be careful about the company's motive behind buying back its shares. We should be suspicious when it doesn't have surplus cash and enough investment opportunities. We often look at the buyback price in relation to the current market price. However, sometimes the existing low price could be a result of temporary market mispricing. In that case, even slightly higher buyback price could drive us to tender our shares for sale.

**Promoter's shield:** Sometimes, promoters try to raise their stake in the company through a buyback. A buyback reduces the number of outstanding shares of the company, and when promoters do not tender their shares for buyback, their stake is automatically increased following it. Promoters often do this to thwart takeover attempts.

**REVIEW OF LITERATURE**

Empirical evidence from the prior studies report that negative long run abnormal returns following the buyback announcement in U S, U K and Canada. Market reaction in the UK differs from that in the US for short term market. In Canada **Ikenberry et.al (2000)** found that the Canadian experience is similar to the earlier evidence obtained for US buyback and the initial market reaction to repurchase programs is small; the abnormal return is less than 1 % in the announcement month. They also found that the market on average seems to under estimate the information contained in repurchase announcements. Further using a three-factor model, abnormal performance over a three year holding period is about seven percent per year. Their finding is consistent with well documented findings in the United States, that long run abnormal stock returns for these cases are negative. **Ikenberry and Vermaelen (1996)** found that announcement returns are directly related to the volatility of the stock and the fraction of shares to be purchased. They also found that the market reaction is negatively related with the correlation co-efficient between stock returns and market returns. **McNally. W, (1998)**, suggests that the two types of offers generate roughly the same total

returns (about 10–11%, on average, during the offering period) to shareholders who do not tender. Fixed-price offers involve considerably larger premiums (over the new, "full-information" price) and wealth transfers than Dutch auctions. Reflecting the higher premiums, shareholders tendering into fixed-price offers receive higher returns than those tendering into Dutch auctions (13.8% vs. 11.3% during the announcement period). He also finds some evidence of fixed-price offers involve a considerably larger wealth transfer from non-tendering to tendering shareholders, fixed-price repurchases compensate the non-tendering shareholders for the larger wealth transfer with larger increases in "intrinsic value," thus generating the same total return as Dutch auctions. Moreover, despite the large premiums offered in both types of offers, the wealth transfer implicit in the premium represents a small cost (less than 1% in fixed-price offers, and less than 0.1% in Dutch auctions) to non-tendering shareholders. **Isagawa (2002)** examined corporate open market repurchase strategy and stock price behavior. He establishes a signaling equilibrium with the assumption that the firm is committed to an announcement of open-market repurchase intention. He also found that positive long run stock returns as well as positive announcement effects following open-market repurchase announcements. **Schaub, Mark (2008)**, provides some evidence that debt buybacks may have beneficial impacts on stockholders' holding period returns and cash flows. His analysis is based on the 'all things constant' model popularized by Modigliani and Miller in the capital structure and dividend policy papers. He concludes, firms can obviously benefit by repurchasing their debt when market values have decreased. His study also suggests debt buybacks may be valuable to stockholders in and of themselves, not just in times of rising interest rates and downgraded bond ratings. **Schaub, Mark (2009)** finds some evidence of wealth effects associated with debt buyback announcements. He observed significant positive average returns on the announcement date reflect investors' opinion that the event is considered 'good' news. He also suggest further research to find out whether there are long-term positive effects or even intra-industry information effects associated with such announcements.

## SAMPLE AND DATA

The share prices and buyback details of shares will be collected from the Prowess, the corporate database of Centre for Monitoring Indian Economy (CMIE). For the purpose of detailed investigation of stock price responses to the announcement of buyback of shares, 10 years time horizon from 1996 to 2006 are taken into consideration. The study restricted sample to the buyback of listed companies and for which data is available in Prowess. The adjusted daily stock prices and BSE 200 index are collected for each of the firms from day – 331 to + 30. If the share price data is not available due to non-trading, such companies are eliminated. Our initial sample consists of 149 companies and the final sample in our study consists of 106.

## METHODOLOGY

Event study methodology to analyze the impact of the announcement of buyback of shares on stock price put to use. The event period is centered on the announcement date of buyback of shares. The announcement date is designated as day "0" in the event period. Prior studies consider different event period to analyse the effect of an event on stock price. Brown and Warner (1985) used eleven day event period (– 5 to + 5) to analyse daily stock returns. Wansley et.al, (1987) and Dodd Peter (1980) used – 50 to +50 event period to examine the effect of merger announcement on stock return. To examine the effect of buyback of shares, I propose to use 61 days event period, i.e. 30 trading days before the announcement of the buyback of shares to 30 trading days after the announcement of the buyback of shares, 0 being the day of the announcement of the buyback of shares. The market proxy used in the study is BSE 200.

The effect of stock prices is measured in an event period using the abnormal return associated with this event. We compute the expected returns (ER), abnormal returns (AR), average abnormal returns (AAR) and cumulative average abnormal returns (CAARs) to examine the stock price reaction. To measure the stock price response to the buyback of shares announcement, it is necessary to segregate the returns attributed to the market movement and those that are not attributed to the market movement, but to buyback announcement. This adjustment is made using the market model. The estimation period used was -31 days to -330 days. If there is no trading in the market on the announcement day, the immediate next trading day is considered as event-day for those firms.

The methodology of the study involves use of market model which was developed and suggested by Sharpe (1963). The prior studies use extensively the market model to determine the expected return on specific asset, given the return on market and the two parameters of the market model (alpha and beta of the security). Market model is based on the fact that the most important factor affecting stock returns is market factor and it is captured in the market model in the form of the parameters. It is a model to analyse the riskness of stocks in terms of systematic risk and unsystematic risk. In market model we regress returns on a security against returns of the market index. The market model is given by the following regression equation:

$$E(R_{jt}) = \alpha_j + \beta_j R_{mt} + e_j$$

Where,

$\alpha_j$  is intercept. (Mean return over the period not explained by the market).

$E(R_{jt})$  is the expected return on security  $j$ ,

$R_{mt}$  is the expected market return,

$\beta_j$  is the slope of the regression and,

$e_j$  is the error term (with a zero mean and constant standard deviation).

The predicted return represents the return that would be expected if no event took place. The predicted return for a firm for a day in the event period is given by the following market model:

$$E(R_{jt}) = \alpha_j + \beta_j R_{mt}$$

Where  $R_{mt}$  is the return on the market index for day 't' in the event period. Since the market model takes explicit account of both the risk associated with the market and mean return, it is used to estimate the expected return (Weston and Kwang, 1996). The residual is calculated for each day and for each firm. The residual is the actual return for that day for the firm minus the predicted return.

The raw return of the estimation window and also for event window is calculated using the following equation.

$$R_{jt} = (P_{jt}/P_{jt-1}) - P_{jt-1}$$

Where

$R_{jt}$  is the daily return on security 'j' on day 't'.

$P_{jt}$  is the daily adjusted price of the security 'j' at the end of period 't'.

$P_{jt-1}$  is the daily adjusted price of the security 'j' at the end of period 't-1'.

$$R_{mt} = (I_t/I_{t-1}) - I_{t-1}$$

Where,

$R_{mt}$  is the daily return on market index on day 't'.  $I_t$  and  $I_{t-1}$  is the closing index value on day 't' and 't-1', respectively

The log return of the estimation window and also for event window is calculated using the following equation.

$$R_{jt} = \ln(P_{jt}/P_{jt-1})$$

Where

$R_{jt}$  is the daily return on security 'j' on day 't'.

$P_{jt}$  is the daily adjusted price of the security 'j' at the end of period 't'.

$P_{jt-1}$  is the daily adjusted price of the security 'j' at the end of period 't-1'.

$$R_{mt} = \ln(I_t/I_{t-1})$$

Where,

$R_{mt}$  is the daily return on market index on day 't'.  $I_t$  and  $I_{t-1}$  is the closing index value on day 't' and 't-1', respectively.

The abnormal return is the difference between the actual return on day t and the predicted return i.e.,

$$AR_{jt} = R_{jt} - E(R_{jt})$$

The residual  $AR_{jt}$  represents the abnormal return, that is, the part of the return that is not predicted and is, therefore, an estimate of the change in firms share price on that day which is caused by the announcement of buyback of shares.

Abnormal returns are averaged across firms to produce  $AAR_t$  for day 't' using the following formula,

$$AAR_{jt} = \frac{\sum_{j=1}^N AR_{jt}}{N}$$

N is the number of firms in the sample. Finally we calculate the cumulative average abnormal return (CAAR) for the event period. The cumulative average abnormal return represents the average total effect of the event across all firms. Where,

$$CAAR = \sum_{t=-30}^{+30} AAR_{jt}$$

The first set of estimated coefficients is used to estimate  $E(R_{jt})$  for t less than or equal to the announcement day, and the second set is used for t greater than the announcement date. The slope,  $\beta_j$ , of the regression measures the variability of the security's returns relative to the market returns and it is the security's beta. Beta is the ratio of the covariance between the security's returns and the market returns to the variance of the market returns. Alpha ( $\alpha$ ) indicates the return on the security when market return is zero. It could be interpreted as return on the security on account of unsystematic risk. Over a long period of time  $\alpha$  should be zero given the randomness of unsystematic risks.

To examine the statistical significance of the average abnormal returns z-statistic is constructed and the hypothesis that the AAR is equal to zero is tested. The test statistics for significance of AAR is given by,

$$Z = \frac{\sum_{j=1}^N SER_{j,t}}{\sqrt{N}}$$

N denotes the number of companies in the study.

$SER_{jt}$  is the standardized prediction error for firm 'j' on day 't'.

The abnormal returns are standardized before they are aggregated and the standardized aggregates form the basis of the test statistics. Brown and Warner (1985, p.28) illustrate the technique while discussing tests assuming cross-sectional dependence. For each security, 'j', the excess return ( $AR_{jt}$ ) or the prediction error ( $PE_{jt}$ ), for each of the days in the event period is standardized by dividing the  $AR_{jt}$  by the standard deviation, ( $S_{jt}$ ), to yield a standardized excess return,  $SER_{jt}$ .

The standardized excess return (SER) is calculated as:

$$SER_{jt} = \frac{AR_{jt}}{S_{jt}}$$

$$S_{jt} = \sqrt{\frac{\sum_{t=1}^T (AR_{jt} - \overline{AR}_j)^2}{T-1}}$$

T is the number of days in the estimation period.

$$\overline{AR}_j = \frac{1}{T} \sum_{t=1}^T AR_{j,t}$$

In our study, the number of days in the estimation period, are 300 days (-330 to -31 days).

**The standardized cumulative excess returns (CAAR) for firms:**

The standardized cumulative excess returns for firm 'i' is the sum of the  $SPE_i$  between any periods of interest, adjusted for the number of days (M) being considered, starting at  $t_1$  and ending at  $t_2$ .

$$SCER_i = \frac{(\sum_{t=1}^T SER_{jt})}{\sqrt{M}}$$

i.e. t = -30.....0.....+30 days

The test statistic for N firms is the sum of the  $SCER_i$  divided by square root of the number of firms:

$$Z = \frac{(\sum_{j=1}^N SCER_j)}{\sqrt{N}}$$

and N is number of firms

## RESULTS AND DISCUSSION

TABLE NO. 1: AAR'S FOR BUY BACK ANNOUNCEMENT

Days	AAR	z-Value	Days	AAR	z-Value
-30	0.00363	-0.20808	1	-0.00745	-0.97731
-29	0.002417	-0.62476	2	0.003815	-0.44545
-28	0.002851	0.368526	3	-0.01103	-0.53546
-27	0.013141	0.95968	4	-0.00189	0.667308
-26	-0.00016	-1.06576	5	-0.01243	-1.3817
-25	-0.0063	-0.87152	6	-0.01019	-1.67002
-24	0.010895	0.681763	7	-0.01865	-2.69924
-23	0.006079	-0.42974	8	-0.00556	0.10008
-22	0.01362	1.545111	9	0.005003	0.956677
-21	-0.00402	0.049508	10	0.000586	-0.0161
-20	0.000214	0.532957	11	-0.00237	-0.24402
-19	0.01093	1.393909	12	-0.0032	0.116788
-18	-0.00944	-1.11682	13	-0.00707	-1.47952
-17	-0.00589	-0.74854	14	-0.00236	0.374514
-16	-0.00039	0.148205	15	0.001524	-0.08603
-15	0.010384	1.204023	16	-0.00587	0.076952
-14	-0.00047	-0.6997	17	-0.00719	-1.54505
-13	0.007619	-0.11411	18	-0.0082	-0.10975
-12	0.009577	1.039109	19	-0.00737	-0.38206
-11	-0.00855	-1.32884	20	4.7E-05	-0.73648
-10	0.0019	-0.96954	21	-0.00377	-0.70127
-9	0.007784	1.284524	22	-0.00147	-0.32889
-8	-0.00994	-1.68701	23	-0.00536	-0.95682
-7	0.004282	1.724019	24	-0.00749	-1.76606
-6	0.005659	1.765531	25	0.007066	1.209894
-5	0.017379	3.827757	26	-0.01249	-1.67666
-4	0.010671	1.47379	27	-0.00643	-0.91373
-3	0.001018	1.787194	28	0.002635	0.415656
-2	0.011768	2.62632	29	-0.00287	-0.17455
-1	0.017079	2.891064	30	0.003043	0.148693
0	0.054682	6.920911			

\*Critical z- value at 5 percent is 1.96

The above result reveals that AAR's are negative for 9 days and positive for 21 days before the announcement of buyback. During the whole event period AAR's are negative for 31 days and positive for 29 days. AAR's is positive and insignificant on the day of announcement. The movement of AAR's after the announcement of buyback indicates that the share price movements persist. It shows that, AAR's are statistically insignificant for 56 days of the 61 days.

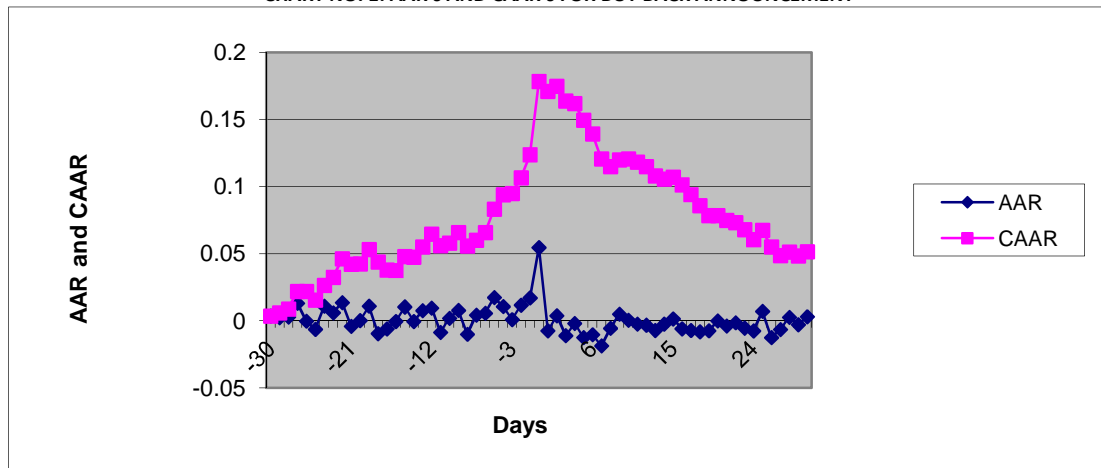
TABLE NO.2: CAAR'S FOR EVENT PERIOD

Days	CAAR	z-Value	Days	CAAR	z-Value
-30	0.00363	-0.20808	1	0.170975	3.779867
-29	0.006047	-0.58891	2	0.17479	3.644612
-28	0.008898	-0.26807	3	0.163761	3.498785
-27	0.022039	0.247682	4	0.161867	3.561235
-26	0.021879	-0.25509	5	0.149438	3.281142
-25	0.015576	-0.58866	6	0.139246	2.961949
-24	0.026471	-0.28731	7	0.120598	2.484842
-23	0.03255	-0.42069	8	0.115037	2.468804
-22	0.04617	0.118402	9	0.120041	2.589012
-21	0.042149	0.127982	10	0.120626	2.55473
-20	0.042363	0.282719	11	0.118254	2.486481
-19	0.053293	0.673069	12	0.115052	2.475208
-18	0.043857	0.336914	13	0.107979	2.223873
-17	0.037969	0.124604	14	0.105623	2.254853
-16	0.037578	0.158645	15	0.107147	2.217525
-15	0.047962	0.454613	16	0.101273	2.205032
-14	0.047495	0.271338	17	0.094079	1.958934
-13	0.055114	0.236796	18	0.085884	1.923163
-12	0.064691	0.468869	19	0.078512	1.849802
-11	0.05614	0.159858	20	0.078559	1.728449
-10	0.05804	-0.05557	21	0.074793	1.6145
-9	0.065825	0.219573	22	0.073323	1.55402
-8	0.055887	-0.13702	23	0.067966	1.409357
-7	0.060169	0.217779	24	0.060475	1.15835
-6	0.065828	0.566486	25	0.067541	1.30964
-5	0.083207	1.30617	26	0.055048	1.076022
-4	0.093878	1.565384	27	0.048622	0.946727
-3	0.094896	1.874925	28	0.051257	0.992783
-2	0.106664	2.33001	29	0.048391	0.961942
-1	0.123744	2.818681	30	0.051434	0.973062
0	0.178425	4.015878			

\*Critical z- value at 5 percent is 1.96



CHART NO. 1: AAR's AND CAAR's FOR BUY BACK ANNOUNCEMENT



The above table and chart shows that CAAR is positive throughout the event period and started increasing before the announcement and declined after the announcement of buyback. It is insignificant for majority of the days in the event period. CAAR is significant on the day of announcement. It is significant for two day before the announcement and sixteen days after the announcement.

TABLE NO. 3: CAAR's FOR DIFFERENT EVENT PERIOD

SL.NO	Window Period	CAAR	z-Value
1	-30 to +30	0.0514340	0.973062
2	-25 to + 25	0.0456619	1.45221
3	-20 to +20	0.0364101	1.86454
4	-15 to + 15	0.0695688	2.59091
5	-10 to + 10	0.0644863	3.41366
6	-5 to + 5	0.0836092	5.0818
7	-4 to +4	0.0786597	4.80279
8	-3 to +3	0.0698831	4.63659
9	-2 to +2	0.0798946	4.9263
10	-1 to +1	0.0643113	5.1007
11	-30 to 0	0.1784252	4.01588
12	-25 to 0	0.1565461	1.45221
13	-20 to 0	0.1362761	4.79092
14	-15 to 0	0.1408471	5.43626
15	-10 to 0	0.1222853	6.52608
16	-5 to 0	0.1125968	7.97188
17	-4 to 0	0.0952179	7.020931
18	-3 to 0	0.0845472	7.11274
19	-2 to 0	0.0835294	2.67688
20	-1 to 0	0.071761	6.93811
21	0 to +1	0.0472318	4.20276
22	0 to +2	0.0510468	3.17436
23	0 to + 3	0.0400175	2.48135
24	0 to +4	0.0381233	2.51781
25	0 to +5	0.0256939	1.73436
26	0 to +10	0.1169233	0.2773
27	0 to +15	-0.016597	-0.0996
28	0 to +20	-0.045185	-0.6754
29	0 to +25	-0.056203	-1.1057
30	0 to +30	-0.072310	-1.4079

CAAR's are positive for shorter and longer windows and statistically significant for smaller window periods (-1 to +1, -2 to +2, -3 to +3, -4 to +4, -5 to +5, -10 to +10 and -15 to +15) and insignificant for longer window period (-30 to + 30, -25 to +25, -20 to + 20). However it is significant for the window period starting from -30 to 0 and 0 to +4.

TABLE NO. 4: AAR's FOR LOG RETURNS

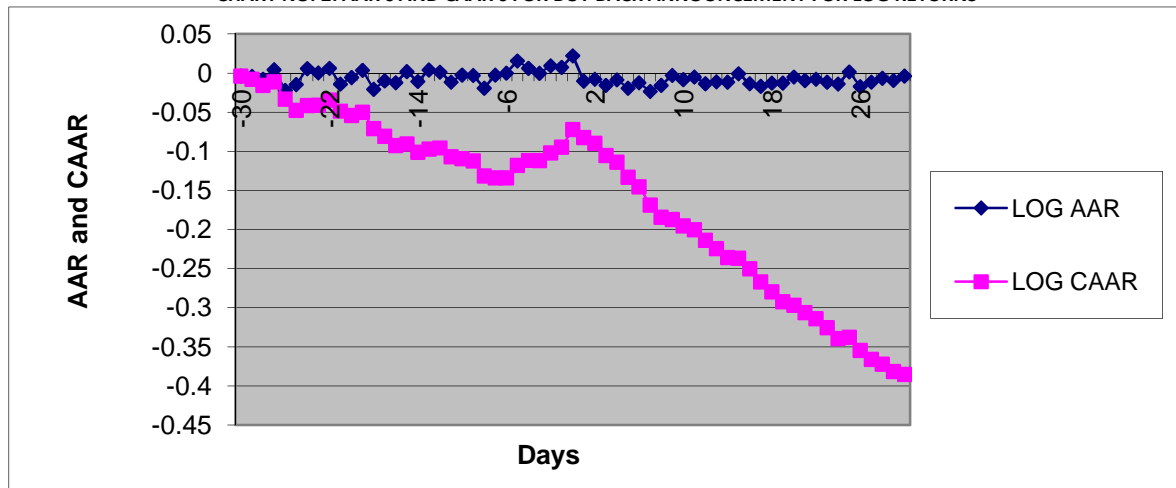
Day	AAR	z-Value	Day	AAR	z-Value
-30	-0.00358	-3.56599	1	-0.01001	-0.08205
-29	-0.00422	-3.35073	2	-0.00767	-0.08971
-28	-0.00769	-2.05786	3	-0.01559	-0.1053
-27	0.004448	-1.33748	4	-0.0084	-0.1137
-26	-0.02187	-6.59666	5	-0.0192	-0.1329
-25	-0.01446	-3.65677	6	-0.01226	-0.14516
-24	0.005996	-1.08391	7	-0.02331	-0.16847
-23	0.000574	-2.42784	8	-0.01562	-0.18408
-22	0.006391	-0.96738	9	-0.00282	-0.18691
-21	-0.01401	-2.22835	10	-0.00826	-0.19517
-20	-0.00545	-0.81616	11	-0.00496	-0.20013
-19	0.003855	-0.18534	12	-0.01337	-0.2135
-18	-0.02058	-4.01282	13	-0.01089	-0.22439
-17	-0.00986	-2.95996	14	-0.01148	-0.23587
-16	-0.01207	-3.44188	15	-0.00058	-0.23645
-15	0.001993	-2.00437	16	-0.0135	-0.24995
-14	-0.01065	-3.94657	17	-0.01685	-0.2668
-13	0.004217	-1.34675	18	-0.01277	-0.27957
-12	0.001467	-0.96795	19	-0.01254	-0.29211
-11	-0.0114	-3.28213	20	-0.00473	-0.29684
-10	-0.00225	-1.62845	21	-0.00938	-0.30622
-9	-0.0029	-1.78803	22	-0.00775	-0.31397
-8	-0.01919	-4.08031	23	-0.0115	-0.32547
-7	-0.00249	-0.42754	24	-0.01368	-0.33915
-6	9.09E-05	-0.48261	25	0.001606	-0.33754
-5	0.015782	2.379232	26	-0.01698	-0.35452
-4	0.006401	-0.00825	27	-0.01134	-0.36585
-3	-0.00011	0.215369	28	-0.0063	-0.37215
-2	0.009585	0.651355	29	-0.00942	-0.38157
-1	0.007627	0.377673	30	-0.00367	-0.38524
0	0.022319	3.206951			

\*Critical z- value at 5 percent is 1.96

TABLE NO. 5: CAAR's FOR LOG RETURNS

Day	CAAR	z-Value	Day	CAAR	z-Value
-30	-0.00358	-3.06068	1	-3.28457	-9.70789
-29	-0.00779	-4.64492	2	-3.24811	-10.1667
-28	-0.01549	-4.99722	3	-2.40275	-10.4103
-27	-0.01104	-5.03019	4	-1.39838	-10.5246
-26	-0.03291	-7.54734	5	-3.39726	-10.9402
-25	-0.04737	-8.43173	6	-3.14695	-11.2811
-24	-0.04137	-8.25137	7	-4.69339	-11.9058
-23	-0.0408	-8.52268	8	-2.97987	-12.2233
-22	-0.03441	-8.31962	9	-2.24136	-12.4097
-21	-0.04842	-8.6477	10	-3.26171	-12.7669
-20	-0.05387	-8.50079	11	-2.579	-13.0417
-19	-0.05002	-8.17951	12	-2.47251	-13.263
-18	-0.07059	-8.96428	13	-3.81444	-13.6678
-17	-0.08045	-9.46021	14	-2.6801	-13.9338
-16	-0.09252	-10.0258	15	-0.65944	-13.8803
-15	-0.09053	-10.1592	16	-3.19843	-14.1934
-14	-0.10118	-10.8493	17	-4.22062	-14.651
-13	-0.09697	-10.9032	18	-2.17398	-14.823
-12	-0.0955	-10.843	19	-2.48563	-15.0461
-11	-0.1069	-11.328	20	-2.79199	-15.2988
-10	-0.10915	-11.4408	21	-2.97751	-15.5625
-9	-0.11205	-11.562	22	-3.06975	-15.8385
-8	-0.13124	-12.1672	23	-2.81685	-16.0928
-7	-0.13373	-11.976	24	-4.20958	-16.5155
-6	-0.13364	-11.8112	25	-1.39071	-16.5422
-5	-0.11786	-11.1344	26	-3.66133	-16.8849
-4	-0.11146	-10.9013	27	-2.76749	-17.1152
-3	-0.11157	-10.6068	28	-2.99555	-17.3583
-2	-0.10198	-10.3042	29	-2.25754	-17.512
-1	-0.09436	-10.0668	30	-2.07262	-17.6406
0	-0.07204	-9.3294			

CHART NO. 2: AAR's AND CAAR's FOR BUY BACK ANNOUNCEMENT FOR LOG RETURNS



The study results reveal that AAR's are negative for 17 days and positive for 13 days before the announcement of shares buyback, where as they are negative for 29 days and positive for 2 days after the announcement of stock buyback. During the whole event period, AAR's are negative for 46 days and positive for 15 days. The movement of AAR's after the announcement reveals that the share price movements persist after the buyback announcement. AAR's are statistically significant for 16 days at 5 % level of significance and it is significant for 30 days at 1 % level of significance during the event window. CAAR's are negative and significant for the entire window period. CAAR's are positive and insignificant for shorter window at 1 % level of significance. It is insignificant at 5 % for shorter windows except for -5 to +5. We find persistence of negative trend in CAAR's for the longer windows period

**CONCLUSION**

The buyback of shares is the repurchase of its own shares by a company. Section 77 of the Indian companies Act prohibits the share repurchase by the companies. As a result of the companies (Amendment) Act 1999, a company in India can now buyback its own shares. Our study examines the stock price reaction to the announcement of buyback for the period 1996 to 2006. Examination of 106 buyback announcement reveal that buyback announcement have not provided any additional information to the market. Market has not found any news in the announcement as revealed by the continuing trend that started before the announcement. The absence of any change in the movement of stock price reaction to buyback reveals that market anticipates the information provided by these announcements and incorporates this before the announcement.

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**APPENDIX**

**LIST OF COMPANY**

SL.NO	COMPANY NAME	ANNOUNCEMENT DATE
1	A D F Foods Ltd.	29/07/2003
2	Aarti drugs Ltd	1/12/2002
3	Aarti Industris Ltd	7/5/1999
4	Abbott India Ltd.	12/4/2002
5	Acce Software Exports Ltd.	2/7/2003
6	Addi Industries Ltd.	3/9/2002
7	Aditya Birla Nuvo Ltd.	16/08/1999
8	Ador Welding Ltd.	22/01/2002
9	Advik Laboroties Ltd.	1/10/2003
10	Aegis Logistics Ltd.	13/09/2001
11	Apar Industris Ltd.	1/9/1999
12	Apollo Finvest Ltd.	21/09/2004
13	Avery India Ltd.	10/12/2003
14	Balrampur Chini Mills Ltd.	24/12/2001
15	Berger Paints India Ltd.	28/04/2005
16	Bhagyanagar India Ltd.	22/04/1999
17	Blue Dart Express Ltd.	18/08/2006
18	Blue Star Ltd.	23/11/2001
19	Britannia Industries Ltd.	14/06/2001
20	Carborundum Universal Ltd.	1/7/2000
21	Carol Info Services Ltd.	11/6/2005
22	Century Enka Ltd.	9/5/2005
23	Cera Sanitaryware Ltd.	7/7/2006
24	Continental Controls Ltd.	27/07/2002

25	Coral Laboratories Ltd.	1/6/2002
26	Coromandel Fertilisers Ltd.	6/4/1999
27	Cybertech Systems & Software Ltd.	18/08/2000
28	D I L Ltd.	19/03/2005
29	Deepak Fertilisers & Petrochemicals Corporation Ltd.	29/04/2002
30	Ema India Ltd.	30/07/2001
31	Essel Propack Ltd.	29/06/1999
32	Exide Industries Ltd.	1/11/2001
33	F D C Ltd.	6/6/2001
34	Fine-Line Circuits Ltd.	16/05/2003
35	Finolex Industries Ltd.	28/11/2000
36	Fortune Financial Services(India) Ltd.	6/10/1999
37	G G Dandekar Machine Works Ltd.	8/1/2002
38	Gandi Special Tubes Ltd.	29/05/2000
39	Garden silk Mills Ltd.	28/06/2002
40	Genus Commu-Trade Ltd.	9/7/2002
41	Glaxosmithkline cosumer Healthcare Ltd.	2/12/2004
42	Godrej Commodities Ltd.	2/7/2002
43	Godrej Industries Ltd.	25/02/2002
44	Goldiam International Ltd.	11/10/1999
45	Great Eastern Shipping Co. Ltd.	31/10/2000
46	Gujrat Petrosynthese Ltd.	19/07/2003
47	H B L Power Systems Ltd.	17/04/2002
48	Heritage Foods (India) Ltd.	1/1/2002
49	I C I India Ltd.	18/07/2006
50	I V P Ltd.	29/06/2001
51	Ind-Swift Ltd.	10/6/2005
52	Indian Hume Pipe Co. Ltd.	28/06/2002
53	Indian Oil Corpn. Ltd.	13/10/2004
54	Indian Resort Hotels Ltd.	29/01/2002
55	Infomedia India Ltd.	11/1/2006
56	Jay Shree Tea & Inds. Ltd.	25/01/2000
57	Kesoram Industries Ltd.	28/04/2000
58	Khoday India Ltd.	17/02/2001
59	Kirloskar Brothers Ltd.	16/07/2001
60	Kirloskar Oil Engines Ltd.	25/04/2003
61	L G Balakrishnan & Bros. Ltd.	24/10/2002
62	Lakhani India Ltd.	6/10/2001
63	Mac Charles (India) Ltd.	25/08/2003
64	Manna Glass-Tech Inds. Ltd.	1/7/2002
65	Manugraph India Ltd.	2/7/2001
66	Mastek Ltd.	10/5/2004
67	Mazda Ltd.	4/10/2001
68	Moh Ltd.	12/10/2001
69	Monsanto India Ltd.	25/04/2003
70	Mphasis Ltd.	10/9/2005
71	Nagreeka Exports Ltd.	30/01/2004
72	Natco Pharma Ltd.	6/9/2006
73	Novartis India Ltd.	14/06/2003
74	Numero Uno Projects Ltd.	11/7/2002
75	O C L India Ltd.	9/5/2001
76	Oil & Natural Gas Corpn. Ltd.	13/10/2004
77	Phoenix Lamps Ltd.	1/7/2002
78	Poddar Pigments Ltd.	26/07/2001
79	Polaris Software Lab Ltd.	27/04/2005
80	Prime securities Ltd.	30/06/2005
81	Punjab communications Ltd.	4/7/2003
82	Raymond Ltd.	6/1/2001
83	Reliance Industries Ltd.	12/4/2000
84	Revathi Equipments Ltd.	29/06/2006
85	Rishi Laser Cutting Ltd.	27/05/2002
86	S B & T International Ltd.	25/07/2006
87	S I L Business Enterprises Ltd.	26/11/2001
88	S R F Ltd.	2/9/2002
89	Sanwaria Agro Oils Ltd.	31/01/2002
90	Selan Exploration Technology Ltd.	27/09/1999
91	Shalibhadra Infosee Ltd.	27/04/2002
92	Siemens Ltd.	4/5/2001
93	Sirpur Paper Mills Ltd.	24/01/2002
94	Solitare Machine Tools Ltd.	4/5/2002
95	Sterlite Industries (India) Ltd.	1/11/2000
96	Sun Pharmaceutical Inds. Ltd.	28/10/2002
97	T T Ltd.	31/07/2002
98	Tata Chemicals Ltd.	13/08/2001
99	Titanor Components Ltd.	25/04/2003
100	Toyama Electric Ltd.	6/11/2003
101	United Credit Ltd.	3/5/2002
102	Venky's (India) Ltd.	9/9/2002
103	vital Communications Ltd.	4/6/2002
104	Winsome Yarns Ltd.	29/09/2000
105	Zenith Computers Ltd.	28/09/2001
106	Zenith Infotech Ltd.	28/09/2001

**INVESTOR BEHAVIOR TOWARDS MUTUAL FUND SCHEMES: AN EMPIRICAL STUDY**

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**ABSTRACT**

*Mutual Fund industry plays a pivotal role in the optimal allocation and channelization of available idle resources in the economy. This role becomes much stronger in the developing economies like India where the prospective investors do not have much investment knowledge, information, and facilities to invest in the capital markets neither they have risk aptitude for direct investments in risky stocks. The present study is pioneer in its nature to investigate the preferences of investors towards mutual fund schemes. The primary data were collected across the states of Jammu & Kashmir and Punjab. Various statistical tools were applied to the data so collected. The findings of the study revealed that investment returns, perception of investors, information sources, investors valuation, investors objectives and investments decisions have significance impact on retail investors preferences.*

**KEYWORDS**

Investment, information sources, investor preference, mutual fund.

**INTRODUCTION**

Mutual funds play an important role for channelizing and optimal allocation of idle resources and savings available in the economy of the individual and institutional investors. The mutual funds are asset management companies which invest in stocks, bonds and other types of money market or combination of these securities. The primary goal of mutual fund is pool small savings, use the idle resources in corporations and invest in a well diversified portfolio of securities, which would allow the investor to significantly reduce, or even eliminate the asset specific (non market) risk of securities. The person saving a part of his/her income tries to find a temporary repository for his savings until they are required to finance his future expenditure. This results in investments. Therefore, investment may be defined as "a commitment of funds made in the expectations of some positive returns". Expectation of return is an essential element of investment.

Increased number of mutual funds all over the world, mainly in developed countries, is an indication of investors' preference for this indirect mode of low-risky investment (Huhmann, 2005). During the past few decades, the mutual fund industry has experienced a tremendous growth, whereas, mutual fund is still a recent phenomenon in emerging markets. This tremendous growth has led to the creation of various types of mutual funds. These types can be categorized in two broad segments: open-ended and close-ended. The open-ended funds are the funds whose redemption and subscription of shares, which are also called units, is allowed on continual basis. These funds are also characterized as having no customers but the shareholders only. The close-ended funds, on the other hand, all called up and subscribed only once at the commencement of the fund and then traded in the secondary capital markets between the general public. In general, the mutual funds are established and incorporated to benefit small investors who cannot invest directly in money market or capital market securities due to any reason.

**CHOOSING THE RIGHT INVESTMENT OPTIONS**

The investors would like to know how to go about the task of investment, how much to invest at any moment and when to buy or sell the securities, This depends on investment process as investment policy, investment analysis, valuation of securities, portfolio construction and portfolio evaluation and revision. Every investor tries to derive maximum economic advantage from his/her investment activity. For evaluating an investment, avenues are based upon the rate of return, risk and uncertainty, capital appreciation, marketability, tax advantage and convenience of investment. The choice of the best investment options will depend on personal circumstances as well as general market conditions. In most cases, the right investment is a balance of three things i.e. Liquidity, Safety and Return.

The 'expectations' of the investors are influenced by their "perception" and investors generally relate perception to action. The beliefs and actions of many investors are influenced by the dissonance effect and endowment effect. The tendency to adjust beliefs to justify past actions is a psychological phenomenon termed by Festinger (1957) as Cognitive Dissonance. Researcher studied the attitudinal preferences and information sources consulted by investors while making investment decisions in mutual funds. Apart from the many advantages that investing in mutual funds provide like diversification, professional management, the ease of investment process has proved to be a major enabling factor. However, with the introduction of innovative products, the world of mutual funds nowadays has a lot to offer to its investors. With the introduction of diverse options, investors need to choose a mutual fund that meets their risk acceptance and risk capacity levels and has similar investment objectives as those of the investor.

With the plethora of schemes available in the Indian markets, an investors needs to evaluate and consider various factors before making an investment decision. Since India has started integration with the world markets and the economy being no more a closed one, external factors which are complex in nature affect the investors in their decision making. Mutual funds provide an option of investing without getting loss in the complexities. Most importantly, mutual funds provide risk diversifications among the primary tenets of portfolio management. Majority of the investors are not necessarily well qualified to apply the theories of portfolio structuring to their holdings and hence would be better off leaving the job to a professional. The basic needs which an investor tries to fulfill include security of original capital; wealth accumulation; comfort factor; tax efficiency; life cover; income; simplicity; ease of withdrawal.

**REVIEW OF LITERATURE**

In the present corporate scenario, behavioural finance has emerged as an imperative area of study which demands scholarly investigation. It deals with the influence of psychology on the behaviour of financial practitioners and the subsequent effect on markets. Behavioural finance is of immense interest as it helps to explain why and how markets might be inefficient. Although there are enough research evidences which support investment portfolio, the concept of behavioural finance still seems to be in embryonic stage. There are very few studies available about investor's perception, preferences, attitudes and behaviour.

Research reveals that fund/scheme selection by investors is based on past performance of the funds and money flows into winning funds more rapidly than they flow out of losing funds (Ippolito, 1992). A study conducted by Goetzman (1997) concluded that psychology of investors has an impact on fund/scheme selection and switching. While investigating the possible psychological basis for investor behaviour, De Bondt & Thaler (1985) argue that mean reversion in stock prices is an evidence of investor over reaction where investors over emphasize recent firm performance in forming future expectations.

SEBI – NCAER Survey (2000) was carried out to estimate the number of households and the population of individual investors, their economic and demographic profile, portfolio size, and investment preference for equity as well as other savings instruments. Some of the relevant findings of the study were: Households preference for instruments match their risk perception; Bank Deposit has an appeal across all income class; 43% of the non-investor households equivalent to around 60 million households apparently lack awareness about stock markets; and, compared with low income groups, the higher income groups have higher share of investments in Mutual Funds (MFs) signifying that MFs have still not become truly the investment vehicle for small investors.

Shanmugham (2000) conducted a survey of 201 individual investors to study the information sourcing by investors, their perceptions of various investment strategy dimensions and the factors motivating share investment decisions, and reports that among the various factors, psychological and sociological factors dominated the economic factors in share investment decisions. Another study conducted by Madhusudhan V. Jambodekar (1996) assessed the awareness of MFs among investors, to identify the information sources influencing the buying decisions and the factors influencing the choice of a particular fund. The study revealed that the income schemes and open ended schemes are more preferred than growth schemes and close ended schemes during the then prevalent market conditions. Investors look for safety of principal, liquidity and capital appreciation in the order of importance. Further, newspapers and magazines are the first source of information through which investors get to know about MFs/Schemes and investor service is a major differentiating factor in the selection of Mutual Fund Schemes. Sujit Sikidar & Amrit Pal Singh (1996) carried out a survey with an objective to understand the behavioural aspects of the investors of the North Eastern region towards equity and mutual funds investment portfolio. The survey revealed that the salaried and self employed persons formed the major investors in mutual funds primarily due to tax concessions.

Syama Sunder (1998) conducted a survey to get an insight into the mutual fund operations of private institutions with special reference to Kothari Pioneer. The survey revealed that awareness about Mutual Fund concept was poor during that time in small cities like Visakhapatnam. Agents play a vital role in spreading the Mutual Fund culture. Open-end schemes were much preferred. Brand image and return proved to be the prime considerations while investing in any Mutual Fund.

Anjan Chakarabarti & Harsh Rungta (2000) stressed the importance of brand effect in determining the competitive position of the AMCS. The study revealed that brand image factor, though cannot be easily captured by computable performance measures, influences the investor's perception and hence his/her fund/scheme selection.

Since 1986, a number of articles and brief essays have been published in financial dailies, periodicals, professional and research journals, explaining the basic concept of Mutual Funds and highlight their importance in the Indian capital market environment. They touch upon varied aspects like Regulation of Mutual Funds, Investor expectations, Investor protection, Trend in growth of Mutual Funds etc. A few among them are Vidyashankar (1990), Sarkar (1991), Agarwal(1992), Sadhak (1991), Sharma C. Lall (1991), Samir K. Barua *et al.*, (1991), Sandeep Bamzai (2001), Atmaramani (1995), Atmaramani (1996), Subramanyam(1999), Krishnan (1999), Ajay Srinivassan (1999). Segmentation of investors on the basis of their characteristics was highlighted by Raja Rajan (1997). Investor's characteristics on the basis of their investment size Raja Rajan (1997), and the relationship between stage in life cycle of the investors and their investment pattern was studied Raja Rajan (1998).

## HYPOTHESES

H1: Type of mutual fund scheme has a significant impact on retail investors' preferences.

H0: Type of mutual fund schemes does not have a significant impact on retail investors' preferences.

## METHODOLOGY

The study is empirical in nature. The scope of the study extends to four cities of Northern India namely Jammu, Srinagar, Chandigarh and Ludhiana. The data was collected both from primary as well as secondary sources. The primary data was collected by using a structured questionnaire. The questionnaire was framed on the basis of investment decisions and preferences of investors. An analysis was done and changes were made to overcome the errors. Factor analysis was done which reduced the number of variables to 31. This was followed by primary data collection. The secondary data was collected from various sources like journals, magazines, periodicals, books, published and unpublished research materials, online search engines etc. A sample size of 1000 was taken out of which 841 filled questionnaire were received. Various statistical tools like statistical tools implemented are factor analysis, mean, standard deviation, multiple nominal logistic regression were applied.

## FACTOR ANALYSIS

Data related to measurement of preferences of retail investors' towards mutual fund schemes was subjected to factor analysis for dimension reduction to find relevant factors. Bartlett's Test of Sphericity (Table 1) indicated a high Chi-square value of 5960.098 with 378 degrees of freedom at significance level of .000. Only those factors were retained which showed large Eigen values as given in the table 2.

## DESCRIPTIVE STATISTICS FOR VARIOUS MEASUREMENT ITEMS

The following section deals with the mean and the respective standard deviations of the various measurement items. The section is divided into five factors of attitudinal and information preferences of retail investors towards mutual fund schemes while making investment decisions.

The items related to "Investment Returns" in table 3.1 below the total means value 3.2024 at 7 point scale and it suggest that the investors believe that the investment returns are less emphasized by the mutual fund investor. The mean values of items are varying from 2.832 to 4.172 which emphasis low care of investors towards the investment returns.

The item R5 in the table 3.1 has mean value 4.172 at 7 point scale and inclining towards the high value than other items, explaining that the mutual fund firms highly focused on the high return of the investor while making portfolio for their customers. Further indicates that the investors give less importance to the other investment returns variables.

In table (3.2) similarly the overall mean value of 5.2502 for "perception" of investor's factor further indicates its relevance in defining the perception of retail investors towards mutual fund schemes. The mean values for various dimensions of reliability ranges from 4.669 to 5.795 showing the importance of reliability of perception of investors towards mutual fund schemes. Moreover investors give more importance toward diversification of portfolio in mutual fund (P6) with a mean value of 5.795.

Table (3.3) gives the mean values of the items of "Information Sources". The mean value of the factors varies from 4.343 to 5.371 and the overall mean value for all the variables comes to 5.1865 suggesting that the most of the investors consulted information sources while making investment decisions in mutual funds schemes. The variable (I, 1) i.e., discussion with professional advisor have maximum mean value 5.271 shows the preferences of investors while making investments. The values given in table (3.4) below related to "Valuation of Investors" reflect the attitude of investors in investments. The mean values vary from 4.882 to 5.897 and the overall mean value is 5.4678 shows that investors attitudinal preferences towards this factor. All factors in this are almost equally important for all the investors except the factor (V3) which consider inflation resistance. The last factor in table (3.5) shows the "Investors Objectives" while making investment in mutual fund schemes. The overall mean value is 5.2093 and the values of mean ranges from 5.003 to 5.587. This factor also affects the attitude of investors while making investment decisions.

**MULTINOMIAL LOGISTIC REGRESSION****OVERALL TEST OF RELATIONSHIP**

Initial Log Likelihood Function, (-2 Log Likelihood or -2LL) is a statistical measure. If our independent variables have a relationship to the dependent variable, we will improve our ability to predict the dependent variable accurately, and the log likelihood measure will decrease. The initial log likelihood value (2016.660) is a measure of a model with no independent variables, i.e. only a constant or intercept. The final log likelihood value (971.331) is the measure computed after all of the independent variables have been entered into the logistic regression. The difference between these two measures is the model chi-square value (1045.328= 2016.660- 971.331) that is tested for statistical significance.

The overall test of relationship is shown in Table 4.1. The table shows the relationship between the preferences and investment decision of retail investors while making investment in mutual fund schemes. The presence of a relationship between the dependent and combination of independent variables is based on the statistical significance of the final model chi-square in the below table i.e., (termed model fitting information). In this analysis, the distribution reveals that the probability of the model chi-square (1045.328) was 0.000, less than the level of significance of 0.05 (i.e.  $p < 0.05$ ). This explained that preferences of investors have a significant impact on investment decision of retail investors. After finding the significant relationship between the dependent and independent variable the researcher used the case processing summary for dependent variable to know the by chance accuracy rate. This rate is useful for validating the model for research in multinomial logistic regression.

**STRENGTH OF MULTINOMIAL LOGISTIC REGRESSION RELATIONSHIP**

In table 4.2, Researcher compute correlation measures to estimate the strength of the relationship (pseudo R square measures, such as Nagelkerke's  $R^2$ ), these correlation measures do not really tells an analyst much about the accuracy. A more useful measure to assess the utility of a multinomial logistic regression model was the classification accuracy, which compares predicted group membership based on the logistic model to the actual, known group membership, which is the value for the dependent variable. To assess the strength of multinomial logistic regression relationship, however, the evaluation of the usefulness for logistic models was considered. In this case, using Cox & Snell R Square, the Nagelkerke R square value and McFadden R square value, they provide an indication of the amount of variation in the dependent variable. These are described as pseudo R square. The distribution in the below table reveals that the values are 0.711, 0.776 and 0.500 respectively, suggesting that between 71.1 percent, 77.6 percent and 5.00 percent of the variability is explained by this set of variables used in the model.

**EVALUATING USEFULNESS FOR LOGISTIC MODELS**

The value of by chance accuracy in table 4.3 and 4.4 was computed by calculating the proportion of cases for each group based on the number of cases in 'Case Processing Summary', and then squaring and summing the proportion of cases in each group ( $0.453^2 + 0.132^2 + 0.293^2 + 0.122^2 = 0.322$ ) which is shown in Table 4.3. To characterize the model as useful, the study compared the overall percentage accuracy rate produced as 25% more than the proportional by chance accuracy. The proportional by chance accuracy criteria is 40.25% ( $1.25 \times 32.2\% = 40.25\%$ ). The classification accuracy rate was 44.2% (table classification) shown in 4.3, which was greater than the proportional by chance accuracy criteria of 40.25%, suggesting that the model was useful in the study.

**RELATIONSHIP OF INDEPENDENT AND DEPENDENT VARIABLES**

The likelihood ratio test evaluates the overall relationship between an independent variable and dependent variables. In table 4.5 there is a statistically significant relationship between the independent variables (preferences of investors) and the dependent variables (investment decisions). The relationship between Factor one (Investment Returns) and investments decisions has the probability of the chi-square statistic (267.852) is 0.000, equal to the value of significance level at 0.005 shows that returns on investment have significance impact on retail investors preferences i.e. investments preferences of investors were changed according to the returns on investments. For the relationship between Factor two (Perception of Investors), Factor three (Information Sources), Factor four (Investors Valuation) and Factor five (Investors Objectives) having chi-square value 337.208, 273.982, 162.380, 245.502 respectively and also have significant relationship for investment decisions of investors.

**DISCUSSION AND CONCLUSION**

The global interest and demand for mutual funds have increased dramatically during recent years. Mutual funds are today a very important savings vehicle for most people in developed countries and they provide an excellent opportunity to obtain a more diversified portfolio through investments in new markets and asset classes. In the light of the fast growth and the increasing importance of the mutual fund industry in the society, understanding of investor behavior is critical to policymakers and asset managers to successfully meet the many challenges and opportunities. Policymakers need to have an understanding of investor behavior in order to design the new define contribution systems appropriately. Similarly, an understanding of investor behavior is an important task for asset managers in order to be successful in the battle of fund flows. In this backdrop, the present paper has added an insight to the existing literature on individuals' behavior in the financial markets by examining preferences of retail investors and investment decisions in mutual funds. The descriptive static section deals with the mean and the respective standard deviations of the various measurement items. The section is divided into five factors of attitudinal and information preferences of retail investors towards mutual fund schemes while making investment decisions. The items related to factor one i.e. investments returns suggest that the investors believe that the investments returns are less emphasized by the mutual fund investors and the factor two, three, four and five shows that the investors give much more importance to these for making investment decisions. Research analysis revealed there is a statistically significant relationship between the independent variables (preferences of investors) and the dependent variables (investment decisions). The relationship between Factor one (Investment Returns), Factor two (Perception of Investors), Factor three (Information Sources), Factor four (Investors Valuation) and Factor five (Investors Objectives) and investments decisions shows that investment have significance impact on retail investors preferences .

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**TABLE 1: KMO AND BARTLETT'S TEST**

Kaiser-Meyer- Olkin Measure of Sampling Adequacy.	.770
Bartlett's Test of Sphericity	Approx. Chi-Square 5960.098
	Df 378
	Sig. .000

**TABLE 2: TOTAL VARIANCE EXPLAINED**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.389	15.674	15.674	4.389	15.674	15.674
2	3.411	12.182	27.856	3.411	12.182	27.856
3	1.777	6.345	34.201	1.777	6.345	34.201
4	1.459	5.210	39.411	1.459	5.210	39.411
5	1.365	4.874	44.285	1.365	4.874	44.285
6	1.292	4.615	48.900	1.292	4.615	48.900
7	1.176	4.199	53.099	1.176	4.199	53.099
8	1.155	4.124	57.223	1.155	4.124	57.223
9	1.055	3.768	60.991	1.055	3.768	60.991
10	1.015	3.625	64.616	1.015	3.625	64.616
11	.864	3.086	67.701			
12	.854	3.050	70.751			
13	.791	2.826	73.577			
14	.722	2.578	76.155			
15	.666	2.380	78.535			
16	.649	2.317	80.852			
17	.620	2.214	83.066			
18	.575	2.052	85.118			
19	.543	1.941	87.059			
20	.527	1.881	88.941			
21	.482	1.721	90.662			
22	.455	1.624	92.286			
23	.441	1.574	93.860			
24	.433	1.547	95.407			
25	.390	1.394	96.801			
26	.369	1.318	98.119			
27	.297	1.060	99.179			
28	.230	.821	100.000			

Extraction Method: Principal Component Analysis.

**TABLE 3.1**

FACTOR ONE(Investment Returns)		MEAN	STD. DEV.
R1	Return of the principal amount invested in mutual fund is assured.	2.877	1.756
R 2	Mutual fund returns are fully protected and guaranteed by SEBI.	3.168	1.769
R 3	Mutual fund investing gives a definite positive return.	2.963	1.710
R 4	Ups and downs of stock market will not affect the return from mutual fund.	2.832	1.736
R 5	Mutual funds gives positive, regular & greater return than term deposits	4.172	1.680
Overall mean		3.2024	0.4983



TABLE 3.2

FACTOR Two(Perception)		MEAN	STD. DEV.
P 1	There are many mutual fund schemes to meet the varied needs of investors.	5.342	1.415
P 2	Mutual fund is a good investment option in financial instruments.	5.573	1.332
P 3	Mutual funds are less risky as compared to other investments.	4.669	1.598
P 4	Investment in mutual fund realizes the benefits of stock market investing.	4.688	1.512
P 5	It is imperative for me to monitor the <b>print</b> and <b>electronic</b> media for making informed investment decisions.	5.109	1.197
P 6	Diversification of portfolio make me to invest in mutual fund schemes	5.795	1.206
P 7	I prefer capital growth while making investment decisions.	5.571	1.270
P 8	Due to professional investment, a good return can be expected of mutual fund.	5.255	1.277
Overall mean		5.2502	0.3850

TABLE 3.3

FACTOR Three (Information Sources)		MEAN	STD. DEV.
I 1	I prefer to discuss with <b>professional</b> financial advisor before making any investment in mutual fund.	5.271	1.356
I 2	<b>Prospectuses</b> of mutual fund companies plays important role for making investment decisions.	5.206	1.206
I 3	Views of my <b>friends</b> and <b>family</b> play a major role in investment decisions.	4.343	1.451
I 4	<b>Financial statements</b> give overview of the mutual fund companies.	5.544	1.147
I 5	I always review mutual fund shareholders reports.	5.564	1.139
I 6	Entry and Exit out of mutual fund is easy.	5.191	1.281
Overall mean		5.1865	0.4060

TABLE 3.4

FACTOR Four(Valuation of Investors)		MEAN	STD. DEV.
V 1	I prefer brand name of the firm while making investment decision.	5.545	1.367
V 2	<b>Funds rating</b> from a rating service of a mutual fund company must be considered	5.595	1.125
V 3	I prefer inflation resistance while making investment decision.	4.882	1.308
V 4	<b>Portfolio</b> held by mutual fund is important for making investment decisions.	5.741	1.095
V 5	I always review research analyst report from brokers.	5.897	1.170
V 6	I prefer tax benefit while making investment decision.	5.147	1.420
Overall mean		5.4678	0.3481

TABLE 3.5

FACTOR Five (Investors Objectives)		MEAN	STD. DEV.
O 1	I prefer safety of principal amount while making investment in mutual fund.	5.587	1.352
O 2	I prefer liquidity of money while making investment decision.	5.038	1.304
O 3	I prefer stability of income while making investment decision.	5.003	1.422
Overall mean		5.2093	0.2674

TABLE 4.1: MODEL FITTING INFORMATION

Model	Model Fitting Criteria Likelihood Ratio Tests			
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	2016.660			
Final	971.331	1045.328	384	.000

TABLE 4.2: PSEUDO R-SQUARE

Cox and Snell	.711
Nagelkerke	.776
Mcfadden	.500

TABLE 4.3: CASE PROCESSING SUMMARY

Schemes	N	Marginal Percentage
Growth Schemes	381	45.3%
Balanced Schemes	111	13.2%
Tax Saving Schemes	246	29.3%
Income Schemes	103	12.2%
Valid	841	100.0%
Missing	0	
Total	841	
Subpopulation	518 <sup>a</sup>	

a. The dependent variable has only one value observed in 497 (95.9%) subpopulations.

TABLE 4.4: CLASSIFICATION

Observed	Predicted				
	Growth Schemes	Balanced Schemes	Tax Saving Schemes	Income Schemes	Percent Correct
Growth Schemes	353	0	25	3	92.7%
Balanced Schemes	101	0	6	4	.0%
Tax Saving Schemes	232	0	14	0	5.7%
Income Schemes	98	0	0	5	4.9%
Overall Percentage	93.2%	.0%	5.4%	1.4%	44.2%

TABLE 4.5: LIKELIHOOD RATIO TESTS

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	971.331 <sup>a</sup>	.000	0	.
Factor_1 (Investment Returns)	1239.183 <sup>b</sup>	267.852	90	.000
Factor_2 (Perception of Investors)	1308.539 <sup>b</sup>	337.208	99	.000
Factor_3 (Information Sources)	1245.313 <sup>b</sup>	273.982	75	.000
Factor_4 (Investors Valuation)	1133.712 <sup>b</sup>	162.380	75	.000
Factor_5 (Objectives of Investors)	1216.833 <sup>b</sup>	245.502	45	.000

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

a. This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.

b. Unexpected singularities in the Hessian matrix are encountered. This indicates that either some predictor variables should be excluded or some categories should be merged.

**MULTICHANNEL STRATEGY – A COMPETITIVE ADVANTAGE TOOL OF ORGANISED RETAILERS**

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**ABSTRACT**

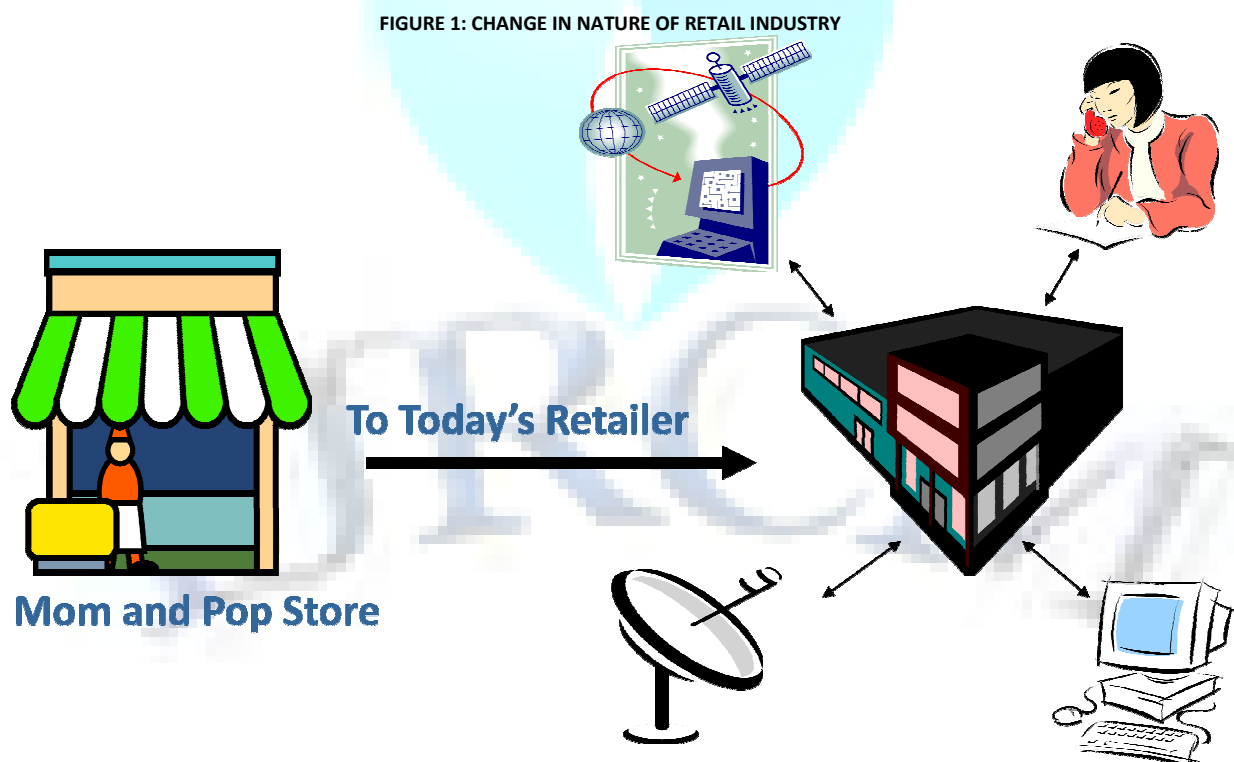
Multichannel retailing is the set of activities involved in selling merchandise or services to consumers through more than one channel. Multichannel retailers dominate today's retail landscape. Retailers are increasingly leveraging their presence across channels – catalogue, web, stores and kiosks, to increase their share of the customer's wallet and expand across consumer segments. Recent studies on consumer shopping behaviour indicate that multichannel shoppers show a significantly higher value and frequency of purchase than single channel shoppers. While there are many benefits of operating multiple channels, these retailers also face many challenges. In this article, we discuss the key issues concerning multichannel retailing, including the motivations and constraints of going multichannel, the challenges of crafting multichannel retailing strategies and opportunities for creating synergies across channels, increasingly, retailers are turning towards multichannel retailing to grow their market share and present a uniform and seem less shopping experience and branding across channels. However, enabling integration and synchronization of organisational structure, processes, operations and systems are significant challenges to realize the multi-channel retailing based on client experience and recommendations for building a customer centric retail enterprise.

**KEYWORDS**

Digitization, e-tailing, Multichannel, Social Shopping Trends, Strategy.

**INTRODUCTION**

Multichannel retailing is the set of activities involved in selling merchandise or services to consumers through more than one channel (See Figure 1). This definition distinguishes multichannel retailing from multimedia marketing that typically involves the use of multiple channels to simply communicate with customers. Multichannel retailers are firms that engage in multichannel retailing and whose primary source of revenue is retailing activities. Multichannel then refers to the delivery of customer propositions via multiple channels with at least some degree of cross channel integration in management, information and service, i.e. in a consistent and coordinated way across all channels



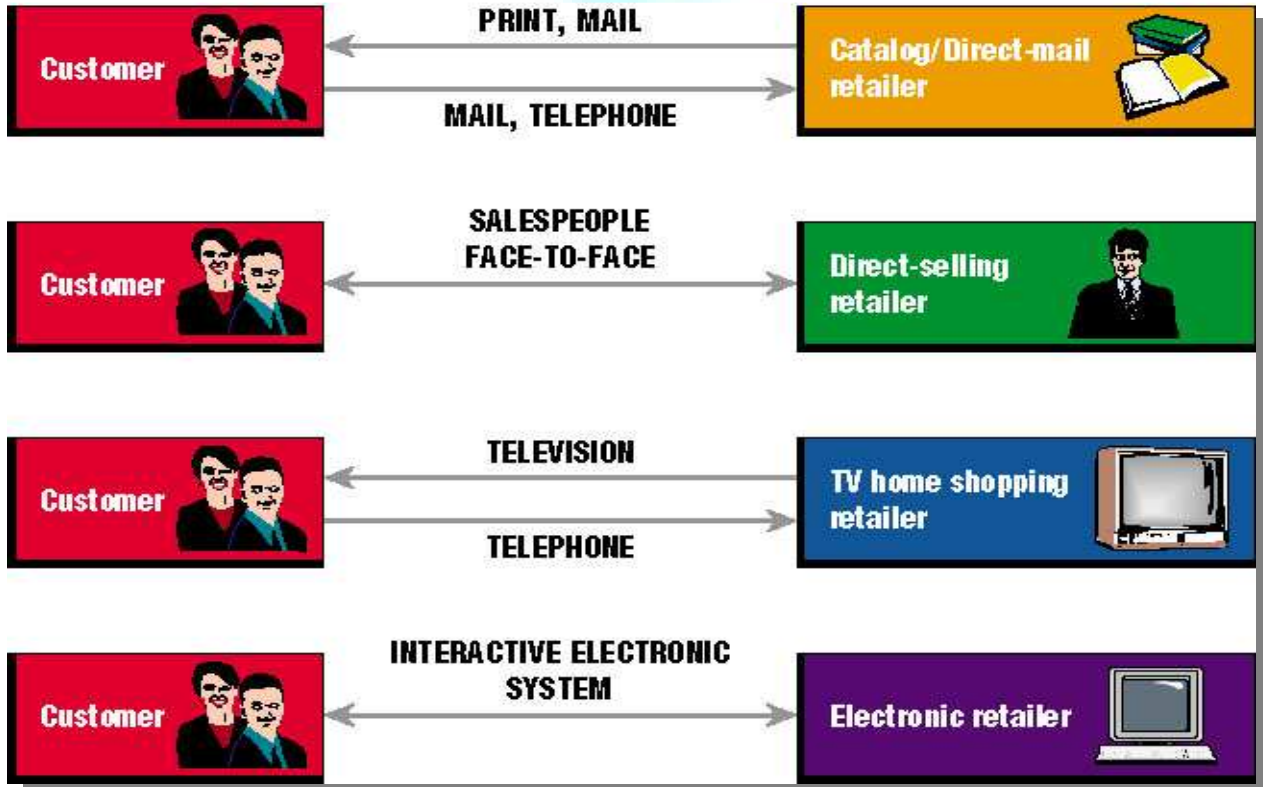
Several unique aspects of the retailing business make multichannel operations more complex and challenging. In general, retailers have to manage a large number of stock-keeping units (SKUs) in their assortment of products (usually not manufactured by the firm), make decisions and frequent modifications on many retail mix elements for each SKU, interact with numerous and often diverse groups of end users, deal with a large number of vendors, and be responsible for the logistic process of selling and delivering products to their end users. In addition to the operational complexities, the potential benefits afforded to

customers are also significantly greater, as we will discuss, than simply using multiple channels to communicate with customers. These factors call for a comprehensive review of issues concerning multichannel retailing.

While emerging technology has been a key enabler, multi-channel growth is essentially driven by consumers. According to Shop.org, 34% of consumers today use at least three channels when shopping. Research has found them to spend up to 10 times more, to generate 25 to 50% more profit and demonstrate greater loyalty than their single-channel counterparts. The core driver then is customer demand. The other major driver is cost saving through efficiency and effectiveness. Managing channels separately may not only impair customer relationships but also result in cost increases resulting from running separate order-management and customer service operations, multiple warehouses and fulfillment systems, and buyers and merchandisers duplicating effort across the different channels.

Multichannel is also driven by strategic 'Competitive Advantage' and differentiation opportunities, and regulatory pressures around ensuring that all customers are able to access products and services on offer. Multichannel retailing is not a new phenomenon, and a retailer can start from any one channel and move to other channels later. For example, Sears became a multichannel retailer in 1925 when it opened its first store to complement its catalog channel which was launched in 1886. Many retailers followed Sears lead selling merchandise through both store and non-store channels (See Figure 2: Non-store Channels), these channels mainly operated as separate businesses and were not integrated. To a large extent, the emergence of integrated multichannel retailing was driven by the rapid expansion of the Internet as a new selling channel. In the mid- 1990's, the Internet was viewed as a disruptive transformational technology with respect to the retail industry. Futurists envisioned consumers abandoning stores and buying most products and services over the Internet. They predicted that store-based retailers would be replaced by Internet-savvy entrepreneurs who could harness this new technology to provide superior offerings to consumers.

FIGURE 2: NON-STORE RETAIL CHANNELS



**ADVANTAGE OF NON-STORE RETAILING EVOLUTION**

Fifteen years later, the Internet appears to be more of a facilitating technology in many domains, enabling traditional store-based retailers to complement their store offering with online channels, to improve their operational efficiency, and to enhance the benefits provided to customers. These traditional retailers have evolved into multichannel operators, and they now dominate the Internet retailing space. Retail organizations are facing many new challenges and opportunities in the multichannel retailing environment. There are also many questions to be answered by marketing researchers and industry practitioners. What motivates retailers to go multichannel and what constraints, opportunity to create synergy across channels? And how will multichannel retailing evolve over time?

**NEED OF THE STUDY**

Ultimately, the search for improved financial performance motivates traditional single channel retailers (store based, catalog, TV home shopping, or Internet-based retailers) to evolve into multichannel operators. While the decision to sell through additional channels prompts concerns about cannibalization and negative spillover, research indicates that operating multiple channels can have a positive effect on financial performance. Three major needs for which retailers are adopting multichannel are:

- 1) TO ACCESS TO NEW MARKETS:** The market for store-based retailers is typically limited to the local trading areas of their stores. Thus, adding non-store channels (e.g. Internet, catalogs, mobile phones) enables retailers with limited locations to exploit economies of scope by expanding their markets without building additional stores.
- 2) TO CREATE CUSTOMER SATISFACTION AND LOYALTY:** By using a combination of channels, retailers can better satisfy their customers' needs by exploiting the benefits and overcoming the deficiencies of each channel. For example, the store channel provides certain unique benefits, including: the potential to use all five senses when evaluating products, personal service, the option of cash payment, entertainment and social experiences, and immediate acquisition.
- 3) TO CRAFT A COMPETITIVE ADVANTAGE:** The opportunities for multichannel retailers to develop a strategic advantage arise from their abilities to develop resources that are not easily detected or duplicated by competitors, such as (1) propriety customer information and (2) tacit knowledge for providing a seamless customer interface. These resources can build customer loyalty and reduce costs. It is difficult for many store-based retailers to develop extensive customer purchase history databases because of their inability to link customers to transactions when the customers pay in cash or use third-party credit cards.

**OBJECTIVES OF THE STUDY**

- To explore the prospects of Multi-channel retailing adoption of Organized Retailers.

➤ To depict the implications in adopting the Multichannel strategy in Retail operations.

## MOTIVATIONS AND CONSTRAINTS FOR GOING MULTICHANNEL

Another strategic resource possessed by effective multichannel retailers is the tacit knowledge associated with integrating multiple channels. Consumers desire a seamless experience when interacting with multichannel retailers. For example, they want to be able to buy a product through the retailer's Internet or catalog channels and pick it up or return it to a local store; find out if a product offered on the Internet channel is available at a local store; and, when unable to find a product in a store, determine if it is available for home delivery through the retailer's Internet or catalog channels.

## BENEFITS OF MULTICHANNEL ADOPTION

There are a huge number of both organizational and customer related benefits to be gained from implementing a multi-channel strategy. Here's a few:

### ORGANIZATIONAL BENEFITS

- 1) Increased revenue and growth opportunities – more touch points into target market thus, better responsiveness and sensitivity to changing environments
- 2) Competitive advantage over pure-plays particularly around immediacy, education opportunities for complex products and easy e-merchandise returns.
- 3) Organizational efficiency and effectiveness opportunities through sharing of processes, technology and information

### CUSTOMER RELATED BENEFITS

- 1) Better and wider customer interaction with a greater variety of information available for improved understanding of customers and identification of opportunities for increasing value per customer (business intelligence)
- 2) Better customer experience, better understanding of customer's thus reducing churn and increasing loyalty.
- 3) Opportunity to leverage and improve brand perception

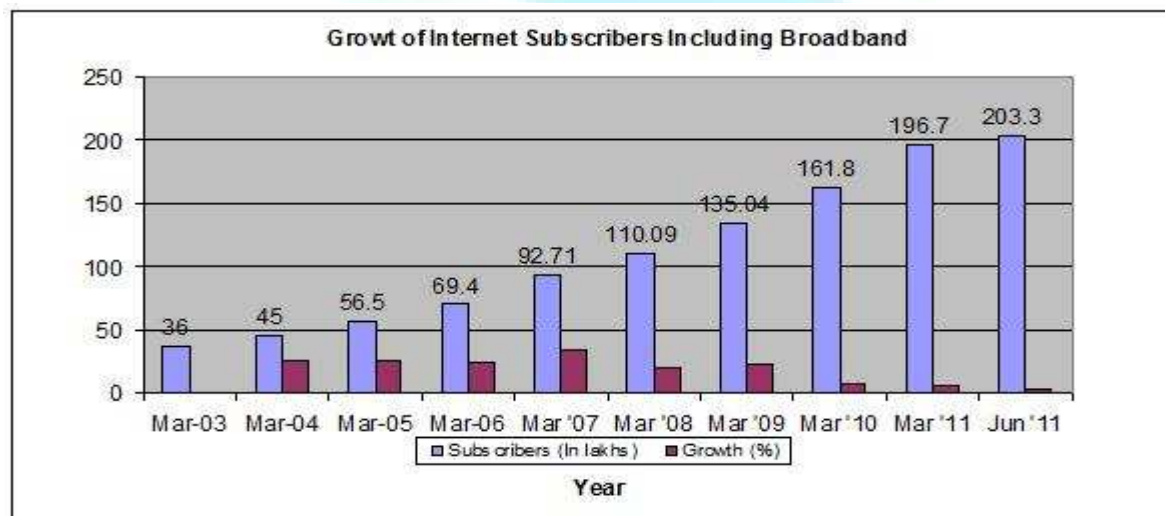
Customers themselves also benefit from increased choice in interaction opportunities and the ability to switch channels as convenient.

## CONSTRAINTS FOR EXPANDING TO MULTICHANNEL

While many retailers have become multichannel operators, some have intentionally shunned this strategy so far (e.g. Amazon.com, Netflix, and Blue Nile). There are three key reasons that have kept these retailers from pursuing multichannel: (1) consumer access to broadband Internet service, (2) operational difficulties of integration, and (3) costs of multichannel offering.

**BROADBAND INTERNET ACCESS:** In the early stages of Internet development, the benefits of operating multiple channels by adding an online channel were questionable because of the limited Internet access among the public, particularly broadband access. This has now become less of a concern in the United States, where Internet access is almost universal among the target segments of most retailers. In 2008, 73% of the adults in the U.S. and over 85% of adults between 19 and 49 with family income over \$50,000 used the Internet. When it comes to India the percentages are less but encouraging.

GRAPH 1: GROWTH OF INTERNET SUBSCRIBERS IN INDIA



Source: ISPAI-2011 (Internet Service Providers Association of India)

**OPERATIONAL DIFFICULTIES:** While there appear to be demand synergies for multichannel offerings (Customers prefer to interact with a retailer anytime, anywhere through multiple, seamless interfaces), operational synergies may be difficult to achieve since unique skills and resources are needed to effectively manage each channel. For example, retail distribution centers (DCs) supporting a store channels are designed to move merchandise cartons from inbound to outbound trucks with minimal handling. With cross-docking, the cartons often remain in the DC for less than a day.

In contrast, the DCs supporting a catalog and/or Internet channel are designed to receive merchandise in cartons and then break the cartons down to individual items for picking, repacking, and shipment to individual customers. These channels also require different packaging to accommodate shipments of individual items as opposed to cartons. Skills for allocating merchandise and managing inventories in a channel with thousands of stores are much more demanding than the skills required managing inventory in a few DCs. The channels may have different target markets requiring unique merchandise and pricing. Due to these operational differences, many multichannel retailers have separate organizations for each channel and even outsource channel management, which further increases the challenges in achieving demand synergies.

**COSTS OF MULTICHANNEL OFFERING:** For some catalog and/or Internet channel retailers, the costs of opening stores with national coverage may be prohibitive. In addition to the initial investment, these non-store retailers may face considerable inefficiencies in building a store channel due to their lack of knowledge and experience in evaluating locations, negotiating leases, maintaining stores, tailoring the assortment to local markets, and selecting, training, and managing a large workforce. These factors may explain why few non-store retailers have added a store channel to their operations.

Retailers providing high levels of personal services also may be reluctant to add non-store channels or sell their high-end merchandise in non-store channels because of concerns about the negative impact on their brand image. At a basic level, any commercial transaction that involves a direct sale to a consumer at any point of time may be termed as retailing. It can be the selling of apparel, books, music, footwear, grocery items or other things. Such a retail trade could take place in a shopping mall, a mom-and-pop store, a department store, or in a friendly neighborhood grocery shop. Most of such retail trades that can be done

through the brick-and-mortar retailing route can be successfully replicated over the Internet as well. In the traditional sense, the term Retailing referred to the final transaction between a business and a customer (B2C).

**POTENTIAL SYNERGIES DUE TO MULTICHANNEL ADOPTION**

**1) CROSS-CHANNEL CUSTOMER COMMUNICATION AND PROMOTIONS.** One of the most common synergies is the use of one channel to promote another. This extends beyond the potential of multiple channels to increase the efficiency of advertising (e.g., television advertising can drive traffic to stores, telephone centers, or Web sites). In many categories, customers may “shop” in one channel and buy in another. In some cases this behavior is anticipated (e.g., automobile purchases), but in other instances customers may encounter unexpected questions and require person-to-person interactions (phone centers) or inspection (stores). Especially when conversion and up-sell rates differ among channels, retailers may desire to direct customers to another channel to complete the purchase. Routinely, multichannel retailers may be able to gather information on customers or purchase patterns in one channel to improve sales in another. For example, online sales may yield information on the conversation rates between display and sales for various products that inform the choice of products for valuable in-store display space. Since online displays and conversions are often faster, easier, and cheaper to manipulate and monitor, the entire channel may be made more productive with information sharing of this nature. The executives interviewed also reported that budget- and credit-conscious consumers often use the Internet channel to establish the affordability of products available from stores, agents, or telephone and their own credit-worthiness.

**2) CROSS-CHANNEL PRICE COMPARISONS.** In some cases, companies have established a presence in multiple channels to complement the pricing strategy of the other channels. For example, showcase stores, such as those maintained by Nike, Sony, and Levi’s have helped to establish reference prices for other channels. When the same companies begin to sell online, direct to consumer, the prices they charge in this channel may help control the threat of double marginalization.

**3) DIGITIZATION:** Digitization of products such as operating manuals, bills, warranty documents, and registrations and using the Internet to distribute and/or process them can reduce personnel costs in all channels. In addition, the production and distribution of these products through online channels increases the convenience for customers and frees up service personnel for more profitable and higher value-added customer interactions.

**4) SHARED COMMON PHYSICAL ASSETS AND OPERATIONS.** Spreading fixed costs across channel scan create economies of scale and scope. A cross-channel return policy also creates cross-selling opportunities, because retailers can encourage customers to shop in the stores when they come to return online and catalog orders. However, these increases in revenues and retention may take time to materialize and, given the costs required to support additional channels, in the short run, customer profits may decline.

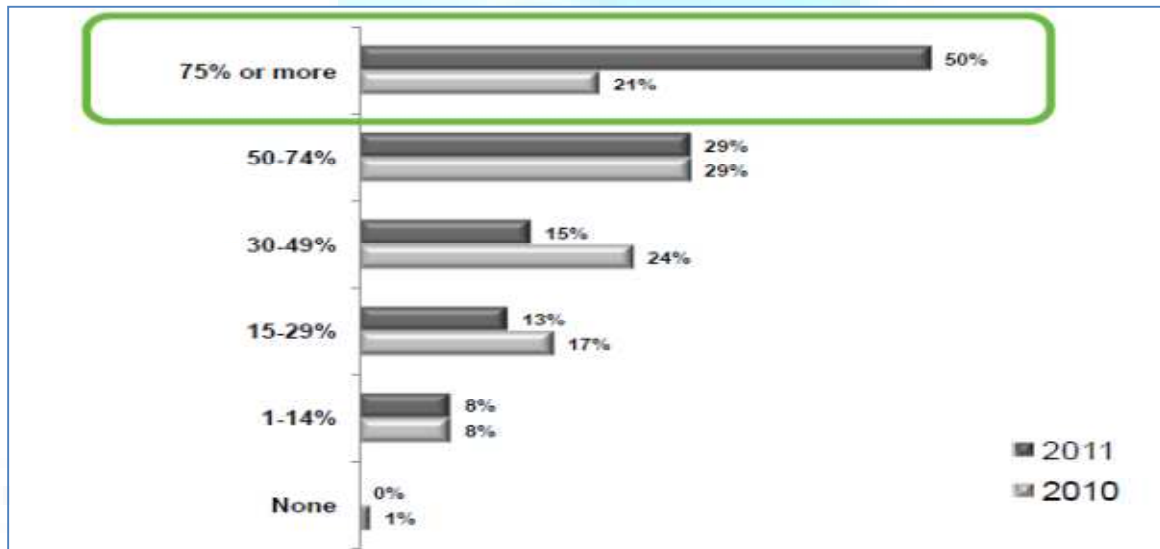
**DISCUSSION: SOCIAL SHOPPING TRENDS – SHAPING THE FUTURE OF E-COMMERCE**

Consumers are spending more time researching, across more sources, expecting certain social tools in the process. Consumers use ‘Facebook’ for sharing and discovery, not for research On-site deployment of social tools has the greatest impact on e-commerce sales. Explore consumer utilization of social media across a range of merchants and channels to understand perception, interest and propensity to buy based on that engagement.

- ❖ Understand the consumer’s level of interest in community across the web and its implication on researching and shopping behavior.
- ❖ Trend customer reviews and social shopping to monitor changing and evolving consumer behavior.

Today’s shopper is savvy with almost black belt certification in researching product and pricing. There is a method to their madness where they are willing to make a significant investment in time when the reward reaped is finding the right product at the right price. (See Graph 2: Percent of Overall Shopping involves research products online). In 2011, it can be observed that more than 75% of shoppers, research products online, increased to 50% out of total product they purchase, which is 21% in the year 2010, according to recent ‘e-tailing Group Survey’.

**GRAPH 2: PERCENT OF OVERALL SHOPPING INVOLVES RESEARCH PRODUCTS ONLINE**



Source: The e-tailing Group Annual Merchant Survey-2011, release

**E-TAILING** – which comprises buying consumer items including electronic products, home appliances, personal products such as apparels and jewellery and other accessories – is currently worth Rs.2050 crore, and is expected to grow by 32% to Rs.2700 crore by next year(See Graph 3: E-tailing Growth Trend). Another segment that could witness humungous growth opportunity is online financial services including Net Banking, utility bills payment, insurance and other services. The financial service segment is estimated to be worth Rs.2000 crore currently, but is expected to log 34% growth by Dec 2011.

GRAPH 3: E-TAILING GROWTH TREND



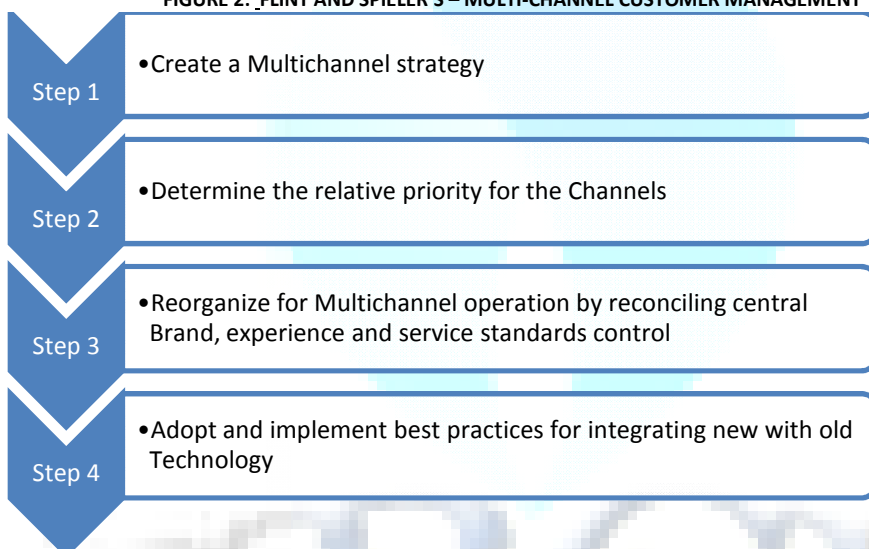
Source: www.trak.in

**RECOMMENDATIONS**

A well-integrated multi-channel format enables consumers to examine goods at one channel, buy them at another channel, and finally pick them up at a third channel. Multichannel retailing offers synergies, as it can result in an increased customer base, added revenue, and higher market share. Common characteristics of a well-integrated retail strategy include: highly-integrated promotions, product consistency across channels, an integrated information system that shares customer, pricing and inventory data across multiple channels, a process that enables store pick-up for items purchased on the Web or through a catalog, and the search for multi-channel opportunities with appropriate partners.

A good place to start a multi-channel journey is by considering Flint and Spieler's four stage process (Source - IBM white paper on Multi-Channel Customer Management: The Benefits and Challenges) shown in Figure 2.

FIGURE 2: FLINT AND SPIELER'S – MULTI-CHANNEL CUSTOMER MANAGEMENT



**CONCLUSION**

One important point to emphasize is that multi-channel done right needs to be holistic. Rather than being viewed as many separate mini-businesses or business units competing with each other and cannibalizing sales from one another, the winning picture is one of a retailer integrating channels to support and promote one another to affect a better overall customer experience. An increasingly common example is that of a traditional brick and mortar retailer with an on-line channel. While the physical store is the bread and butter of the brand, when properly employed and nurtured the Internet can be a truly powerful ally in reinforcing brand awareness and keeping customers close and informed.

Embedding real multi-channel practices will take time as it involves both a cultural and technological shift for any organization. And strongly recommending when making early stage investment and ROI decisions around multi-channel retailing, is aim to focus on long-term value and competitive advantage rather than short-term profit. In other words, think longer term when developing your business case, and have the patience to see it through. It will pay off.

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**STUDY OF SAVING PATTERN AND INVESTMENT PREFERENCES OF INDIVIDUAL HOUSEHOLD IN INDIA**

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**ABSTRACT**

*Investment is one of the major issues of the middle class families as their small savings of today are to meet the expenses of tomorrow. This study examines the investment pattern and awareness of the Indian Investors about different investment instruments such as bank deposits, real estate, small savings, life insurance schemes, bullions, commercial deposits, corporate security- bonds, mutual funds, and equity and preference shares. This research finds the impact of age, education, occupation and income level of the individual on investment. This paper aims to study the awareness and preferences of investor for different investment option available to them and to analyze the factors influencing their perception and preferences. More especially, an attempt has been in this article to measure the level of awareness of investor about several pre-identified investment products; to rank the investment products in terms of awareness; to analyze the relation between awareness and socio-economic factors relating to the investors; to study the preferences of investors for different investment products; and finally to identify the factors influencing investor awareness and preferences.*

**KEYWORDS**

Investment avenues, Saving schemes, Funds.

**INTRODUCTION**

An investment refers to the commitment of funds at present, in anticipation of some positive rate of return in future. Today the spectrum of investment is indeed wide. An investment is confronted with array of investment avenues like bank deposits, real estate, small savings, life insurance schemes, bullions, commercial deposits, corporate security- bonds, mutual funds, and equity and preference shares. Among all investment, investments in bank deposits are safest and most preferred by the household and in equity proportionately are most profitable.

This is because the history of stock market is booming and bursts overnight millionaires, an instant pauper. Indian economy is doing indeed well in recent years. The study has been undertaken to analyze the saving pattern and investment preferences of households. The main reasons behind the study is to study the demographic factors like income, gender, age, occupation, education and the risk covering nature of the household. The percentage of Indian investors investing in the Indian equity market is very less as compared to the bank deposits. This project contains the investors' preferences and as well as the different factors that affect investors decision on the different investment avenues; all investors are the household of India. This study includes response of investor in choosing securities in each classification and analysis has been for the respective performance based on their returns. The findings relates to the out-performing products and investors risk taking ability while investing in each different products.

The money you earn is partly spent and the rest saved for meeting future expenses. Instead of keeping the savings idle you may like to use savings in order to get return on it in the future, which is known as 'investment'. There are various investment avenues such as bank deposits, real estate, small savings, life insurance schemes, bullions, commercial deposits, corporate security- bonds, mutual funds, equity and preference shares, etc. A Portfolio is a combination of different investment assets mixed and matched for the purpose of achieving an investor's goal.

The two key aspects of investment are preferences and pattern. Benefit is expected in the future and tends to be uncertain. In some investments (like stock options) risk element is dominant attribute while in some investment (like govt. bonds) time is dominant attribute. There are various factors which affects investors' portfolio such as annual income, government policy, natural calamities, economical changes etc.

According to RBI data, household sector accounted for 82.4% of gross domestic savings during 2001-02. They invested 38% of financial savings in deposits, 33% in insurance/provident funds, 11% on small savings, and 8% in securities, including government securities and units of mutual funds during 2001-02. Thus the fixed income bearing instruments are the most preferred assets of the household sector. Their share in total financial savings of the household sector witnessed an increasing trend in the recent past and is estimated at 82.4% in 2001-02. In contrast, the share of financial savings of the household sector in securities (shares, debentures public sector bonds and units of UTI and other mutual funds and government securities) is estimated to have gone down from 22.9% in 1991-92 to 4.3% in 2000-01, which increased to 8% in 2001-02; Though there was a major shift in the saving pattern of the household sector from physical assets to financial assets and within financial assets, from bank deposits to securities, the trend got reversed in the recent past due to high real interest rates, prolonged subdued conditions in the secondary Market, lack of confidence by the issuers in the success of issue process as well as of investors in the credibility of the issuers and the systems and poor performance of mutual funds. The portfolio of household sector remains heavily weighted in favor of physical assets and fixed income bearing instruments. Investor Population the Society for Capital Market Research and Development carries out periodical surveys of household investors to estimate the number of investors. Their first survey carried out in 1990 placed the total number of share owners at 90-100 lakh. Their second survey estimated the number of share owners at around 140-150 lakh as of mid-1993. Their latest survey estimates the number of shareowners at around 2 crore in 1997 end, after which it remained stagnant up to the end of 1990s. The bulk of increase in number of investors took place during 1991-94 and tapered off thereafter. 49% of the share owners at the end of 2000 had, for the first time, entered the market before the end of 1990, 44% entered during 1991-94, 6.3% during 1995-96 and 0.8% since 1997.

**OBJECTIVES OF THE STUDY**

The basic objective of this research is to study the investment culture among the Indian Investors. For this purpose, the following has been examined:

- To study the saving pattern of the individual household in India.
- To analyze the Investment preferences of individual household in India.
- To study relation of saving pattern and investment preferences to social, economic, educational and occupational background of the individual household.
- To give suggestions for evolving better investor awareness and educational programs.

**RESEARCH METHODOLOGY**

**DEFINITION OF THE POPULATION** - Since the study is mainly related to know the saving pattern and investment patterns of the household. Their potential of earning income and reducing risk of the investment community on the products, where each security in the market has to be analyzed through their earnings over the others.

The population studied here is the household of Class 2 and Class 3 cities in India.

**TYPE OF RESEARCH:** This is a descriptive research where survey method is adopted to collect primary information from the investors using different scales; and secondary information for the analysis.

- Primary Data- A questionnaire was prepared and the primary data was collected through survey method
- Secondary Data- Companies websites, books and internet Customer database
- Sample Size- The population being large the survey was carried among 526 respondents, most of them are the household of India. They will be considered adequate to represent the characteristics of the entire population.
- Sampling Procedure- The sampling procedure followed in this study is non-probability convenient sampling. Simple random procedures are used to select the respondent from the available database.

While selecting the respondents, factors, such as rural-urban background, economic status, professional background and educational qualification of the population, were considered. A total of 526 respondents have been collected by using simple random sampling method.

**REVIEW OF LITERATURE**

Investment is the sacrifice of certain present value for the uncertain future reward. It entails arriving at numerous decisions such as type, mix, amount, timing, grade etc of investment and disinvestments. Further such decisions making has not only to be continuous but rational too. Instead of keeping the savings idle you may like to use savings in order to get return on it in the future, which is known as 'investment'. There are various investment avenues such as Equity, Bonds, Insurance, and Bank Deposit etc. A Portfolio is a combination of different investment assets mixed and matched for the purpose of achieving an investor's goal. There are various factors which affects investors' portfolio such as annual income, government policy, natural calamities, economical changes etc.

What is Investment? Investment is the employment of funds with the aim of achieving additional income or growth in value. The essential quality of income is that, it involves 'waiting' for a reward. It involves the commitment of resources which have been saved or put away from current consumption in the hope that some benefits will occur in future. The term 'investment' does not appear to be a simple as it has been defined. Investment has been categorized by financial experts and economists. It has also Financial and Economic Meaning—often been confused with the term speculation. Of Investment is the allocation of monetary resources to assets that expected to yield some gain or positive return over a given period of time. These assets range from safety investment to risky investments. Investments in this form are also called 'Financial Investments'. To the economists, 'Investment' means the net additions to the economy's capital stock which consists of goods and services that are used in the production of other goods and services. In this context the term investment implies the information of new and productive capital in the form of new construction, new producers' durable equipment such as plant and equipment. Inventories and human capital are included in the economist's definition of investment.

**DATA ANALYSIS**

The analysis of data collection is completed and presented systematically with the use of different tables and charts (pie chart and bar chart)

**TABLE 1: RANKING OF INVESTMENT AVENUES BASED ON LEVEL OF AWARENESS**

Sr.No.	Investment Avenues	High	Low	No. Awareness	Rank
1	Bank deposits	419 (79.6)	77 (14.6)	30 (5.7)	1
2	Real Estate	415 (78.9)	87 (16.5)	24 (4.6)	2
3	Small Saving	395 (75.1)	99 (18.8)	32 (6.1)	3
4	Life insurance scheme	398 (73.1)	90 (17.1)	38 (7.2)	4
5	Bullions	367 (69.8)	122 (23.2)	37 (7.0)	5
6	Commercial Deposits	188 (35.8)	133(25.2)	205 (39.0)	6
7	Corporate securities- Bonds	157 (29.8)	162 (30.8)	207 (39.4)	7
8	Mutual funds	147 (27.5)	151 (28.7)	228 (43.3)	8
9	Equity	139 (26.4)	140 (26.6)	247 (47.0)	9
10	Preference Shares	137 (25.7)	143 (27.2)	246 (46.8)	10

Source – Data Source Population Survey

The following conclusion have been drawn from the information furnished in table1

- Majority of the respondent (79.6%) stated that they had a high degree of awareness about bank deposits as investment avenues.
- As regards real estate, as an investment channel, 78.9% of the respondents showed a high level of awareness
- The other investment avenues , which follow bank deposits after real estate are: Small saving scheme (75.1% respondent high awareness), Life insurance scheme (73.7%) and Bullions (69.8%)
- The investment avenues which are not very popular amongst the investor are: Preference Share (47%), Equity share (47%), mutual funds (43%), corporate bonds and deposits (39%)

After having assessed the awareness level of the investors about the various avenues, it is necessary to identify the factors that contribute to investor awareness. To meet this need, an attempt is now to make to examine the relation between various factors, such as age, gender, education, occupation, income, and the level of awareness.

**AGE AND INVESTOR AWARENESS**

The relation between age and awareness of investors, the age-wise distribution of investment avenues with high awareness and also with low awareness amongst the investors is analyzed hereunder.

**TABLE 2: AGE-WISE DISTRIBUTION OF INVESTMENT AVENUES WITH HIGH AWARENESS**

Age in Year	Bank In Deposits	Real Estate	SSS	LIC	Bullion
Below 30	74.6	92.1	65.1	63.5	77.8
31-40	78.4	83.0	72.1	70.5	69.3
41-50	82.8	74.5	85.5	83.5	65.5
51-60	78.8	76.0	68.5	69.9	69.9
Above 60	81.0	77.4	78.5	86.9	71.4

Source – Data Source Population Survey

It may be seen from table 2 that the respondents are almost equally distributed among the different age group while claiming their high level of awareness about these avenues. Therefore, the age of investor cannot be taken to influence their level of awareness

**TABLE 3: AGE-WISE DISTRIBUTION OF INVESTMENT AVENUES WITH LOW AWARENESS**

Corporate deposits	Corporate Bond	Mutual Fund	Equity Share	Preference share
44.4	31.7	38.1	39.7	31.7
42.0	39.8	31.8	25.0	34.1
39.3	29.0	29.0	28.3	26.2
26.7	28.1	17.8	19.2	17.1
32.1	22.6	32.1	27.4	28.6

Source – Data Source Population Survey

**GENDER AND INVESTOR AWARENES**

To examine whether any relation exist between the gender and the level of investor awareness, the gender wise distribution of the investor respondents of different investment avenues, which are divided into avenues with high awareness and those with low awareness, is analyzed. The relevant information is furnished in table 4 and 5.

**TABLE 4: GENDER-WISE DISTRIBUTION OF INVESTMENT AVENUES WITH HIGH AWARENESS**

Gender	BD	RE	SSS	LIC	Bullion
Male	80.7	78.0	76.3	75.8	68.9
Female	77.3	81.0	72.4	75.5	71.8

Source – Data Source Population Survey

It may be observed from table 4 that there are no significant differences in the level of awareness between male and female investors of all investment avenues. The difference between male and female investor is hardly 4% for any avenues and it can be insignificant for a sample size of 526.

**TABLE 5: GENDER-WISE DISTRIBUTION OF INVESTMENT AVENUES WITH LOW AWARENESS**

Gender	CD	CB	MF	ES	PS
Male	38.8	32.2	32	30.9	28.4
Female	20.9	20.9	21.0	20.9	20.9

Source – Data Source Population Survey

It may also be seen from table 5 that there are no significant differences in the level of awareness between male and female investors of all investment avenues. From table 4 and 5, it is very clear that the gender of the investor has no effect or influence on his or level of awareness about any investment channel.

**OCCUPATION AND INVESTOR AWARENESS**

To know whether there is any relation between investor’s occupation and their awareness, the occupational distribution of investment avenues with high as well as low awareness studied .The relevant data pertaining to this aspect is furnished in table 6 and 7.

**TABLE 6: OCCUPATIONAL DISTRIBUTION OF INVESTMENT AVENUES WITH HIGH AWARENESS**

Occupation	Bank Deposits	Real-estate	Small saving scheme	LIC	Bullion
Self	75.0	77.6	68.3	66.8	65.3
Fulltime	86.8	80.2	84.6	87.7	75.3
Relined	67.7	80.6	64.5	64.5	67.7

Source – Data Source Population Survey

Data furnished in the table 6 indicates that the percentage of responses of the sample investor is not equally distributed among the different occupational categories. It may be noted that the level of awareness among full time salaried person is significantly different from the other occupational categories namely, retired

And self employed person. This leads to a conclusion that the investor may be a factor influencing his level of awareness about an investment option.

**TABLE 7: OCCUPATIONAL DISTRIBUTION OF INVESTMENT AVENUES WITH LOW AWARENESS**

Occupation	Corporate Deposits	Corporate Bonds	Mutual Funds	Equity Shares	Preference Shares
Self	33.6	25.4	27.6	18.7	21.3
Fulltime	41.0	37.9	30.0	36.6	33.9
Relined	16.1	9.7	16.1	19.4	9.7

Source – Data Source Population Survey

Information provided in Table7 exhibits the similar picture. On the whole it is found that the full time salaried persons, had better awareness of the various investment alternatives, as compared to the investors of other occupational categories. From perusal of table 6 and 7, it can be concluded that there is a relation between occupation and level of investor awareness.

**EDUCATION LEVEL AND INVESTOR AWARENESS**

To verify the influence of education on the level of awareness among the investors about various investments alternatives available to them, an analysis of education-wise distribution of investment avenues (which are classified into high awareness and low awareness) is undertaken. The data is given in table 8 and 9.

**TABLE 8: EDUCATION-WISE DISTRIBUTION OF INVESTMENT AVENUES WITH HIGH AWARENESS**

Educational Qualification	Bank Deposits	Real-estate	Small saving scheme	LIC	Bullion
Post Graduation	82.9	76.6	83.8	86.5	74.8
Graduation	85.2	83.3	81.0	82.9	77.1
Intermediate	76.1	76.6	66.5	64.4	57.4
No.	29.4	64.7	41.2	41.2	82.4

Source – Data Source Population Survey

It is clear in the table 8 that there is no difference significant in respect of graduates and post graduates. However, there is a decline in percentage in respect of respondents whose educational level is intermediate or below. Further a significant decline has seen in respondent with no further formal education. It is therefore, evident that education is an important factor in influencing the level of awareness in the investor about various investment avenues available to them.

**TABLE 9: EDUCATION-WISE DISTRIBUTION OF INVESTMENT AVENUES WITH LOW AWARENESS**

Educational Qualification	Corporate Deposits	Corporate Bonds	Mutual Funds	Equity Shares	Preference Shares
Post Graduation	54.1	35.0	39.6	44.1	37.8
Graduation	45.2	33.8	29.0	35.7	37.6
Intermediate	16.5	8.0	21.8	8.0	6.4
No.	11.8	0.0	5.9	0.0	23.5

Source – Data Source Population Survey

Table 9 also leads us to the similar observations that was made out of the analysis of table 8. It can, thus, be concluded that education is a very important factor in shaping the level of awareness about different investment alternatives available.

**INCOME LEVEL AND INVESTOR AWARENESS**

Income is also identified as one of the variable that has a significant relation with the level of investor awareness. To assess the level of relation an analysis of income-distribution of investment avenues (classified as high and low) is attempted. The relevant data for this purpose is furnished in table 10 and 11.

**TABLE 10: INCOME-WISE DISTRIBUTION OF INVESTMENT AVENUES WITH HIGH AWARENESS**

Monthly Income	Bank Deposits	Real Estate	Small saving scheme	LIC	Bullion
10000	78.1	78.4	71.3	70.4	67.8
10-20	81.6	77.6	82.9	82.9	73.0
Above 20	86.1	88.9	87.8	94.4	75.0

Source – Data Source Population Survey

Table 10 reveals that there is a significant relation between the income level and investor awareness. It is observed from the contained data in the table that there is gradual increase in level of awareness of investor as income level increased.

**TABLE 11: INCOME-WISE DISTRIBUTION OF INVESTMENT AVENUES WITH LOW AWARENESS**

Monthly Income	Corporate Deposits	Corporate Bonds	Mutual Funds	Equity Shares	Preference Shares
10000	27.2	27.5	22.8	17.5	19.8
10-20	49.3	32.9	33.6	39.5	36.8
Above 20	58.3	38.9	52.8	55.6	38.9

Source – Data Source Population Survey

Table 11 leads to a similar conclusion that were made out of the analysis of table 10. Thus, it can be concluded that level and extent of awareness varies with the level of income.

**INVESTOR PREFERENCES OF INVESTMENT AVENUES**

Table 12 and 13 provide the information about the preference of sample investor towards various investment products.

The following observation may be made from the data provided in table 12.

- Most investor preferred ‘Bank Deposits’ as their first choice of investment, out of ten investment products placed before them.
- Next to bank deposits, small saving scheme constitute the second choice of investment among the sample investors.
- The small saving scheme followed by the life insurance policies as the next most preferred vehicle for the investment by the sample investor.

**TABLE 12: INVESTMENT PREFERENCES OF INVESTMENT AVENUES (ON THE BASIS OF NO. OF RESPONDENT)**

Preference	BD	CD	SSS	LIC	MF	B	RE	C.B	ES	PS	Total
1 <sup>st</sup>	263	12	97	101	13	8	10	10	12	27	553
2 <sup>nd</sup>	113	43	188	114	19	19	14	17	12	15	554
3 <sup>rd</sup>	70	49	118	178	35	19	24	10	20	10	533
4 <sup>th</sup>	25	129	43	63	64	88	42	34	34	15	537
5 <sup>th</sup>	12	114	37	22	121	70	58	45	17	34	530
6 <sup>th</sup>	12	72	10	14	121	100	58	59	36	30	512
7 <sup>th</sup>	8	37	8	8	61	84	133	74	61	34	508
8 <sup>th</sup>	7	36	8	9	33	38	49	190	89	42	501
9 <sup>th</sup>	3	14	14	9	36	37	63	64	166	91	497
10 <sup>th</sup>	13	20	3	8	23	63	35	23	69	228	485
Total	526	526	526	526	526	526	526	526	526	526	5260

Source – Data Source Population Survey

- The investment product, such as company deposits, mutual funds, bullions, real estate, corporate securities, equity shares and preference shares received the fourth, fifth, sixth, seventh, eighth, ninth and tenth places respectively.
- It is evident from the preference expressed by the sample investor that the capital market securities, like corporate debt securities, equity shares, preference shares are not popular among the investor.

TABLE 13: INVESTMENT PREFERENCES OF INVESTMENT AVENUES (FIGURES IN PERCENTAGE)

Preference	BD	CD	SSS	LIC	MF	B	RE	CS	ES	PS
1 <sup>st</sup>	50.0	2.3	18.4	19.2	2.5	1.5	1.9	1.9	4.2	5.1
2 <sup>nd</sup>	21.5	8.2	35.7	21.7	3.6	3.6	2.7	3.2	2.3	2.9
3 <sup>rd</sup>	13.5	9.3	22.4	33.8	6.7	3.6	4.6	1.9	3.8	1.9
4 <sup>th</sup>	4.8	24.5	8.2	12.0	12.2	16.7	15.6	6.5	6.5	2.9
5 <sup>th</sup>	2.3	21.7	7.0	4.2	23.0	13.4	11.0	8.6	3.2	6.5
6 <sup>th</sup>	2.3	13.7	1.9	2.7	23.0	19.0	11.0	11.2	6.8	5.7
7 <sup>th</sup>	1.5	7.0	1.5	1.5	11.6	16.0	25.3	14.1	11.6	6.5
8 <sup>th</sup>	1.3	6.8	1.5	1.7	6.3	7.2	9.3	36.1	16.9	8.0
9 <sup>th</sup>	0.6	2.7	2.7	1.7	6.8	7.0	12.0	12.2	31.6	17.3
10 <sup>th</sup>	2.4	3.8	0.7	1.5	4.3	12.0	6.6	4.3	13.1	43.2
Total	100	100	100	100	100	100	100	100	100	100

Source – Data Source Population Survey

Table 13 furnishes the information relating to the no. of investor in percentage term. The following points may be noted from this table

- About 50% of the sample investor given their first preference to Bank deposits as the most preferred investment product.
- Nearly 36% of the investor chosen Small saving scheme as the next most preferred instrument.
- Almost 34% of the investor has preferred life insurance policies in the third place.
- Above three are followed by company deposits by 24.5%,mutual fund 23%,bullion with 19% and real estate with 25%.
- And other securities are not much popular among the investors.

**RANKING OF THE INVESTMENT AVENUES**

It can be seen in the Table 14 that bank deposits, with a total score of 4,586 points, stood in the first place. These are followed by small saving scheme with total score of 4,266 points in the second place, and life insurance policies with 4,188 points in the third place. Next to these investment products, company deposits, with 3,150 points in the fourth place, mutual fund with 2,798 in the fifth place, bullions with 2,526 points in the sixth place, and real estate with 2,470 points are in seventh place. At the same time securities like corporate debt, equity shares and preference shares are placed at eighth, ninth and tenth place respectively.

TABLE 14: INVESTOR PREFERENCE OF INVESTMENT AVENUES-WEIGHTED SCORE

preference	BD	CD	SSS	LIC	MF	B	RE	CS	ES	PS	Total
First	2630	120	970	1010	130	80	100	100	220	270	5630
Second	1017	387	1692	1026	171	171	126	153	108	135	4986
Third	560	392	944	1424	280	152	192	80	160	80	4264
Fourth	175	903	301	441	448	616	574	238	238	105	4059
Fifth	72	684	222	132	126	420	348	270	102	204	3180
Sixth	60	360	50	70	605	500	290	295	180	150	2560
Seventh	32	148	32	32	244	336	532	296	244	136	2032
Eighth	21	108	24	27	99	114	147	570	267	126	1003
Ninth	6	28	28	18	72	74	126	128	332	182	994
Tenth	13	20	3	8	23	63	35	23	69	228	485
Total Score	4586	3150	4266	4188	2198	2526	2470	2153	1920	1616	29673
Rank	1	4	2	3	5	6	7	8	9	10	

Source – Data Source Population Survey

**INVESTMENT OBJECTIVE**

To ascertain the investment objective influencing the investor preferences and their behavior, sample investor are asked to indicate their choices for various investment objectives in the descending order of their preferences. For this purpose, six objectives, such as, safety, liquidity and marketability, income generation, capital appreciation, tax benefit and diversification were placed before them. The obtained information is presented and analyzed in table 15 and 16

TABLE 15: INVESTMENT OBJECTIVE (NO. OF RESPONDENT)

Preference	Safety	Liquidity & marketability	income generation	Capital appreciation	Tax benefit	Diversification	Total
1 <sup>st</sup>	328	22	122	27	33	16	548
2 <sup>nd</sup>	115	78	258	42	48	23	564
3 <sup>rd</sup>	39	138	72	69	180	23	521
4 <sup>th</sup>	19	149	43	136	96	66	509
5 <sup>th</sup>	22	97	24	146	108	125	522
6 <sup>th</sup>	3	42	7	106	61	273	492
Total	526	526	526	526	526	526	3,156

Source – Data Source Population Survey

Information presented in table 16 and 71 reveals that mot of the sample investors, i.e. , 328 out of 526 which work out 62.4% of them, has indicated that ‘safety of the investment’ as their first objective in choosing the investment alternative. The second objective influencing the investor behavior and preferences in the

selection of investment alternative is 'income' earned from the investment made. This is stated by 258 out of 526 which will work out to 49% of the total. The two objectives are followed by liquidity and marketability, capital appreciation, tax benefit and diversification benefits.

TABLE 16: INVESTMENT OBJECTIVE (PERCENTAGE BASIS)

Preference	Safety	Liquidity & marketability	income generation	Capital appreciation	Tax benefit	Diversification	Total
1 <sup>st</sup>	62.4	4.2	23.2	5.1	6.3	3.0	104.20
2 <sup>nd</sup>	21.9	14.8	49.0	8.0	9.1	4.4	107.20
3 <sup>rd</sup>	7.4	26.2	13.7	13.1	34.2	4.4	99.00
4 <sup>th</sup>	3.6	28.3	8.2	25.9	18.3	12.6	96.90
5 <sup>th</sup>	4.2	18.4	4.6	27.8	20.5	23.7	99.20
6 <sup>th</sup>	0.5	8.1	1.3	20.1	11.6	51.9	93.50
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>600</b>

Source – Data Source Population Survey

#### INVESTOR SAVING PATTERN

To analyze the effect of saving pattern on the investors, the savings pattern of the sample investor is studied. The information showing the saving pattern of the sample investor is furnished in table 17.

TABLE 16: SAVING PATTERN OF THE SAMPLE INVESTOR

Percentage Of Saving		
Saving As % Of Annual Income	No. Of Respedent	% Of Total
01-10%	138	26-2
11-20%	200	38-0
21-30%	121	23-0
Over 30%	45	8-6
No Saving	22	4-2
<b>Total</b>	<b>526</b>	<b>100</b>

Saving pattern of the sample investor

It may be noted from the information given in the table 17 that the most of the respondent are able to save between 10-30% of the annual income. Only a few of the respondent, i.e., around 4% of the total respondent were not able to save from their income. It can be noted that 38% of the total respondent are able to save to the extent of 10-20% of their annual income. While 23% are saving between 21-30%. And 9% are saving over the 30% of their annual income. It is therefore, concluded that most of the sample investors are able to save substantially out of their annual income and is in position to make investment.

#### SUGGESTIONS

Through the conclusion drawn earlier, the following suggestions may help to improve the investment pattern and investor preferences among the small household.

- There is an explosion in the growth of middle class families due to double income and increase in number of working women. Hence effort should be made to attract women investors by providing right information and knowledge about the market through advertisement
- There is a dire need to initiate steps to inculcate saving habit among the growing middle class families.
- The savings are to be pooled and channelized into productive investments. Thereby enhancing the return to the investor which may result in the further investment in corporate securities also.

Different groups of investors like, professionals, businessman pay less attention while evaluating the pros and cons of investing in different securities. The need and benefits of the systematic and analytical evaluation of different alternatives and competitive avenues need to be explained to them. Then only it is possible to park their surplus funds in economical viable condition.

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## DEVELOPING INFRASTRUCTURE FOR PROMOTION OF RURAL TOURISM IN THE STATE OF WEST BENGAL: A STUDY ON KAMARPUKUR

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### ABSTRACT

*The concept of rural tourism has become one of the vital issues of economic and social benefits to the society. The primary objectives of this study includes the growth, development and emergence of rural tourism in the state of West Bengal, study the rural tourism potentials of West Bengal in general and Kamarpukur in Particular, study the role played by the State Government, Department of Tourism, analyze the tourist flow pattern of Kamarpukur, examine the existing as well as future requirement of tourism infrastructure of Kamarpukur and lastly to promote and market kamarpukur as an important rural tourism destination in Indian Scenario. This study is based on both primary and secondary data. The collected data has been analyzed using different statistical methods, ARMA Model used for future inflow of tourists as well as future tourism amenities requirement. The sources of secondary data collected were legal documents, official statistics, reports, publications including data from district information centre. This study also indicates that how to develop and upgrade the rural tourism destinations by development of proper utilization of tourism infrastructural amenities in the area as well as active participation by public private initiatives and utilization of local resources. This approach of study tried to achieve how to achieve sustainable tourism development in Kamarpukur as a perfect rural tourism destination of West Bengal. Rural tourism is expected to emerge as an important key factor for sustainable human development including poverty alleviation, employment generation, environmental re-generation and development of remote areas and empowerment of women in West Bengal in the near future to come. This paper provides some recommendations that the Government as well as private agencies including NGOs intending to promote rural tourism infrastructure in the state of West Bengal, India which can ensure sustainable economic development and positive social change in this particular destination.*

### KEYWORDS

Rural Tourism, Rural tourism infrastructure, Pattern of tourists, Pattern of Tourism amenities, Rural tourism indicators.

### INTRODUCTION

West Bengal has the wide variety of attractions in terms of tourist destinations from bustling Kolkata with its historical evidence to the rural beauty of lush green country side. The state is endowed with all the diversities of the nature that is the tourist's attractions or dream. West Bengal Tourism Development Corporation is foreseeing an investment of Rs 150 crore in the next couple of years just for promoting river tourism. The investment would go towards renovating heritage ghats along the Ganges as well as developing a Marina with speed boats, para-sailing and cruise boats facilities. Tourism's greatest potential benefit is to earn money and attached with different allied activities. This involvement can translate into numerous positive economic opportunities for society and development communities. Tourism in West Bengal has much to offer to the world. West Bengal has rich tradition, culture, craft and so on which can emerge as a rich potential tourism destination. Tourism development means more income profits for tourist's related business. The lifestyle of the Indian village includes the education and the occupation and lifestyle of the villagers. If there is Industrialization in India still the majority of the people depends on agriculture. The person of India is also engaged in the various arts, culture and handicrafts and the tourism in the country is also the major occupation of the country. As per the report of West Bengal Human Development, 2004 depicts that rural economy in the West Bengal province has improved especially in terms of agricultural production largely due to the effective function of the Panchayet system. The most remarkable acceleration of growth occurred in agriculture. Rural West Bengal is a land of stupendous dimension with a rich handicraft, handlooms, folklore, wild life etc.

### SURVEY OF LITERATURE

Tourism studies turned its attention to 'alternative' forms of tourism, suggesting that these were more likely to overcome the exploitative dimensions of mass tourism in developing countries (Lea 1993; Brohman 1996; Khan 1997). The 'pro-poor tourism' (PPT) approach can be seen as an attempt to take these questions into account and to target the benefits of tourism more directly towards poverty reduction (Brown and Hall 2008). According to Negi (1990) the attractions in rural areas are enjoyment of rural scenery, the desire for open space, quiet and piece of mind, rural sports like hunting, fishing, ethnic attractions like folk life, custom, food, drinks, and festivals, educational and historical attractions like castles, churches, temples and monasteries etc. According to Jennet Hanshall (2000) "describes that Rural area is that rural tourism uses the country side as resources, which is associated with the search by urban dweller for tranquility and space for out door recreation rather than being specifically liked to nature". Bramwell & Lane (1994) points out that "Rural tourism is a multifaceted activity. It is not just farm based tourism. It includes farm based holidays but also comprises special interest nature holidays and ecotourism, walking, climbing, riding, adventure, sports & health tourism, hunting, and angling, educational travel, arts & heritage tourism & in same areas ethnic tourism." Tourists participate in creation of sales, profits, jobs, returns and income. Tourism is characterized by the fact that consumption takes place where the service is provided (Steenwegen, 2003), and the economic impact of tourism is an important factor of national, regional and public planning and economic development. Focusing on the demand side as several authors have pointed out (Page and Getz 1997, Sharpley and Sharpley 1997), the recent trends in tourism lead to shift from standardized mass tourism to more individualistic patterns, which look for a more meaningful experience. In this sense the emergent rural tourist segment has varied motivations, which might include ecological uniqueness, cultural attractions, special adventures opportunities or the peace and quiet of the countryside. This represents a unique opportunity for rural operator, who can established network of different service providers to maximize opportunity and offer a diverse range of activities (Briedenhann and Wickens 2004)

### OBJECTIVES

1. To study the growth, development and emergence of rural tourism in the state of West Bengal.
2. To study the rural tourism potentials of west Bengal in general and Kamarpukur in Particular.
3. To study the role played by the State Government, Department of Tourism, to promote rural tourism in the state.

4. To analyse the tourist flow pattern of Kamarpukur
5. To examine the existing as well as future requirement of tourism infrastructure of Kamarpukur.

**METHODOLOGY**

This study is based on both primary and secondary data. Observation and Survey methods have also been used in conducting this research study. For fulfillment of the objectives of this study, observation method and survey method are the main technical tools. The survey instrument included questions on socio-economic aspect like age, sex, education and occupation of respondents. Information about the profile of tourism industry includes the tourism units (i.e. hotel, guesthouse, etc.), number of rooms, number of persons employed, number of local workers as well as the profile of tourists were the main elements of the survey. The Sample size was restricted to 150 respondents. The data sources include an integrated household questionnaire about socio economic and health status; a survey of village infrastructure; detailed surveys of village infrastructure; detailed survey of public, private and traditional health facilities available to villagers. The collected data has been analyzed using different statistical methods like percentage and ARMA Model for future prediction of tourist inflow.. Sources of secondary data collected were legal documents, official statistics, reports, articles, publications and other documents, reports of self-government bodies and organizations websites.

**KAMARPUKUR**

Kamarpukur is situated in the extreme West of Arambag Sub-division of Hooghly District, West Bengal in India with Bankura district in the West and Burdwan in the North. It is surrounded by three rivers like the Damodar, the Kansabati and the Darakeswar. Considering its geographical location and historical importance, Kamarpukur has taken a vital position in the road map of rural tourism in West Bengal. Although this tourist spot is of religious importance, it nature – lovers’ paradise as if Garh Mandaran, Jilimili, Susunia and Mukutmanipur are located in crow’s flight from tourists’ main destination of Kamarpukur. In other words, it may be said that the tourists visit Kamarpukur for religious purpose and thereafter cover the neighboring tourists locations in one go. The Ramakrishna Mission Kamarpukur is the holy birth place of Sri Bhagawan Ramakrishna and the centre was affiliated to the Headquarter of Ramakrishna Math and Ramakrishna Mission, Belure Math in 1947.

**STUDY AREA**

The study area has covered more than 5000 house holds were covered under the survey covering around 42 villages and 3 GPs(Gram Panchayet). In the process 22233 persons were exclusively interviewed to know about their behaviours and social practices, of which about 50% i.e 10,926 were female. As the area under operation are very much back warded with comparatively high density of socially and educationally back ward households 42% of the households surveyed are SC and around 10% households are of minority community(Mandaran GP having more proportionate of minority community). The purpose of the study to identify about different infrastructural component in the point of view of tourism as well as socio economic conditions, such major components are education, occupation, sanitation, water, environmental infrastructure .

**DEMOGRAPHIC PROFILE OF THE RESPONDENTS**

**TABLE 1: DEMOGRAPHIC PROFILE OF RESPONDENTS**

Demographic Characteristics	No of respondents	Percentage of respondents
<b>Sex</b>		
Male	85	83.33
Female	65	16.67
<b>Age</b>		
Less than 25	40	26.67
25 – 35	46	30.67
Above 45	64	42.66
<b>Marital Status</b>		
Single	50	33.33
Married	100	66.67
<b>Occupation</b>		
Businessmen	25	16.67
Servicemen	40	36.67
Professional	55	26.66
Students	30	20.00
<b>Income (Rupees)</b>		
Less than 15,000	35	23.33
15,000-45,000	50	33.33
Above 45,000	65	43.34
<b>Length of Stay</b>		
Less than 5 days	35	23.33
5- 15 days	55	36.67
Above 15 days	60	40.00

Source: Data collected from field survey

**RESULTS AND DISCUSSIONS**

For analysis the gathered data a 5 point Likert Scale was used. The range of ordinal scale starting from very good – 5(more than 80%), good- 4(more than 60% but less than 80%), satisfactory- 3(more than 40% but less than 60%), average – 2(more than 20% but less than 40%), unsatisfactory- 1(20% and less).The following tables depict that the highest score in the point of view of different infrastructural factors.

**TABLE 2: TOURISTS MOTIVATIONAL INFRASTRUCTURE**

Parameters	Score	Ranking
Cultural Infrastructure	3.8	1
Enjoyment of rural experience	3.5	2
Art and Folk lore	2.8	4
Historical Setting	3.1	3

The above table depicts that, score of cultural infrastructure is high and art and folk lore belongs to the lowest score. The reason behind the lowest score of folk-lore is modern culture exploits the rural culture. According to few artists of folk-lore that due to lack of publicity, lack of Govt. initiative, lack of fund, they are



migrated in other profession. Cultural activities at Kamarpukur are very rich. Enjoyment of rural experience is the second option to the respondents popular activities at Kamarpukur as activities bicycle rides, tree house recreation, yoga vacations, bush walking, farm holiday, horse cart rides, craft market, fishing, bird watching.

**TABLE 3: INFRASTRUCTURE OF PHYSICAL AMENITIES**

Parameters	Score	Ranking
Rest house	3.1	5
Sight seeing	3.0	6
Room service facilities (lighting, bath ,etc)	3.7	2
Attractive environment of meditation	4.2	1
Rural recreations	3.4	3
Car Parking	3.3	4

Table 4 revealed about the physical amenities infrastructure, where attractive environment for meditation belongs to highest score and sight seeing belongs to lowest score. Rural recreation infrastructure is moderately satisfied but according to respondent’s car parking infrastructure is not too much satisfied they often complained that at the time of festival the parking problem occurred. According to respondents the entire atmosphere is very peaceful so it is ideal for meditation. The internal infrastructure of rest house should improve as per the opinion of respondents.

**TABLE 4: INFRASTRUCTURES OF TOURISM ACTIVITIES**

Parameters	Score	Ranking
Handcrafts and arts	3.7	3
Shopping	3.5	4
Festivals	3.9	2
Religious activity	4.4	1
Cultural activity	3.4	5

The above table depicts about the infrastructure of tourism related activities, where the religious activity belongs to high score and cultural activity belongs to lowest. Ramakrishna Mission Pallimangal satisfactorily organized the handicraft units as per the respondents the quality of the products are good . The shopping outlets are situated inside the temple campus so it is very easy access to purchase the souveniouir by the visitors. According some locals cultural activities are exploited by the modern culture when the different behavior pattern of tourists.

**TABLE 5: DESTINATION INFRASTRUCTURES**

Parameters	Score	Ranking
Peaceful Place	4.6	1
Accessibility to the destination	4.1	2
Price consideration	3.1	6
Transportation	3.5	4
Safety and Security	3.4	5
Guide	2.8	7

The above table revealed about destination infrastructure where peaceful place belongs to highest score and guide facility belongs to least score. Transportation Cost is comparatively high as per respondents. Most of the respondents shared their view in the context of handicraft that the price of handiwork at Kamarpukur and outside Kamarpukur quite same. Low prices would easily and quickly attract clients, but this is an inefficient way to seek for sustained success in the market (Vitkienė, 2002; Kotler, 2003). At Kamarpukur there is no discount or rebate offer it implies that the price of the product is fixed. According to respondents safety and security should improve due to disturbance of some law and order.

**TABLE 6: PROMOTIONAL INFRASTRUCTURES**

Parameters	Score	Ranking
Fairs & Trade shows / Brochures	3.5	2
Advertising	3.4	3
PR Cell	4.1	1
Publications	3.2	4

In the context of promotion of marketing mix dimension, four elements were selected. Among four parameters PR Cell has the highest score and publications has the lowest score. According to respondents Public relation plays a very vital role in the promotional activity of any tourist destination. At Kamarpukur, well executed PR Cell may be established with the support of the Ramakrishna Math as per respondents. Respondents have agreed that Fairs & Trade shows or quality Brochures carry more weightage than publications. According to them Fairs & Trade shows / Brochures have stronger impact in their minds compared to any publication. Good quality of Brochures on the villages of Kamarpukur as a spiritual and rural destination may be produced containing detailed tourism information regarding accommodation, prices travel, schedules, attractions, for tourists in the villages and the pattern of different activities available including auxiliary and ancillary services through illustrations, roadmap, and graphic design of the cover and the layout of the Brochures.

**EMPIRICAL STUDY**

On the basis past 5 years tourist’s inflow data, we are analyzing the future trend of tourist inflow in Kamarpukur. We apply a general time series regression model, which describes as:

$$Y_t = X_t \beta + \epsilon_t \tag{1}$$

Where  $Y_t$  =tourist inflow,  $X_t$  = Year,  $\epsilon_t$  = White noise, with zero mean and constant variance. We estimate the time series regression equations as follows:

Tourist Inflow:

$$y_t = 4140 .79 + 85 .54 x_t \tag{2}$$

Based on the above time series regression equation we predict the future trend of tourist inflow in.This is a basic time series regression model where we do not consider the random walk model as well as the stationary property of time series that is the problem of moving average and autoregressive problem. In order to avoid the problem of autoregressive and moving average we consider the ARMA (Autoregressive Moving Average) model for prediction of tourist inflow in Kamarpukur.

AR-model:  $y_t = \rho y_{t-1} + \epsilon_t$  . It can be shown that

$$E(y_t) = 0; V(y_t) = \frac{\sigma^2}{(1 - \rho^2)}; corr(y_t, y_{t-k}) = \rho^k \tag{3}$$

ARMA MODEL:

$$y_t = \rho_1 y_{t-1} + \dots + \rho_p y_{t-p} + \varepsilon_t \tag{4}$$

We estimate the ARMA model for tourist inflow, where we apply  $\rho = 1$  and  $q = 0$  based on partial autocorrelation functions. Here  $x_t$  is the value of time. The estimate ARMA equation as follows:

Tourist inflow:

$$y_t = 3140.79 + 82.54 x_t + 0.43 y_{t-1} \tag{5}$$

Based on Akaike Information criteria and all t values for different regression parameter we can conclude that model is accepted and it can be used for predict the future trend based on past data.

**TABLE 8: ARMA ESTIMATION OF TOURIST INFLOW IN KAMARPUKUR**

Number of residuals	48		
Standard error	1430.0396		
Log likelihood	-415.45199		
AIC	836.90398		
Analysis of Variance:			
	DF	Adj. Sum of Squares	Residual Variance
Residuals	45	9,24,38,641.2	20,45,013.2

From the above table 3 we observed an Akai Ke information criterion which is highly recommended to accept ARMA (1,0) model in our analysis. If we consider the likelihood test statistics, it also suggests us to accept ARMA (1,0). In first row shows the number of observations. First column of second row shows the standard error and second column of second row shows the value of standard error. First column of the third row estimates the value Log likelihood statistics and second column of third row show the values of estimated Log likelihood statistics. First column of the fourth row estimates the value AIC statistics and second column of fourth row show the values of estimated AIC statistics. Fifth row shows the value of analysis of variance. Second column of sixth row shows degrees of freedom, third column of sixth row shows adjusted sum of squares and fourth column of sixth row shows residual variance.

**TABLE 9: SHOWS THE PARAMETERS OF ARMA ESTIMATION OF TOURIST INFLOW IN KAMARPUKUR**

Variables in the Model:				
	B	SEB	T-RATIO*	APPROX. PROB Or p-values
AR1	0.43980	0.14818	2.9681127	.00478743
MONTH	82.54851	25.34438	3.2570740	.00214403
CONSTANT	3,140.79088	719.04335	4.3680132	.00007284

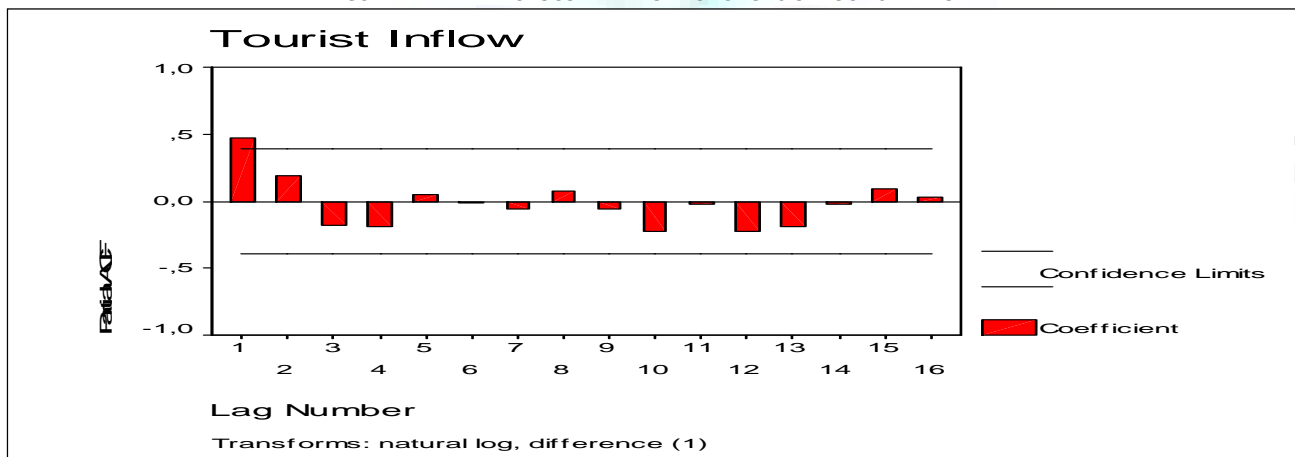
From table 4 we have a different test statistics for different parameters. Here all t-values are statistically significant at 5% level of significance. So we accept alternative hypothesis i.e. all parameters are explained our model significantly. In first row shows the variable in the model. Second column of second row shows parameters and third column of second row shows the value of standard error, fourth column of second row shows t-ratio and fifth column of second row shows p-values. First column of the third row estimates the value AR1 and remaining column shows the estimated values of different statistics. First column of the fourth row estimates the value of month parameter and remaining column shows the estimated values of different statistics. First column of the fifth row estimates the value of constant parameter and remaining column shows the estimated values of different statistics.

In our model, we accept the alternative hypothesis for each parameter based on t-statistics where the test statistics is described as follows:

\* t- statistic are significant at 1% level of significance i.e., t-values are more than 2.51 at 45 degree of freedom and t-values are more than 2.50 at 45 degree of freedom.

\*\* t- statistic are significant at 5% level of significance i.e., t-values are more than 1.96 at 45 degree of freedom and t-values are more than 1.96 at 45 degree of freedom.

**FIGURE 1: PARTIAL AUTOCORRELATION FUNCTIONS OF TOURIST INFLOW**



This figure shows that partial autocorrelation functions of tourist inflow, where it has a one coefficient, which is out of the confidence limits that mean we consider one order auto regressive model for our analysis.

TABLE 10: TOURISTS ARRIVAL TO KAMARPUKUR (ACTUAL)

Year	No of Tourist Arrival	% Change
2006	48,714	-
2007	53,322	9.45
2008	59,454	11.49
2009	82,511	38.78
2010	90,734	9.96

Source: Database from Ramakrishna Mission Authority

Table no.5 reveals the actual tourist arrivals to Kamarpukur starting from the year 2006 onwards. The table also reveals that the tourist flow to the destination is increasing every year.

TABLE 11: TOURISTS ARRIVAL TO KAMARPUKUR (FORECASTED)

Year	No of Tourist Arrival	% Change
2010	91,656	-
2011	1,03,541	12.96
2012	1,15,427	11.47
2013	1,27,312	10.29
2014	1,39,199	9.33

Table no.6 reveals the expected tourist flow to Kamarpukur starting from the year 2010 onwards with the help of ARMA model and percentage change of tourists' inflow at Kamarpukur

From the table also depicts that the tourist flow to the destination is increasing every year and it is matching the actual number of tourist arrivals with a negligible difference, which we have already seen from the recent compiled tourist statistics of the year 2010. Where the actual tourist arrivals to Kamarpukur is 90,734 and projected tourist arrivals to Kamarpukur is 91,656 with a minimum error of 1.01%.

On the basis of above analysis it has been observed that tourist inflow is increasing but the capacity of accommodation is very little. The infrastructural amenities like more smooth running transportation facilities, guide, up to date technology, should develop to increase the tourists stay at Kamarpukur.

**INFRASTRUCTURE REQUIREMENTS IN AND AROUND KAMARPUKUR**

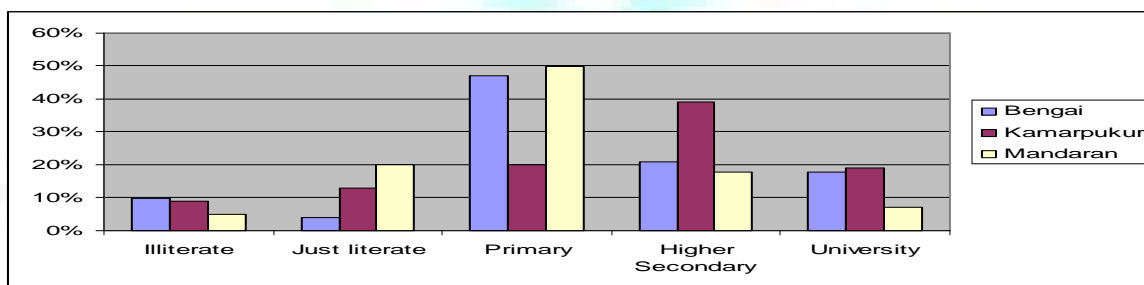
After analyzing the data both from the tourists and well as from various stakeholders it is noted that the hotel facilities to be increased substantially to accommodate more number of tourists in this destination particularly. As existing number of hotel is only seven and mostly they are budget category of hotels so effort should be made on a private –public partnership basis to construct at least two standard hotels in Kamarpukur just to make the tourists stay as most of the tourists return back on the same day to Kolkata and nearby town due to non availability of good hotels at the destination. Another important observation made by the researchers that particularly during rainy season water logging takes place causing the tourists more inconvenient to travel. So effort should be made by the concerned department of the state government to construct good drainage system to get rid of this problem of water logging.

It is also observed that during any festivals and fairs in this destination, due to the increase inflow of the people, the transportation facilities at the destinations is not sufficient to meet the need of the people. As a result within a very short span of time, the rickshaw puller and generator operator van numbers are increasing at a alarming rate causing traffic problem as well as noise pollution. So effort should be made both by the govt. as well as private body to introduce some battery operated multi utility van to minimize the sound as well as noise pollution in the area.

**RURAL INFRASTRUCTURE FOR SOCIO-ECONOMIC DEVELOPMENT**

❖ **Educational Status:**

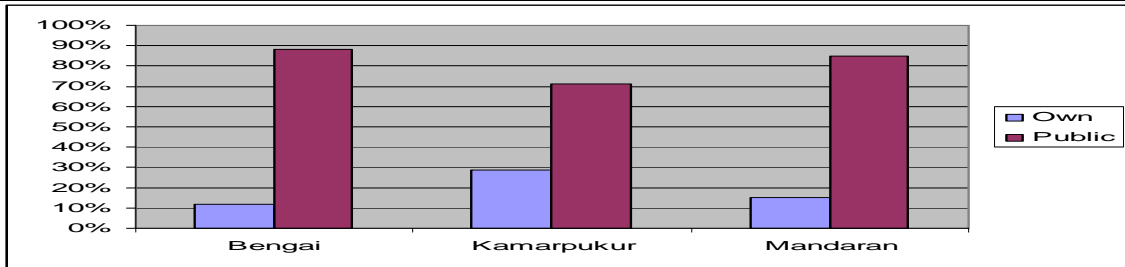
It is well recognized that education level plays a vital role in improving the quality of life of people on the average 16% of the households having good educational background with at least one person in the family having university degrees. A large population of this study area is only primary educated and the density is 39% of the total population. 23% of the households are having members who have just attended higher education. 13% of the households having just literate members and 9% of the HHs are still having members who are completely literates. In three GPs the educational status varies interestingly, Kamarpukur where more number of HHs having university Degrees most of them Masters Degree. But in the other side this GP is having more illiterate population as compare to the other two GPs Bengai and Mandaran GPs having more number of primary educated people. Education has a direct impact on the health status of the family. During the field operation it has been well recognized that house holds having good educational background are practicing healthier practices of water and sanitation activities. Muslim communities in this study area are having less education and their sanitation operation practices are very poor condition compare to the other community in this study area.



**WATER RESOURCE INFRASTRUCTURE**

“The 7<sup>th</sup> Goal of the millennium development in its Environmental sustainability focuses that by half proportion of people without sustainable access to safe drinking water reduce by 2011”

In this study area more than 70% of the households are observed using bore well/ hand pump as drinking water sources with a variance at village level whereas rest are depending upon the open well or some time pond water used for drinking water purpose. Where as pipe or tape water used is marked only in case of 10% families in the whole operational areas. In this resent scenario accessibility to the bore well/ hand pump is minimum looking in to the population size. According t the community point of view to get water from the hand pump they have to wait in long queue for long time. As the trend shows in regard to water collection for drinking in some of the specific area / HH water collected for drinking is from the contaminated sources. It is only due to insufficient water sources at the ground level.

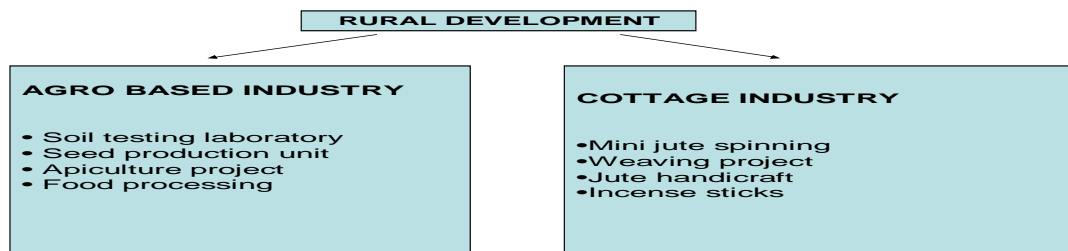


#### ❖ FOOD PRESERVATION INFRASTRUCTURE

In this present study scenario, two aspects of food keeping practices were observed during the survey. It was observed in the villages that on average 70% families are not keeping food in a relatively safer place away from animals. The other one is almost 50% of families is keeping their food for longer time after cooking.

#### ❖ RURAL DEVELOPMENT INFRASTRUCTURE

Pallimangal is a Bengali word, which means rural welfare. Thus Ramakrishna Mission Pallimangal Kamarpuku ,Hooghly has been working for the upliftment of the poor and downtrodden with an emphasis on the folk in the health, education, training in order to enable them to earn their livelihood. Since its inception in 1980, various new income generating initiatives have been launched that have developed into mature and effectively managed programmes under two major categories: Agro Based Industry and Cottage Industry.



#### ❖ AGRO BASED INDUSTRY

Soil testing laboratory established in 1983 to encourage the farming community for scientific agriculture with balanced use of plant nutrients for higher production, economy in input cost, maintenance of soil health and reduction in pollution. Total 2918 soil samples were received and tested during the year 2008-09. Soil samples for testing received from farmers 1224, soil samples received from NGO 39, from Government 2 and directly received from farmers 1632. Simultaneously apiculture project increases the potentiality of Beekeeping unemployed youths are trained and provided with Bee Box and appliances. Honey is collected from the bee keepers and is sold after processing and bottling.

#### ❖ INDUSTRY INFRASTRUCTURE

Jute is a cash crop which is cultivated in Eastern Region of the country mainly in Bengal . A large number of industries have been engaged to produce bags and carpets of jute fabrics since the 19<sup>th</sup>. Century and export the products all over the world. This helps to develop the socio economic conditions in the country. Ramakrishna Mission and Math has started jute handicraft projects through its Ramakrishna Mission Pallimangal, Kamarpukur in the year 1980. More than 160 different varieties of products comprising of bags, decorative items, shoes, money purse etc are being produced and sold at showrooms of Ramakrishna Mission located in different parts of the country. Besides this a large number of people who have been trained by experienced and expert trainers under the guidance of Ramakrishna Mission at Tarakeswar, Dhaniakhali in Hooghly districts are now engaged in producing selling the jute products. Ramakrishna Math and Mission exemplary rerecord in promoting rural crafts has now earned the patronage of Ministry of Tourism, Govt. of India for its valuable contribution to the "Incredible India".

## RECOMMENDATIONS

Some policy prescriptions are given in the context.

1. Local authorities should have to provide a legislative frame work to regulate tourism.
2. Govt. should do something towards provide the improvement of the village road.
3. Multiple information service must be provided such as established 'Tourism Information Centre' and local educated youths should be hired as a guide those who know Hindi and English.
4. To build more guest houses/hotels for accommodation of tourist at the time of Mass Tourism.
5. So many heritage architectural sites are in ruined condition (Manik Rajas Palace), so it should be taken over & maintained both by R.K.M authority and local Govt.
6. Organize Silpa Mela, Exhibition, Travel Fairs in Calcutta and other major cities of India.
7. Local authority should do something for development of drainage system.
8. Improvement of transportation facilities and other allied facilities.
9. Optimum marketing strategies keeping in mind the all segment of the tourism marketing.
10. The tourism package/product, which is composite in nature, must match the taste, temperament, income and requirement of difference group and segment.
11. The stable price structure of various tourist packages/products, which place a very important role in effective tourism marketing and directly effects, the sales of the tourism products because the potential customers are price sensitive.

## CONCLUSION

In the conclusion, we can say that, the social significance of heritage lies in its association with identity: it is fundamental in helping individuals, communities. Kamarpukur is a destination of custodian of religious heritage sites constitutes key elements in defining their Socio Cultural identity. Interest in cultural heritage emerged as a tourist attraction during the 1990's and was embraced as an important economic asset and a mechanism to preserve ethnicity. History and its tangible markers in the form of buildings, Cemeteries, folk music, literature, Culture has quietly survived for centuries. This study reveals that Kamarpukur has a great prospect as rural heritage tourism, cultural tourism destination as well as pilgrimage tourism. The interest of tourism and heritage conservation is complementary and thus tourism & culture become partners in the developmental process. This paper provides some recommendations that the Government

as well as private agencies including NGOs intending to promote rural tourism infrastructure in the state of West Bengal which can ensure sustainable economic development and positive social change in this particular destination. It can be said that rich traditions of religious tourism, Kamarpukur can emerge to be a promising destination for modern tourism in India.

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## PROFITABILITY AND LIQUIDITY MANAGEMENT OF FMCG COMPANIES IN INDIA: A COMPARATIVE STUDY BETWEEN HINDUSTAN UNILEVER LIMITED (HUL) AND ITC LIMITED

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### ABSTRACT

*This paper delves at evaluating the profitability and liquidity management and inter-firm comparison based on statistical models of two leading FMCG companies in India – HUL and ITC Limited over a period of ten years (2000-01 to 2009-10). The Indian FMCG sector is the fourth largest sector in the economy with a total market size of US\$ 13.1 billion and it has been experiencing a phenomenal pace of growth since last decade. For the purpose of analysis statistical tools like descriptive statistics and linear multiple regressions are used. Statistical results shows that the HUL has performed better than ITC Limited both in terms of profitability and liquidity. Multiple regression results reveal that liquidity performance indicators have direct impact on profitability.*

### KEYWORDS

FMCG, Liquidity, Multiple Regression, Profitability.

### INTRODUCTION

The FMCG industry has emerged as one of the largest sectors in the Indian economy by registering an astonishing double-digit growth rate in sales in the past couple of years. Characterized by healthy distribution network, strong MNC presence, intense competition between the organized and the unorganized segments and low operational costs, it is one of the rapid growing industries in India with a total market size US \$13.1 billion. The FMCG market is set to treble from US\$ 11.6 billion in 2003 to US\$ 33.4 billion in 2015. While the recent spiraling inflation remains a barrier to the sector's growth prospects, many FMCG companies still blossom under inflationary pressures by passing on the increasing cost to consumers through a well-thought-out blend of price hikes, reduction in packaged size, and alternative product mix.

Over the years, companies like, Hindustan Unilever Limited (HUL) and ITC Limited have improved performance with innovation and strong distribution channels. Their key categories have strengthened their presence and out performed peers in the FMCG sector. In addition, companies have been successful in reviving their presence in the semi-urban and rural markets.

HUL has been ranked sixth in the list of 'Top Companies for Leaders 2011 Study Results' announced by Aon Hewitt, The RBL Group and Fortune ([www.hul.co.in/mediacentre/news/2011/HUL](http://www.hul.co.in/mediacentre/news/2011/HUL)). It has been also ranked sixth in the list of 'The World's Most Innovative Companies 2011' published by Forbes ([www.forbes.com/special-features/innovative-companies.html](http://www.forbes.com/special-features/innovative-companies.html)). HUL topped the list of 'The 10 Best FMCG Companies in India' with market capitalization of ₹ 614,59 crores in 2010-11 ([www.chillibreeze.com/articles\\_various/fmkg-in-india.asp](http://www.chillibreeze.com/articles_various/fmkg-in-india.asp)). The products of HUL vary from 'Home & Personal Care' to 'Food and Beverages'.

ITC is one of the India's foremost private sector companies with a market capitalization of ₹ 140,408 crores (this is the total market capitalization value of its four business segments – Hotels, Packaging and Agri-Business, Information Technology and FMCG) in 2010-11. ITC is rated among the 'World's Best Big Companies', 'Asia's Fab 50' and the 'World's Most Reputable Companies' by Forbes Magazine, among 'India's Most Respected Companies' by Business World and among 'India's Most Valuable Companies' by Business Today. ITC ranks among 'India's 10 Most Valuable (Company) Brands', in a study conducted by Brand Finance and published by the Economic Times. ITC also ranks among 'Asia's 50 best Performing Companies' compiled by Business Week ([www.itcportal.com/about-itc/itc-profile/itc-profile.aspx](http://www.itcportal.com/about-itc/itc-profile/itc-profile.aspx)).

Accordingly, this study makes an attempt to analyze the profitability and liquidity performance of leading FMCG companies in India. It assumes significance because FMCG sector is considered as one of the pillars of Indian economy.

### OBJECTIVES

Keeping in view the importance of FMCG sector in India's economic growth scenario, the study generally aims at evaluating the profitability and liquidity performance of the leading FMCG companies and also to find out the relationship between liquidity performance indicators and profitability (HUL and ITC Limited), over a period of 10 years (2000-01 to 2009-10).

### METHODOLOGY

This section reveals all about the institutions and variables included in the study, the distribution patterns of data and applied statistical techniques in exploring the relationship and comparison between selected FMCG companies in terms of profitability and liquidity performance analysis. The study covers two leading companies in the FMCG segment – HUL and ITC Limited. These two companies are the leaders in their respective sectors securing. The purposive sample design method was applied for selection of sample in this analysis. The relevant data have been collected from Prowess Database of CMIE for computation of the ratios. The study has been undertaken for a period of 10 years from 2000-01 to 2009-10.

This study recognizes key variables that influence profitability and liquidity performance. The dependent variable is defined as the profitability of the sample firms. The independent variable is interpreted as the commonly used profitability and liquidity ratios. Net Profit Margin (NPM), Capital Turnover Ratio (CTR), Return on Shareholders Equity (ROSE), Current Ratio (CR), Quick Ratio (QR), Super Quick Ratio (SQR), Debt-Equity Ratio (DER) are taken as independent variables and Return on Investment (ROI) is taken as an dependent variable.

### RESULTS AND DISCUSSIONS

Tables 1 and 2 provide descriptive statistics of the collected dependent and independent variables. Variables were calculated using accounting ratios. The accounting ratios were computed from data set obtained from Prowess database of CMIE to understand profitability and liquidity trend of selected FMCG

companies. In addition, the measurement of profitability could only be based on return on investment, not on so-called profitability ratio. To make the analysis and interpretation more precise and accurate, the values of A.M., S.D., C.V., maximum, minimum, Skewness and Kurtosis have been computed from the ratios.

TABLE - 1: DESCRIPTIVE STATISTICS OF HUL

Variables	NPM	CTR	ROSE	CR	QR	SQR	DER	ROI
N	10	10	10	10	10	10	10	10
Maximum	18.15	9.90	134.00	1.57	1.05	0.42	0.80	133.54
Minimum	11.91	2.70	50.00	0.96	0.45	0.05	0.01	34.54
Mean	14.13	5.20	76.60	1.29	0.78	0.26	0.19	70.87
S.D.	2.25	2.70	29.54	0.23	0.19	0.12	0.30	32.58
C.V. (%)	5.10	7.29	872.71	0.05	0.039	.016	.090	1061.50
Skewness	0.81	1.04	1.20	-0.12	-0.08	-0.53	1.68	1.17
Kurtosis	-0.74	-0.34	0.26	-1.79	-0.98	-1.20	1.27	0.28
K-S Statistic	0.82	0.78	0.68	0.63	0.44	0.53	1.17	0.74
Probability	0.43	0.00	0.00	0.15	0.09	0.56	0.33	-
r	-0.28	0.97**	0.93**	-0.49	-0.56	-0.21	-0.34	-
t value of r	0.83	12.20	7.28	1.59	1.92	0.60	1.03	-

\*\* Correlation is significant at the 0.01 level (2-tailed).

Source: CMIE, Results computed.

TABLE - 2: DESCRIPTIVE STATISTICS OF ITC LIMITED

Variables	NPM	CTR	ROSE	CR	QR	SQR	DER	ROI
N	10	10	10	10	10	10	10	10
Maximum	28.81	1.30	29.00	2.93	1.39	.39	.25	28.81
Minimum	21.35	1.00	24.00	1.35	.82	.01	.01	22.81
Mean	23.47	1.11	26.50	2.24	1.17	0.19	0.05	25.93
S.D.	2.16	0.09	1.50	0.47	0.18	0.16	0.07	1.88
C.V. (%)	4.68	0.01	2.28	0.23	0.04	0.03	0.01	3.55
Skewness	1.86	0.61	0.12	-0.451	-1.09	0.06	2.86	-0.16
Kurtosis	4.16	-0.16	-0.40	-0.32	0.51	-2.01	8.45	-0.27
K-S Statistic	0.71	0.76	0.73	0.43	1.02	0.78	1.2	0.45
Probability	0.22	0.21	0.00	0.73	0.41	0.32	0.75	-
r	0.43	0.43	0.85**	-0.12	-0.29	-0.35	0.12	-
t value of r	1.34	1.36	4.58	0.35	0.87	1.06	0.33	-

\*\* Correlation is significant at the 0.01 level.

Source: CMIE, Results computed.

Both positive and negative skewness have been observed for all the selected variables of the two companies and the kurtosis indicates that all the selected variables are less peaked than normal distribution only with the exception of NPM and DER of ITC Limited where the distribution is leptokurtic, because for a normal distribution kurtosis generally equals to 3. The Kolmogorov-Smirnov statistic confirms that the series is normally distributed.

**MULTIPLE REGRESSION STATISTICS**

Multiple regression techniques have been applied to study the joint influence of all the selected ratios indicating liquidity performance and performance of profitability and the regression coefficients have been tested with the help of the most popular 't' test. In this study, net profit margin, capital turnover ratio, return on shareholders equity, current ratio, quick ratio, super quick ratio and debt-equity ratio have been taken as the explanatory variables and return on investment has been used as the explained variable.

The regression model used in this analysis is:

$$ROI = \beta_0 + \beta_1 NPM + \beta_2 CTR + \beta_3 ROSE + \beta_4 CR + \beta_5 QR + \beta_6 SQR + \beta_7 DER + \epsilon_i$$

(unexplained variables or error terms)

Where  $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$  and  $\beta_7$ , are the parameters of the ROI line.

To reduce the number of financial ratios, numerous MDS runs on the SPSS are performed using different combination of ratios. A study by Moyer (1977) using the enter method showed that even though the stepwise method uses less variables in the model, the results obtained are useful for the all ten years as compared to the results obtained using the enter method.

Multiple correlations and multiple regression analysis of the selected companies have been tabulated in Tables 4 and 5.

TABLE - 3: MULTIPLE CORRELATIONS AND MULTIPLE REGRESSIONS OF HUL

Regression Coefficient						
Effect	Coefficient	Standard Error	Std. Coefficient	tolerance	t	p-Value
CONSTANT	-40.804	6.126	0.000	.	-6.661	0.001
CTR	12.990	0.303	1.077	0.770	42.868	0.000
NPM	3.505	0.364	0.243	0.762	9.630	0.000
SQR	-20.261	5.695	-0.080	0.958	-3.558	0.012
R=0.999	R <sup>2</sup> =0.997		Adjusted R <sup>2</sup> = 0.996		S.E. of the estimate = 2.15368	
F statistics= 12.657	Durbin-Watson=2.906		R <sup>2</sup> change = 0.006		P-value of F change =0.012	

TABLE - 4: MULTIPLE CORRELATIONS AND MULTIPLE REGRESSIONS OF ITC LIMITED

Regression Coefficient						
Effect	Coefficient	Standard Error	Std. Coefficient	tolerance	T	p-Value
CONSTANT	-2.221	6.145	0.000	-	-0.361	0.727
ROSE	1.062	0.232	0.851	1.000	4.588	0.002
R=0.851	R <sup>2</sup> =0.725		Adjusted R <sup>2</sup> = 0.690		S.E. of the estimate = 1.04830	
F statistics= 21.047	Durbin-Watson=2.358		R <sup>2</sup> change = 0.725		P-value of F change =0.002	

Table 3 and 4 shows that multiple regression results between the explained and explanatory variables is authenticated because the result of tolerance satisfy the model, that is, tolerance value exceeds 0.5.

**FINDINGS**

Table 1 shows that in case of HUL, all the liquidity ratios (CR, QR, SQR and DER) and also NPM are negatively associated with ROI (taken as explained variable), which is an important indicator of profitability. This means that the result is in support of expectation that liquidity is negatively associated with lower profitability. But, the other two profitability ratios CTR and ROSE are strongly (positive) associated with ROI. In case of ITC Limited (Table 2), the correlation coefficient reveals almost negligible (both positive and negative) relationship between all the liquidity ratios (CR, QR, SQR, DER) and ROI. This implies that liquidity has almost no effect on profitability or in other words, the result is in support of expectation that liquidity is negatively associated with lower profitability. NPM and CTR shows a moderate positive association while ROSE is strongly (positive) associated with ROI. The results of correlation coefficient are significant at 1 per cent (asterisk) and 5 per cent level.

The strength of the relationship between the explained variable, ROI and all the explanatory variables taken together and the impact of these explanatory variables on the profitability are given in Table-3 in case of HUL. It was observed that an increase in CTR by one unit; the ROI increased by 12.990 units that were statistically significant at 1 per cent level. However, when NPM increased by one unit, the ROI of the company increased by 3.505 units that were statistically significant at 5 per cent level and an increase in SQR by one unit; the ROI decreased by 20.261 units that were statistically significant at 5 per cent level. The multiple correlations among the explained variable ROI and the explanatory variables taken together were 0.999. It indicates that the profitability was more responded by its explanatory variables. It is also evident from the value of  $R^2$  that 99.7 per cent of variation in ROI was accounted by the joint variation in explanatory variables. Adjusted 'R' square ( $R^2$ ) signifies that 99.6 per cent of the positive variations in the ROI are explained by the explanatory variable. Standard Error of regression coefficients being low (2.15368), demonstrates that there exists really line of estimates among the variables.

Table-4 (ITC Limited) reveals that a unit increase in ROSE simultaneously increases ROI by 1.062 units that were statistically significant at 1 per cent level. The multiple correlations among the dependent variable ROI and the independent variable were 0.851. It is also evident from the value of  $R^2$  that 72.5 per cent of variation in ROI was accounted by the variation in independent variables. Adjusted 'R' square ( $R^2$ ) signifies that 69.0 per cent of the positive variations in the ROI are explained by the independent variable. Low standard error of regression coefficients (1.04830) demonstrates that there really exists line of estimates among the variables.

However, for both the selected companies an insignificant variability in profitability could be the result of the composite effect adopted in the analysis as well as many other performance management related unexplained variables.

**CONCLUSIONS AND SUGGESTIONS**

Profitability and liquidity management is of crucial importance in financial management decision. The most favorable financial performance could be achieved by a company that can trade off between profitability and liquidity performance indicators. The purpose of this study is to find out the relationship between liquidity performance indicators and profitability as well as comparison. Descriptive statistics discloses that performance of both the companies in terms of profitability and liquidity position is very satisfactory and relatively efficient financial position is found in case of HUL and ITC Limited under the study and at the same time liquidity position has a significant impact on profitability. Multiple regression tests confirm a higher degree of association between the liquidity performance indicators and profitability. Therefore, it is suggested that both the institutions under the study should concern on financial profitability, especially unexplained variables in purpose of creating shareholders' wealth.

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## A COMPARATIVE STUDY ON BUYING BEHAVIOR OF RURAL AND URBAN CUSTOMERS IN SELECTED DISTRICT OF GUJARAT

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### ABSTRACT

*There is huge potential in the rural markets because of increase Government support, stability of income and education and exposure of different kinds of media. But because rural market is different from urban market in terms of demographic features, socio-culture values, buying behavior, purchasing pattern of rural customer are different than urban customer, and so marketer needs different strategies and marketing mix to target rural customer. This paper focuses on the status of rural marketing in the present scenario, and comparative studies of rural and urban customers while purchasing mobile phone in the Ahmedabad district. Data are gathered through questionnaire and sample size taken is 250 respondents.*

### KEYWORDS

rural market, urban market mobile phone.

### INTRODUCTION

Rural Markets have acquired significance, as overall growth of the economy and positive policies in favor of rural masses have resulted into substantial increase in the purchasing power of people in rural areas. The economic slowdown has adversely affected the urban organized retail, especially the manufacturing and services sector, which has in turn slowed down the urban market. On the other hand, its rural counterpart is thriving. Rural areas are consuming large quantities of industrial and urban manufactured products. Marketers, today, have realized that there is a huge potential in the rural market, and have started finalizing strategies in this area. Rural Market, have fostered the growth of industries like automobiles, cement, consumer electronics, textiles, telecommunications and fast moving consumer goods, among others. However marketer needs to study the similarities and differences in consumer behavior in the two settings. The rural consumer differs from the urban consumer in the following aspects: Economic situation, lifestyle, occupation and psychological factors like perception, cognition and motivation. The rural consumer maybe more influenced by traditions, customs and values. The low per capita income leads to low consumption. Rural market maybe underdeveloped and the rural consumer may not be aware of the latest trends and popular brands. Medium of communication of information could also vary between rural and urban consumers. This study was done to assess the differences and similarities between consumer buying behavior for mobile phones among the urban and rural customers.

### LITERATURE REVIEW

Anand & Hundal, B .S. (2007) examined the comparative behavior of rural and urban counter parts towards the purchase of refrigerator. The factors considered by them are social status, advertising influence, brand reputation, and income.

Boby Joseph. S.J.Vishnu Khannal (2011) published an article on "A comparative study of buying behavior of mobile phones among rural, semi rural and urban teenagers of Nepal".

Chirag V. Erda (2008) examined the comparative behavior of rural and urban customers towards the purchase of mobile phone. The factors considered by them are price, quality, style, functions, and brand name.

Deepti Srivastava (2010) published an article on "Marketing to Rural India: A changing Paradigm". Her paper studies the changing paradigm of the Indian rural markets and suggests some ways in overcoming the roadblocks in rural selling. A new rural marketing mix is suggested with special emphasis on the marketing communication mix.

Francis Piron, (2006) published an article on "China's changing culture: rural and urban consumers' favorite things", his research aims at discovering and understanding what Chinese rural and urban consumers value most among their possessions.

Gupta (1987) examined the factors motivating consumers to buy durables, the factors considered by them in making brand choice, source of information, role of family members in choice of product, and to examine customer satisfaction.

Jagdish Prakash & Akanksha Srivastava (2009) published article on "Management of Rural Marketing Opportunities and Challenges Ahead". His paper focuses on the status of rural marketing in the present scenario, reasons responsible for boom in these markets , opportunities waiting to be exploited and challenges ahead.

Mandar, Avishkar & Ankita (2008) has examined decision making process of rural customer and the factors that influence their purchasing in case of FMCG products.

### OBJECTIVES OF STUDY

1. To assess the buying behavior of rural and urban customers as regards to mobile phone.
2. To study difference in source of information used by urban and rural customers.
3. To study and compare motivational factors such as price, quality, style, functions, and brand name affect the purchasing of mobile phones by urban and rural customer.

### HYPOTHESIS

1. Ho: There is no significant difference between in the demographic features rural and urban customer.
2. Ho: There is no significant difference between information source and the purchasing of phone among rural and urban customer.
3. Ho: There is no significant difference between motivating factors and the purchasing of phone among rural and urban customer.

**RESEARCH METHODOLOGY**

**TYPE OF DATA AND SOURCES OD DATA:** Researcher has used two kinds of data for the study, primary and secondary data. Primary collected from surveying the respondents. For collecting primary data structure questionnaire is used by the researcher. And Secondary data are collected various magazines, journals, articles, websites, books etc.

**RESEARCH DESIGN:** Descriptive research design is followed for studying the purchasing pattern of rural and urban customers of mobile phones. A structured questionnaire is used for collecting primary data from respondent.

**TARGET POPULATION:** Target population involves the users and buyers of cellular services. Researcher had taken target population as college students, as they are major user of different kind of mobile phones.

**SAMPLE SIZE:** It denotes the number of elements included in study. Researcher had taken sample of 250 respondents from Ahmedabad district where 125 respondents are taken from Ahmedabad city and rest 125 responses are collected through Viramgam and Dhanduka which is rural counter parts of Ahmedabad district.

**SAMPLING DESIGN:** For the purpose of this study researcher has adopt basically non-probability method, where researcher has applied judgmental sampling for selecting sample.

**DATA TABLE AND INTERPRETATION**

**TABLE: 1 TABLE SHOWING DEMOGRAPHIC PROFILE OF RESPONDENT**

Variables	Characteristics	Respondent					
		Rural		Urban		Total	
		No	%	No	%	No	%
Age	1.14-17	6	5	9	7	15	6
	2.18-21	82	65	113	90	195	78
	3.Above 21	37	30	3	3	40	16
Chi – Square value (p-value)		34.428 (0.00006)** d.f. = 2					
Sex	1.Male	72	58	82	66	154	62
	2.Female	53	42	43	34	96	38
Chi – Square value (p-value)		1.370 (0.2419) d.f. = 1					
Educational qualification	1.U.G	52	42	48	38	100	40
	2.Graduate	40	32	37	30	77	31
	3.P.G	19	15	26	21	45	18
	4. other	14	11	14	11	28	11
Chi – Square value (p-value)		1.366 (0.7136) d.f. = 3					
Family income	1. <5000	13	10	7	6	20	8
	2. 5000-10000	21	17	23	18	44	18
	3. 10001-15000	43	34	37	30	80	32
	4. above 15000	48	39	58	46	106	42
Chi – Square value (p-value)		3.284 (0.3498) d.f. = 3					

The demographic data in Table-1 indicates that most of the respondents in rural (66%) and urban (90%) category fall in the age category of 18-21. 58% of rural population is male and 43% is female while in urban sample 66% is male and 34 % is female. Most of the respondents in rural (52%) and urban (38%) area are under-graduate. Family income of rural respondents indicates that most of the respondents (34%) are between 10001-15000 while family income of urban respondents (46%) indicates that most of the respondents are above 15000.

**TABLE: 2 TABLE SHOWING MOBILE PHONE USED BY THE RESPONDENT**

Sr. no.	Mobile phone	Respondent					
		Rural		Urban		Total	
		No	%	No	%	No	%
1	Nokia	13	10	43	34	56	21
2	Macro max	17	15	14	12	31	12
3	Samsung	9	7	29	23	38	15
4	Reliance	8	6	9	7	17	7
5	Tata	8	6	6	5	14	6
6	L.G	3	2	3	2	6	3
7	Sony	5	4	7	6	12	5
8	Spice	17	14	5	4	22	9
9	Fly	11	9	4	3	15	6
10	Other	34	27	5	4	39	16
	Total	125	100	125	100	250	100
Chi – Square value (p-value)		58.83 (0.00001)** d.f. = 8					

The above table indicates that most of the rural respondents (27%) prefer other cheap brand mobiles while most of the urban respondents (34%) prefer Nokia mobile.

**TABLE: 3 TYPE OF MOBILE PHONE USED BY THE URBAN AND RURAL RESPONDENTS**

Sr. no	New & Used Mobile phone	Respondent					
		Rural		Urban		Total	
		No.	%	No.	%	No.	%
1	New mobile	45	36	87	70	132	53
2	Used mobile	80	64	38	30	118	47
	Total	125	100	125	100	250	100

The above table indicates that most of the rural respondents (64%) buy Used or second hand mobile while most of the urban teenagers (70%) prefer new mobile.

**TABLE 4: COST OF MOBILE PHONE PAID BY THE RURAL AND URBAN RESPONDENTS**

Sr. no	Cost of Mobile phone in (Rs.)	Respondent					
		Rural		Urban		Total	
		No.	%	No.	%	No.	%
1	Below 2000	52	42	42	30	94	38
2	2001-5000	47	38	37	33	84	33
3	5001-10000	17	13	26	21	43	17
4	More than 10000	9	7	20	16	29	12
	Total	125	100	125	100	250	100

The above table indicates that most of the rural respondents (42%) purchase the mobile which have cost of mobile below 2000 while incase of urban respondent's majority of the respondents (33%) prefer cost between 2001-5000.

**TABLE 5 TABLE SHOWING SOURCES OF INFORMATION USED BY THE RESPONDENT**

Sr. no.	Sources of Information	Respondent					
		Rural		Urban		Total	
		No	%	No	%	No	%
1	News paper	7	6	7	6	14	6
2	T.V	8	6	23	18	31	12
3	Internet	3	2	44	35	47	19
4	Shopkeeper	41	33	10	8	51	20
5	Friends	32	26	22	18	54	22
6	Family	29	23	14	11	43	17
7	Other	5	4	5	4	10	4
	Total	125	100	125	100	250	100
Chi – Square value (p-value)		68.952 (0.00001)** d.f. = 5					

From the above table it is inferred that most of the rural and urban respondents use shopkeeper (33%), friends (rural- 26%) followed by family (29%) and T.V (8%) while most of urban respondents use internet (35%), T.V. (18%) and friends (18%) as major sources of information.

**TABLE 6 TABLE SHOWING MAJOR FACTORS THAT AFFECT THE PURCHASE DECISION OF THE RESPONDENT**

Sr. no.	Important Factors	Respondent					
		Rural		Urban		Total	
		No	%	No	%	No	%
1	Price	41	32	20	16	61	24
2	Quality	12	10	25	20	37	15
3	Style	37	29	11	9	48	19
4	Functions	7	6	15	12	22	9
5	Brand name	21	17	35	28	56	22
6	Latest technology	7	6	19	15	26	10
	Total	125	100	125	100	250	100
Chi – Square value (p-value)		37.828 (0.00004)** d.f. = 5					

From the above table it is inferred that in case of rural respondents (41%) low price is motivating factor for purchasing mobile phones while in case of urban respondents Brand name (28%) and quality (20%) are the motivating factors.

**TABLE 7 TABLE SHOWING Z-VALUE FOR MAJOR FACTORS THAT AFFECT THE PURCHASE DECISION OF THE RESPONDENT**

Sr no	Important features	Respondent						z-value	p-value
		Rural		Urban		Total			
		No	%	No	%	No	%		
1	Price	41	33	20	16	61	24	3.188	0.0023**
2	Quality	12	10	25	20	37	15	2.236	0.025*
3	Style	37	30	11	9	48	19	4.346	0.000**
4	Functions	7	6	15	12	22	9	1.667	0.095
5	Brand name	21	17	35	28	56	22	2.101	0.0358*
6	Latest technology	7	6	19	15	26	10	2.346	0.0148*
	Total	125	100	125	100	250	100		

\* indicates significance at 5% level.

\*\* indicates significance at 1% level.

## FINDINGS

- From the study it was found that most of the respondents in rural (66%) and urban (90%) category fall in the age category of 18-21. Also from the chi-square study shows that there is no significant difference in age group of rural and urban with p-value 0.00006.
- From the study it was found that 58% of rural population is male and 43% is female while in urban sample 66% is male and 34% is female. Also from the chi-square study shows that there is no significant difference in gender ratio of rural and urban with p-value 0.2419.
- From the study it was found that most of the respondents in rural (52%) and urban (38%) area are Under-Graduate. Also from the chi-square study shows that there is no significant difference in education ratio of rural and urban with p-value 0.7136.
- From the study it was found that family income of rural respondents indicates that most of the respondents (34%) are having family income between 10001-15000 while most of urban respondents (46%) are having income above 15000. Also from the chi-square study shows that there is no significant difference in education ratio of rural and urban with p-value 0.3498.
- The study indicates that most of the rural respondents (27%) prefer other cheap brand mobiles while most of the urban respondents (34%) prefer Nokia mobile. Also from the chi-square study shows that there is significant difference between rural and urban respondent in selection of brand of mobile with p-value 0.00001.
- The study indicates that most of the rural respondents (64%) buy Used or second hand mobile while most of the urban teenagers (70%) prefer new mobile.
- The study indicates that most of the rural respondents (42%) purchase the mobile which have cost of mobile below 2000 while incase of urban respondent's majority of the respondents (33%) prefer cost between 2001-5000.

8. From the study it was found that most of the rural and urban respondents use shopkeeper (33%) , friends (rural- 26%) followed by family (29%) and T.V (8%) while most of urban respondents use internet (35%), T.V. (18%) and friends (18%) as major sources of information. Also from the chi-square study shows that there is significant difference between rural and urban respondent in selection of brand of mobile with p-value 0.00001
9. From the study it is inferred that in case of rural respondents (41%) low price is motivating factor for purchasing mobile phones while in case of urban respondents Brand name (28%) and quality (20%) are the motivating factors. Also from the chi-square study shows that there is significant difference in motivating factor that affect the purchase of mobile phones by rural and urban respondent p-value 0.00004.
10. From the z-test it is found that out of all other motivating factors brand and style are the two factors that can crate difference in purchasing of urban and rural customer because their proportionate value is less than 0.005.

### CONCUSION

A survey of customers has been conducted to know the variables that affect the selection of service provider and to study the differences and similarities between consumer buying behavior for mobile phones among the urban and rural customers. According to our study we conclude that customers in rural area are cost conscious they mostly prefer low cost or second hand mobile phone while urban customers are more concern for brand name and other features such as style and quality of mobile phones. Also there is huge difference between the sources of information used by urban and rural customers and the major influence in purchasing decisions. And because of such difference in their buying pattern and procedure it is inevitable for mobile phone companies to develop different set of marketing strategies to exploit huge potential of rural markets. Rural marketing cannot succeed if the marketing plans are not modified and until innovative approach is adopted by the mobile companies to attract target customers.

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## RETAILING STRATEGIES FOR CUSTOMER SATISFACTION: COMPARATIVE STUDY OF MORE AND FOOD WORLD

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### ABSTRACT

*Retailing has been the most dynamic and attractive sector in the recent times.. While the retailing industry itself has been present through out the history in our country, it is only the recent past that has witnessed a significant vitality. Retailing arena today is very different as compared to earlier practices. Retailing is the set of business activities that adds value to the products and services sold to consumers for their personal or family use. It's the latest bandwagon that has been witnessing hordes of players leaping onto it. Often people think of retailing only as the sale of products in stores. But retailing also involves the sale of services. Retailers attempt to satisfy consumer needs by having the right merchandise, at the right price, at the right place. The purpose of this study is to examine the present Retail strategies of store services and store choice and the effect of store services and store choice on Customer satisfaction at MORE and FOODWORLD. Results of my study shows that MORE retail store should concentrate more on improving the store services and store choice Retail strategies for better customer Satisfaction and FOOD WORLD should concentrate on some more retail strategies on store choice.*

### KEYWORDS

Retailing, Customer Satisfaction, Food World, MORE, Retail strategies, store choice.

### INTRODUCTION

The face of Indian retailing has witnessed a rapid transformation over the last decade. Retailing in India is one of the pillars of its economy and accounts for about 15% of its GDP.<sup>[1]</sup> The Indian retail market is estimated to be US\$ 450 billion and one of the top five retail markets in the world by economic value.<sup>[2][3]</sup> In India, the retail sector is the second largest employer after agriculture.

The retailing sector in India is highly fragmented and predominantly consists of small independent, owner-managed shops. This is evident from the fact that shopping mall activity which was earlier only a part of the big cities has started percolating down to smaller cities and towns. Retailers are the final business in a distribution channel that links manufacturers to consumers. Thus, retailing includes all the activities involved in selling goods or services directly to consumers for personal, non business use. A retailer or retail store is any business enterprise whose sales volume comes primarily from retailing. The purpose of this study is to examine the present Retail strategies of store services and store choice and the effect of store services and store choice on Customer satisfaction at MORE and FOODWORLD.

### OBJECTIVES OF THE STUDY

1. To study the present Retail strategies followed by MORE and FOODWORLD for their store services and store choice.
2. To examine the effect of store services and store choice on Customer satisfaction.

### Scope of the study

Since the whole world is revolving around retailing and the scope is very wide, my study is limited to HYDERABAD region only i.e. Suchitra and Bowenpally stores for MORE and Karkhana store for FOOD WORLD

### REVIEW OF LITERATURE

Jinfeng, W. and Zhilong, T. (2009)<sup>4</sup> indicated the positive effect of store image dimensions such as convenience, perceived price, physical facilities, employee service, and institutional factors on retailer equity dimensions as antecedents of retailer equity.

Store image affects purchase intentions indirectly, by reducing perceived risk and increasing Store brand quality perceptions (Liljander, V. et al. 2009)<sup>5</sup>.

Understanding buying behavior patterns *per se* is not enough without understanding the composition and origin of the customer (Applebaum William 1951)<sup>6</sup>. One such study compared frequent department store customers based on the activity, interest and opinion items, media questions and several demographic variables to get an in depth profile (Crask Melvin and Reynolds Fred, 1978)<sup>7</sup>.

Bellenger Danny N, Steinberg Earle, Stanton Wilbur W (1976)<sup>8</sup> have empirically tested the relationship between the consumers self image, his store image and his loyalty to that store. Lifestyle characteristics have been used to identify shopper's communication needs which would be useful in designing suitable promotional strategies (Moschis C George P, 1976).<sup>9</sup>

### METHODOLOGY AND SAMPLING

#### SAMPLING METHOD

Simple random sampling is adopted. Sample size is restricted to 50 customers per each store.

#### DATA COLLECTION

The data were collected through personally administering the structured questionnaire which contains open and closed questions and by intercepting customers at the exit doors of retail stores after they have finished their respective visits to the stores.

Secondary sources are the other important sources through which the data is available. Some of the sources are Internet, Websites, Journals, and Articles and Store Records.

## DATA ANALYSIS AND INTERPRETATION

## STORE SERVICES (MORE &amp; FOOD WORLD)

	Good		Average		Below average	
	MORE	FW	MORE	FW	MORE	FW
Ease of entering	41	45	6	5	3	0
Ease of picking up products from the shelf	36	29	12	20	2	1
Ease of product traceability	32	31	15	18	3	1
Ease of billing	30	37	18	13	2	0
Ease of navigation	27	31	21	15	2	4
Ease of exit	35	40	10	10	5	0
Availability of shopping baskets/trolleys	32	38	18	12	0	0
Standardized service offerings	22	30	23	11	5	9
In house brands	27	23	15	21	8	6
Is the timings of the store convenient	32	36	11	10	7	4
Ease of contacting customer service representative	28	25	18	18	4	7
Ease of exchange of products or refund of your money	23	27	19	18	8	5
Effectiveness of communication by the store employees	25	31	23	16	2	3

Source: primary source of data.

## STORE CHOICE (MORE&amp;FOOD WORLD)

Questions	Agree		Neutral		Disagree	
	MORE	FW	MORE	FW	MORE	FW
This store is conveniently located	40	40	8	10	2	0
This store has a good selection of products of your choice	39	42	8	6	3	2
This store has the lowest prices in the area	32	36	13	13	5	1
The customer service representative is Very knowledgeable	30	33	14	13	6	4
The sales personnel in this store were helpful in the process of purchase	32	28	10	17	8	5
This store is fair in making adjustments when you have a problem with the purchase	24	30	20	11	6	9
I got the value for my money spent in this store	31	38	15	9	4	3

Source: primary source of data.

## FINDINGS

- **About the store services**

1. MORE: 60% marked good (390), 32.15% rated average (209) and the remaining 7.85% marked below average (51)
2. FOOD WORLD: 65.07% marked good (423), 28.76% rated average (187) and the remaining 6.15% rated below average (40)

- **About the store choice**

1. MORE: 65.14% marked agree (228), 25.14% marked neutral (88) and the remaining 9.7% rated Disagree (34) when asked about the store choice
2. FOODWORLD: 70.57% marked agree (247), 22.5% rated neutral (79) and the remaining 6.85% rated disagree (24).

Overall customer satisfaction in MORE is 60% for store services and 65.14% for store choice. 65.07% of the FOOD WORLD customers are satisfied with store services and 70.57% of the customers are satisfied with the store choice.

- Food world customers are not satisfied with the in-house brand offerings as only 46% of their customers marked good.
- More should concentrate more on ease of exchange of products or refund of money as only 46% of their customers marked good.
- More should concentrate on making fair adjustments when customers have a problem with the purchase as only 48% of their customers are satisfied.

## SUGGESTIONS

- In case of Store service: Ease of navigation, Standardized service offerings and In house brands can be improved for both the stores.
- Both the stores should focus on Ease of contacting customer service representative, Ease of exchange of products or refund of your money services.
- MORE should concentrate on the knowledgeable customer service representative as customers say the store lacks knowledgeable customer service representative.
- FOODWORLD should focus on the sales personnel who are helpful to the customers as the customers are not happy.
- MORE can concentrate on making fair adjustments when customers have a Problem with the purchase for better customer satisfaction.

## CONCLUSION

This study provides a different perspective to understanding ones customers such that it would lead to more efficient use of resources. From the study MORE retail store should concentrate more on improving the store services and store choice Retail strategies for better customer Satisfaction and FOOD WORLD should concentrate on some more retail strategies on store choice in order to attract more customers and improve customer satisfaction.

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## DIRECT MARKETING OF AGRICULTURAL PRODUCTS - A STUDY OF RYTHU BAZAARS (FARMERS' MARKET) IN ANDHRA PRADESH

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### ABSTRACT

*Direct marketing is a long felt need of the farmers and consumers of the country as it goes a long way in ensuring higher remuneration to the farmers and meeting the satisfaction level of the consumers through direct sale of the agricultural commodity by the farmers to the consumer at affordable prices. In this backdrop the first farmer's market namely Apni Mandi or Kisan Mandi was started in Chandigarh, Punjab in 1987 and later on at Karnal, Haryana in 1988. In Andhra Pradesh, Rythu Bazaar (Farmer's Market) has been planned for creating a direct interface between farmers and consumers by eliminating middlemen. The main objective of this paper is to study the concept of Rythu Bazaars (Farmers' Market) in general and to analyze the major preferences and satisfaction levels of consumers towards Rythu Bazaar (Farmers' Market) in Andhra Pradesh in particular.*

### KEYWORDS

Direct marketing, Agriculture products, Rythu Bazaars.

### INTRODUCTION

One of the weakest links in the chain of activities concerned with production and disposal of agricultural products is marketing. Besides the farmers, other major sufferers due to lack of proper marketing facilities are the consumers who are deprived of the fresh farm products. Direct marketing is a long felt need of the farmers and consumers of the country as it goes a long way in ensuring higher remuneration to the farmers and meeting the satisfaction level of the consumers through direct sale of the agricultural commodity by the farmers to the consumer at an affordable price. Direct marketing of agricultural produce helps in complete elimination of middlemen and commission agents who charge high level of commission from the farmers, coming to the market yards for selling their produce and then artificially inflate the retail prices. Marketing of fruits and vegetables is more complex in nature in comparison with the other field crops because of special traits like highly perishable nature, seasonality and bulkiness, which needs special care and immediate disposal. Regulated market yards for fruits and vegetables are functioning only at a few centers. The marketing system for fruits and vegetables is now in the hands of middlemen. Middlemen exist at various levels between the farmers and the consumers and exploit through malpractice in weighing, handling and payments. Large numbers of small farmers are unable to effectively bargain for better prices in the wholesale market. Inefficiencies in the wholesale markets result in a long chain of intermediaries, multiple handling, and loss of quality and increase the gap between the producer and consumer prices. Large number of small retailers, each handling small quantities, create high overheads leading to high margin on produce. It is, therefore, felt necessary to evolve an alternate marketing strategy where both farmers and consumers are benefited through Farmers Markets locally called as *Rythu Bazaars*. Hence the marketing system like farmers' market, if properly organized not only facilitate the proper and smooth disposal of what the farmer produces, but also acts as a catalyst to stimulate increased production and satisfy the consumers' needs. These markets are usually held out-of-doors, in public places, where farmers can sell their produce to the public.

### AGRICULTURAL MARKETING IN INDIA

Agriculture continues to be the mainstay of the Indian economy. Agriculture is the principal means of livelihood for over 58.4 per cent of India's population and accounts for approximately one-fifth of the total gross domestic product (GDP)<sup>3</sup>. While significant strides have been made in increasing agricultural production over the years, immense problems continue to cloud the system of agricultural marketing in the country. Ironically, the burden of inefficient marketing procedures affects the farmers of the country the most, when in fact as producers they are entitled to the benefits of a robust marketing system.

The agricultural marketing structure in India consists of three types of markets<sup>4</sup>: a) rural primary markets or *haats* (tribal markets in tribal areas) that are meant to meet local demands, b) secondary markets that attract potential buyers and traders who take agricultural produce in bulk quantity for sales in the city, and c) wholesale markets that act as centers for gathering large amounts of agricultural produce from different sources. Retailers in the country procure produce from these wholesale markets and then sell it to the consumers.

The operations in rural primary markets and secondary markets are largely informal and lack proper infrastructural facilities. As wholesale markets handle large volumes of agricultural produce and act as dispersal points, they form a very crucial component of the entire agricultural marketing system in the country. These markets require elaborate infrastructural facilities. The GOI is responsible for the provision of such facilities in the market. Wholesale markets operate within a legal framework and are covered under the Agriculture Produce Marketing Committee Act (APMC). The implementation of the APMC is in the hands of respective State Governments.

As a result of the APMC, wholesale markets started functioning as regulated markets. The purpose of these regulated markets was to promote organized marketing of agricultural commodities in the country and ensure that farmers get a reasonable share in profits. It was hoped that with market regulation, agricultural trade practices would become more efficient that until now were plagued with inefficiencies like subjection of farmers to heavy market charges and defective use of weights and scales in the markets.

Although regulation of markets has helped in reducing the burden on farmers in the form of lesser market charges, verified weights and scales, and establishment of market committees, the system still remains largely inefficient and has been monopolized by traders and intermediaries. In reality, no person or agency can operate in the wholesale market area without a license issued by the market committee that, in turn, is under the influence of dominant traders.

<sup>3</sup> <http://india.gov.in/sectors/agriculture/index.php>. Web. 3 August. 2011

<sup>4</sup> Gokul Patnaik. 'Marketing, Storage and Extension Services: State of Agriculture in India'. Working Paper No.9. *Bazaar Chintan*. April. 2003. New Delhi

This defeats the very purpose of market regulation, which is to benefit the farmers. Inefficiencies in the wholesale markets result in a chain of intermediaries, quality degradation and increase the gap between producer and consumer prices.

### DIRECT AGRICULTURAL MARKETING

An effective answer to these issues lies in the establishment of direct linkages between farmers and consumers. Direct marketing of agricultural produce helps in eliminating middlemen and makes the farmers directly responsible for selling his/her produce. This helps in ensuring financial returns for farmers as well as increased consumer satisfaction.

In order to promote the development of direct agricultural marketing in the country, the GOI enacted the *Scheme for the Development of Agricultural Marketing Infrastructure, Grading and Standardization*. As a crucial component of the scheme, all Indian States and Union Territories are required to amend their specific APMC acts in pursuance of the development of direct agricultural marketing practices. Many Indian states adopted the concept of direct agricultural marketing. Examples include Apni Mandi in Haryana, Uzhavar Sandhai in Tamil Nadu, Shetkari Bazaar in Maharashtra and Rythu Bazar in Andhra Pradesh.

### RYTHU BAZAR IN ANDHRA PRADESH

Rythu Bazar is one of the most successful models of direct agricultural marketing in the country. The first Rythu Bazar was established in 1999 in Hyderabad. Rythu Bazars provide facilities to farmers for selling their produce directly to consumers under a proper administrative system and government protection. Presently there are 106 Rythu Bazars operating in all the 23 districts of Andhra Pradesh.

### RYTHU BAZAR AIMS

- ✓ To eliminate middlemen in wholesale agricultural markets and enable farmers to sell their produce directly to consumers
- ✓ To ensure that farmers get remunerative prices
- ✓ To curb marketing malpractices like defective weighing
- ✓ To provide fresh products to consumers at reasonable rates.

### NEED FOR THE STUDY

Producers use different market outlets (commission agents, local traders, and farmers' markets) at the different times of the years, a strategy to maximize their profits. Farmers' markets are especially beneficial for small producers, who have difficulties in selling small volumes during the dry season on the conventional market system. Farmers' markets have influenced producers practices in two main ways; 1) Diversification of production, to include a wider variety of vegetables, and 2) Intensification to maximize the use of water and land resources throughout the year. Farmers' markets have also stimulated producers' adoption of marketing strategies, through a better understanding of consumers' needs and preferences based on incomes, dietary habits and religious celebrations. Experience sharing and communication between farmers has also increased. But unlike conventional marketers who always watch the pulse of their consumers by studying their behaviour, farmers are too naïve to conduct market research on behaviour of the vegetable purchasers. So it was felt a study could be undertaken to observe the preferences, needs and wants of the vegetable buyers and make them available to farmers so that they can take correct decisions regarding the marketing strategies to be implemented in Rythu Bazars.

### OBJECTIVES OF THE STUDY

Keeping in view the relevance of the study in the present market scenario the following objectives have been framed.

- ✓ To study the Farmers' Market concept in general and particularly Rythu Bazars in Andhra Pradesh
- ✓ To evaluate the consumers perception towards farmers' markets.

### DATA & METHODOLOGY

This study based on survey method. Data has been collected from both primary and secondary sources. For collecting primary data, a sample of 240 regular purchasers of vegetables at Rythu Bazaar from Karimnagar urban area, was selected through convenience sampling method. A structured questionnaire was administered among the consumers to collect primary data. Secondary data has been collected from newspapers, journals, and magazines and through informal discussion with officials of the department concerned.

### LIMITATIONS OF THE STUDY

The study is confined to only 240 consumers of Rythu Bazaar, situated at Karimnagar. It is assumed that the respondents are honest in expressing their opinions. Though the sample size is small and less scope for generalizations, but every care has been taken to include all types of consumers in the sample to make it a representative one.

### ANALYSIS OF DATA

TABLE 1: PROFILE OF THE RESPONDENTS

Age	Below 25Yrs	25-40 Yrs	40-50 Yrs	Above 50 Yrs
	38 (15.84%)	76 (31.67%)	82 (34.16%)	44 (18.33%)
Sex	Male: 94 (39.16%)		Female 146 (60.84%)	
Marital Status	Married: 182 (75.83%)		Un-married; 58 (24.17%)	
Education	Illiterate	Below SSC	Inter	Degree & above
	22 (9.17%)	69 (28.75%)	96 (40.00%)	53 (22.08%)
Occupation	Employee	Business	Professional	Others
	118 (49.16%)	83 (34.58%)	32 (13.34%)	7 (2.92%)
Distance traveled (In Kms.)	Below 1	1 to 2	2 to 5	Above 5
	71 (29.58%)	92 (38.33%)	61 (25.42%)	16 (6.67%)

#### Primary data compiled from Questionnaire

The data in Table 1 reveals that 34.16 per cent of the respondents belong to 40-50 years age group, followed by 31.67 per cent belong to the age group of 25-40 years and the remaining respondents fall either in above 50 years or below 25 years age group. In the sample respondents about 61 per cent are female. The marital status of the respondents shows that about 76 per cent are married and others are un married. The educational back ground indicates that 40 per cent of the respondents have Inter mediate education and 28.75 per cent have below SSC qualification. 22.08 per cent respondents have Degree and above qualifications and the remaining are illiterates. It is to be noted that majority of respondent have inter mediate and above qualifications. The data further shows that 49.16 per cent of the respondents are employees and 34.58 per cent are business people. The remaining respondent are either professionals or other category people.



Further the respondents were asked about the distance they travel to purchase the vegetables from the market and the relevant information is placed in Table 1. The data shows that 38.33 per cent of the respondents are traveling 1to 2 Kms and 29.58 per cent are traveling less than 1 Kmr distance to purchase the vegetables and the remaining respondents are traveling more than 2 Kms to purchase the vegetables.

**TABLE 2: FREQUENCY OF PURCHASING THE VEGETABLES IN RYTHU BAZAARS**

Details of Purchasing	No. of Respondents	Percentage
Daily	25	10.42
Alternate Days	24	10.00
Once in Three Days	106	44.17
Weekly Once	66	27.50
Others	19	7.92
<b>Total</b>	<b>240</b>	<b>100</b>

**Primary data compiled from Questionnaire**

From Table 2 it is clear that majority of the respondents purchase vegetables once in three days (44.17 per cent) followed by 27.50 per cent consumers who purchase vegetables with a frequency of once in a week. Almost equal number of respondents said that they purchase vegetables either daily or on alternate days (about 10 per cent) and the remaining said that they purchase occasionally. From the foregoing discussion it can be inferred that majority of the consumers buy vegetables either weekly or once in three days.

**TABLE 3: TIMING OF PURCHASING THE VEGETABLES IN RYTHU BAZAARS**

Time of Purchase	No. of Respondents	Percentage
Morning Hours	114	47.50
Afternoon	54	22.50
Evening	72	30.00
<b>Total</b>	<b>240</b>	<b>100</b>

**Primary data compiled from Questionnaire**

The data in Table 3 makes it clear that majority of the respondents (47.50 per cent) purchase vegetables in the morning hours and 30 per cent mentioned that they purchase in the evening hours. The remaining 22.50 per cent replied that they purchase in afternoon hours. Majority of the respondents prefer morning hours with the perception that the vegetables will be fresh in that session only.

**TABLE 4: FACTORS INFLUENCING FOR SELECTING RYTHU BAZAARS FOR PURCHASING VEGETABLES**

Factors	No. of Respondents	Percentage
Quality	70	29.17
Right Measurements	44	18.33
Freshness	40	16.67
Location of Rythu Bazaar	12	5.00
Availability	18	7.50
Price	44	18.33
Others	12	5.00
<b>Total</b>	<b>240</b>	<b>100</b>

**Primary data compiled from Questionnaire**

Table 4 depicts that majority of respondents considered quality as the most influencing factor (29.17 per cent) followed by Right measurements and Price (18.33 per cent). Freshness (16.67 percent), location (5 per cent), availability (7.50) and other (5.00) stood in other places in the order. It can be observed from the above information that majority are preferring Rythu Bazars due to Quality, freshness, right measurement and reasonable price.

**TABLE 5: QUALITY OF VEGETABLES IN RYTHU BAZAARS**

Quality Level	No. of Respondents	Percentage
Excellent	76	31.67
Good	89	37.08
Average	65	27.08
Poor	7	2.92
Very Poor	3	1.25
<b>Total</b>	<b>240</b>	<b>100</b>

**Primary data compiled from Questionnaire**

From Table 5 it was found that majority of the respondents perceived quality of the vegetables at Rythu Bazars as good (37.08 per cent), followed by Excellent (31.67 percent). The respondents who stated that the quality is Average (27.08 per cent), Poor (2.92 per cent) and Very Poor (1.25 per cent) stood in third, fourth and fifth place respectively. It can be concluded from the discussion that the majority of the respondents are satisfied with quality of the vegetables at Rythu Bazars

**TABLE 6: PRICE OF VEGETABLES IN RYTHU BAZAARS**

Price Level	No. of Respondents	Percentage
Very High	23	9.58
High	38	15.83
Average	65	27.08
Low	59	24.58
Very Low	55	22.93
<b>Total</b>	<b>240</b>	<b>100</b>

**Primary data compiled from Questionnaire**

From the data in Table 6 it was found that majority of the respondents perceived price as average (27.08 per cent), followed by low (24.58 percent), very low (22.92 per cent), high (15.83 per cent) and Very high (9.58 per cent). From the foregoing discussion we can conclude that an overwhelming majority are satisfied with the prices that prevailed in Rythu Bazars.

TABLE 7: CONVENIENCE OF THE LOCATION OF RYTHU BAZAARS

Convenience of the Location	No. of Respondents	Percentage
Convenient	46	19.17
Neither convenient nor in-convenient	52	21.67
In-Convenient	142	59.17
<b>Total</b>	<b>240</b>	<b>100</b>

**Primary data compiled from Questionnaire**

The survey reveals that the majority of the respondents felt the location of the Rythu Bazaars are in-convenient (59.17 per cent) and 21.67 per cent stated that the Rythu Bazaars are neither convenient nor in-convenient. Only 19.17 per cent expressed that the location of the Rythu Bazar is convenient for them. We can observe from the discussion that the location of the Rythu Bazaars is not convenient for majority of the respondents and there is need to provide a location which is convenient for majority buyers.

TABLE 8: WHETHER RECOMMENDED RYTHU BAZAARS TO OTHERS

Response	No. of Respondents	Percentage
Recommended	158	65.83
Not Recommended	82	34.17
<b>Total</b>	<b>240</b>	<b>100</b>

**Primary data compiled from Questionnaire**

Further the respondents were asked whether they recommend the Rythu Bazaars for other customers to buy vegetables and the data is placed in Table 8. From Table 8 it is clear that most of the respondents (65.83 per cent) stated that they recommend the Rythu Bazaars to others to purchase the vegetables and the remaining said that they do not recommend (34.17 per cent) Rythu Bazaars to others to purchase the vegetables. Most of the on the basis of the perception about respondents recommended price and quality.

TABLE 9: ANY PROBLEMS FACED WHILE PURCHASING IN THE RYTHU BAZAARS?

Response	No. of Respondents	Percentage
Yes	92	38.33
No	148	61.67
<b>Total</b>	<b>240</b>	<b>100</b>

**Primary data compiled from Questionnaire**

The survey reveals that Most of the respondents did not face any problems while purchasing vegetables in rythu bazaars (61.67 per cent) while some of them (38.33 per cent) faced problems due to lack of facilities such as location of rythu bazaars, lack of hygiene facilities, lack of proper lighting, lack of space etc.

TABLE 10: BEHAVIOUR OF THE SELLERS IN THE RYTHU BAZAARS

Response	No. of Respondents	Percentage
Very Courteous	53	22.08
Courteous	76	31.67
Indifferent	86	35.83
Rude	25	10.42
<b>Total</b>	<b>240</b>	<b>100</b>

**Primary data compiled from Questionnaire**

Table 10 depicts that most of the respondents felt that the sellers in the rythu bazaars are indifferent behaviour (35.83 per cent) followed by 31.67 per cent who stated that the behaviour is courteous. 22.08 per cent per cent of the respondents are of the opinion that the behaviour is Very Courteous and 10.42 per cent mentioned that the behaviour is rude. From the discussion it is observed that majority are not satisfied with the behaviour of the sellers.

TABLE 11: FACILITIES PROVIDED AT RYTHU BAZAARS

Response	No. of Respondents	Percentage
Excellent	64	26.67
Good	38	15.83
Poor	138	57.50
<b>Total</b>	<b>240</b>	<b>100</b>

**Primary data compiled from Questionnaire**

From Table 11 it is clear that most of the respondents stated that the facilities provided is poor at rythu bazaars (57.50 per cent) followed by excellent (26.67 per cent) and good (15.83 per cent).

**FINDINGS**

- The study revealed that majority customers (44.17 per cent) purchase vegetables two times in a week at Rythu Bazaars.
- Majority customers prefer to buy vegetables in the morning (47.50 per cent) and evening (30 per cent) at Rythu Bazaars.
- Quality, Price and Right Measurement are the factors which attract the customers to buy vegetables at Rythu Bazaars.
- Majority of the customers rate the quality of vegetables at Rythu Bazaars is good (37.08 per cent) and excellent (31.67 per cent).
- Majority of the customers feel that the vegetables at Rythu Bazaars are fairly priced.
- Majority of the respondents (59.17 per cent) feel inconvenience with the location of Rythu Bazaars.
- Majority of the customers (65.83 per cent) recommend others to buy vegetables from Rythu Bazaars.
- Majority of customers (61.67 per cent) do not face any problems in purchasing vegetables from Rythu Bazaars.
- In the opinion of 57.50 per cent customers, the facilities provided at Rythu Bazaars are poor.

The Rythu Bazaars are acting as essential link between customers and producers as far as the marketing of vegetables is concerned. The concept of Rythu Bazaar is built on mutual benefit i.e. producers and users of the commodity. The state government introduced this to eliminate middle men, commission agents and other traders in the process of selling agricultural produce to customers. The study shows that the Rythu Bazaars are playing an important role in providing the fresh and qualitative vegetables at reasonable prices to the customers. Further it is observed that the location and other facilities provided at Rythu Bazaars are not up to the expectation of the customers and there is a need to improve them.

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## NEED FOR A PARADIGM SHIFT IN MANAGEMENT TEACHING THROUGH PROFESSIONAL DEVELOPMENT OF FACULTY

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### ABSTRACT

*Teaching is imparting knowledge with constant having update of the same. With continuous change in the economical, social, political, legal, technological environment around the globe, the evolution of new paradigms in teaching is the need of the hour. Management teaching should not be restricted with teaching the syllabus, giving notes, and evaluating answer scripts. The traditional methods of teaching Management must be replaced by modern pedagogy since there is a dearth of innovations in teaching. I believe, "It is not what you want to teach, but it is what your students need to learn from you". There must not be a gap between the former and the later. Hence there is a need for building 'new image' of a Management faculty, evolving 'new model' for Management teaching, bringing a 'revolution' in education and a new 'paradigm shift' for Management Teaching. This can happen through Professional Development of teachers. The paper was conceived during a formal interaction with the management faculty of different institutions during January 2012. This paper is an effort for Professional Development in Faculty with the help of models developed by the author. It includes two conceptual models which can be implemented and practiced.*

### KEYWORDS

management education, management teaching, professional development, teaching pedagogy, teaching process.

### INTRODUCTION

Faculty development is the theory/practice of facilitating improved faculty performance in a variety of domains including institutional, intellectual, personal, social, and pedagogical. Developmental needs of faculty in these areas should therefore be amongst an organization's major and long-term goals. These developmental goals can be achieved by: providing faculty with training opportunities to achieve maximum effectiveness; ensuring that the faculty develop their skills and capabilities to be able to work efficiently and respond rapidly to changes within their organizations; improving performance of their present duties, ensuring that the best use is made of the natural abilities and individual skills of all employees for the benefit of the organization and their career. Development and training is a continuous and systematic process. The process of training should necessarily be directed to give every faculty a sense of professionalism, excellence, motivation and customer satisfaction. A faculty should be aware that knowledge is not enough. Just being knowledgeable about something without applying this knowledge to the classroom is not sufficient to derive benefits.

For educational reforms, faculty are said to be both subjects and objects of change (Eleonora villegas 2003). In today's scenario, when we see revolutions in world economy due to new developments in science and technology, media revolution and internationalization, it is not enough to glance at the syllabus alone. Management subjects must be taught with a rigor and therefore, this situation has made great impact on teaching, as a faculty is known to be a critical catalyst. Therefore it has become imperative that the faculty updates their knowledge and skills and be conversant with the latest developments in the field of teaching. Faculty have multiple roles to perform like teaching, research, development of learning and coordinated programmes for professional development of faculty. The Professional Development of Faculty implies the growth in knowledge of their subject, in pedagogy and in training techniques, in their love for students and for their institution, in moral and ethical values and growth of their desire to give their best to the world of learning and society.

There is a common myth in the entire professional faculty that, some faculty are seniors and the rest fall in junior category. "I shall be hesitant to agree with that" (Dr. M. S. Subhas, Professor in Management at Karnatak University, Dharwad, during an FDP), mentioned that "faculty are seniors or juniors by way of their attitude towards their profession, the knowledge that they possess, their dedication towards their profession, zeal and enthusiasm in teaching, innovations in teaching methodologies. In brief, a successful and a renowned teacher is the one who 'welcomes learning' even after decades of teaching". A teacher can grow and develop by constantly brushing up of their teaching skills and constantly reviving the methodology of teaching the same subjects by them. There must be inclination towards learning and zeal to unlearn and relearn. Good teaching methods have a significant positive impact on how and what students learn.

Young faculty (newly qualified faculty) usually attend induction programmes and are expected to have a mentor, sometimes given one. They are observed frequently by colleagues and are oriented, trained and mentored. They need to build their professional portfolio of their achievements as a teacher. The first couple of years are crucial ones in any career as the experience teaches the individual to cope up with the practical world, which is usually away from the theory learnt in post graduations. Same happens in case of teaching. Learning, unlearning and relearning become part of reality. Good mentoring can make it easy. There is thus a constant need to study, experiment, discuss and reflect in dealing with teacher professional development on the interacting links and influences of the history and traditions of groups of faculty, the educational needs of their student populations, the expectations of their education systems, faculty' working conditions and the opportunities to learn that are open to them.

### FOLLOWING STEPS ARE IMPORTANT WAYS OF IMPLEMENTING NEW LEARNING

- To understand and apply the elements of education system based on feedback from stakeholders;
- To understand and apply systemic change principles and anticipate change as a dynamic process;
- To develop own intellectually rigorous professional development;
- To use data on student academic achievement as the foundation for selecting main targets for improving.

### FOLLOWING FACTS ARE IMPORTANT CONCERNING KNOWLEDGE AND SKILLS (CONTENT)

- To demonstrate high learning expectations for all students;
- To be ready for continuous improvement as a teacher
- To demonstrate continuous progress in developing current content knowledge and the skill based and instructional strategies required to facilitate effective learning for all students

### IMPORTANCE OF PROFESSIONAL DEVELOPMENT OF MANAGEMENT TEACHING

Teacher Professional Development as either advancement of faculty in the field of teaching or as improving faculty professionally, academically and technically. Others define it as a process of enabling faculty to move with changes in economy and technology, and as a new way of acquiring new methods of teaching. Teacher Professional Development is an academic advancement as well as development in the profession. It enables faculty to become professionals, to realize their potential as faculty, to move with changes in economy, business and technology, and enables them to serve pupils better by improving the standard of

teaching. In the process of improving themselves they also gain confidence and self esteem. These perceptions lean towards a much broader conception which combines academic advancement and professional development. The three pillars of any higher education institution are: quality of faculty, infrastructure facilities and learning environment. With the increasing demand-supply gap, organizations are facing immense war for talent. Like business and industry, education field too is discovering the need for talent so as to meet the new quality standards demanded by the society and is also facing leadership crisis. Hence the need for Faculty Professional Development is very evident here. Several advantages are mentioned for engaging in Teacher Professional Development:

- Getting more skills, gaining confidence and competence
- Enabling faculty to move with changes in science and technology
- Improving the teacher professionally, academically and technically
- Updating faculty in line with changes in the curriculum and
- Enabling faculty to serve pupils better and improving the standard of performance

The literature review takes a performance oriented perspective, with an emphasis on the meaning of professional development for the quality of education, in the sense of fostering educational performance and educational effectiveness. In other words, faculty think that Professional Development will help them achieve high standards of teaching and keep them updated in teaching; it increases their self-worth, enables them to move with time, and it allows them to react appropriately to the challenges brought about by advancements in science and technology, and also to get promoted to higher ranks in the career. Educational institutes depend on the skills, knowledge and abilities of their faculty for efficient and effective delivery of services in order to stay abreast with new changes and to achieve the vision of the institution. Growth and development of Faculty enables the process of Teaching and learning effectively.

**LITERATURE REVIEW AND DISCUSSIONS**

Eleonora villegas (2003) identifies conceptual, contextual and methodological factors that contribute to a successful professional development program. Conceptual factors relate to how change, teaching, and teacher development are perceived, while contextual factors refer to the role of the institute leadership, organizational culture, external agencies and the extent to which site-based initiatives are supported. Methodological factors relate to processes or procedures that have been designed to support Teacher Professional Development. It would seem that from the perspective of an interactive system model, Teacher Professional Development is a function of the interaction between and among five key players or stakeholders. These are the ministry responsible for teacher education, universities, institutes, the community and the faculty themselves

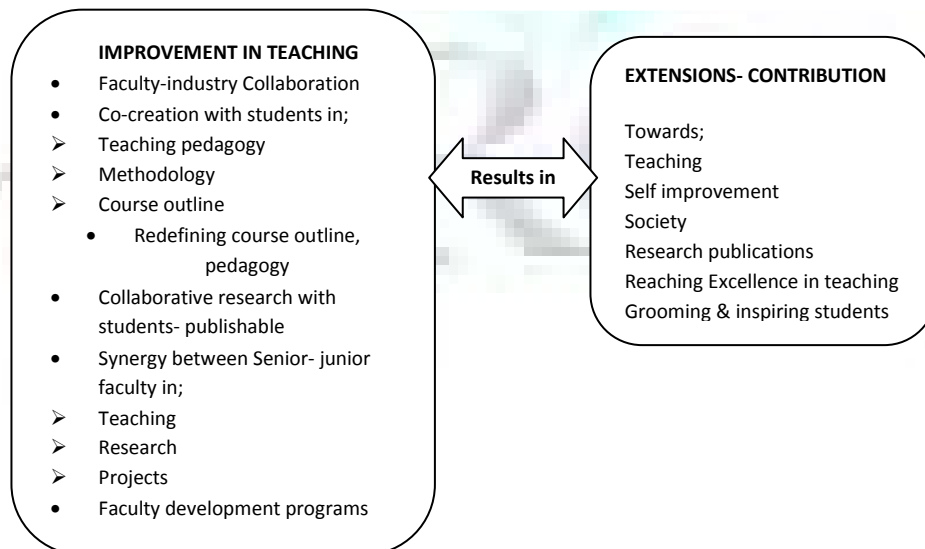
Willy L. and Emmanuel (2008) say that Teacher Professional Development is described as a process embracing all activities that enhance professional career growth or as formal and informal experiences throughout the teacher’s career. Teacher Professional Development is defined as a process of improving both the teacher’s academic standing as well as –acquisition of greater competence and efficiency in discharging her/his professional obligations in and outside the classroom. They further mention that the effectiveness of the teacher depends on her competence (academically and pedagogically) and efficiency, (ability, work load, and commitment), teaching and learning resources and methods; support from education managers and supervisors. Teacher Professional Development provides opportunities for faculty to explore new roles, develop new instructional techniques, refine their practice and broaden themselves both as educators and as individuals.

Beatrice Avalosa (2011) believes that Teacher professional learning is a complex process, which requires cognitive and emotional involvement of faculty individually and collectively, the capacity and willingness to examine where each one stands in terms of convictions and beliefs and the perusal and enactment of appropriate alternatives for improvement or change. He has also stressed on collaborative research, teacher co learning and workplace learning. He discusses the importance of Faculty Learning to ‘learn’.

Sandra Leaton Gray (April 2005) found that faculty were enthusiastic about networking and learning opportunities that took place outside school, where they demonstrated high quality characteristics for learning. He reported that although these opportunities took relatively little time out of their working lives, they found them stimulating and refreshing, and that they assisted their overall professional development. Faculty felt that peer observation was an extremely cost-effective and time-effective professional development opportunity. They argued that, in the present uncertain funding climate, this was one method of training that could play a more important role within schools. Gray talks about Continuous Professional Development (CPD) as the need of the hour.

Jaap Scheerens (2010) said that the most frequently used analytical variables when attempting to explain why some faculty are more effective than others are mastery of subject matter and pedagogical knowledge. In the more recent research literature, an interactive construct, combining the two, namely “pedagogical content knowledge” appears to show promising results. Pedagogical content knowledge also includes understanding of what makes the learning of specific topics easy or difficult, including knowledge about conceptions and misconceptions that students bring to the subject. The assumption is that “deep knowledge” about the content and structure of a subject matter area is the crucial precondition for faculty ‘reliance on pedagogical content knowledge in their teaching. Additional components sometimes included in the concept are knowledge of the appropriate use of teaching materials and media, as well as strategic knowledge on the application of teaching strategies.

**MODEL 1: ‘PROFESSIONAL DEVELOPMENT IN MANAGEMENT TEACHING PROCESS’  
DEVELOPED BY: MRS. AFREEN NISHAT A. NASABI**



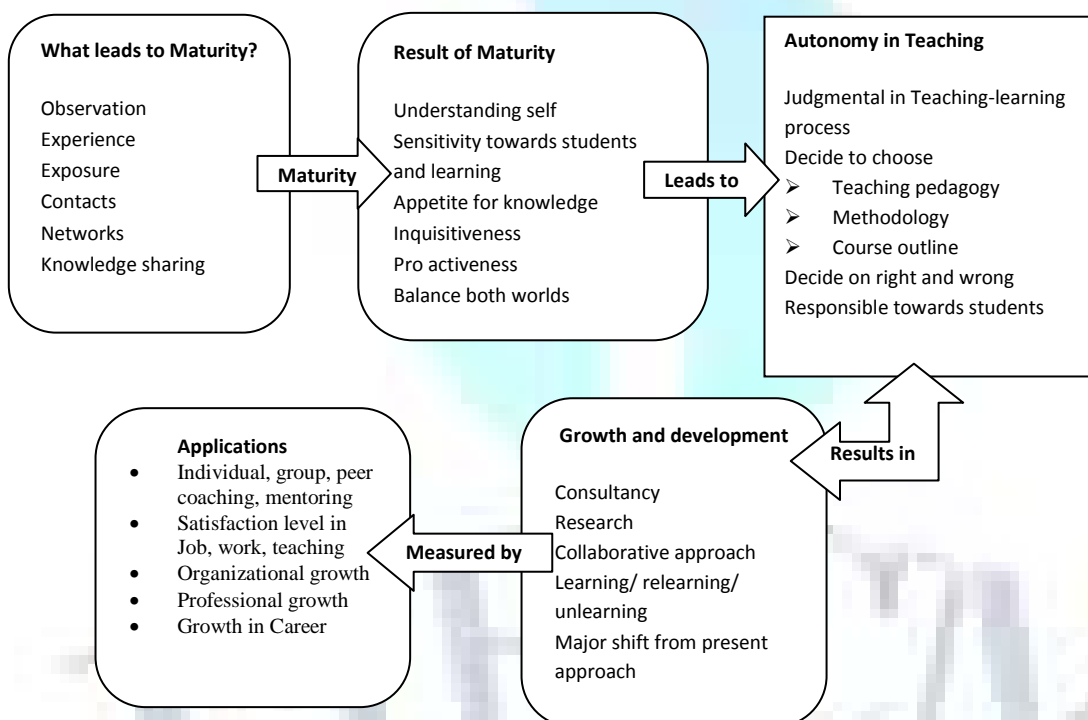
The model was developed with a view to improvise the process of Management teaching. It is a common notion and a misunderstanding that there is lot of difference in the theory learnt in 'classroom' and the practical 'Corporate world', we cannot fully eradicate this myth, but we can surely try to bridge the gap between the two, by going for Faculty-industry collaboration. A concurrent project or project based learning by partnering with industries nearby for classroom projects shall be of considerable help for learning. Furthermore, I see a lot of innovations happening in teaching just by 'Co creation' with the students. After all the students are our important stake holders and it is "not what you want to teach, but it is what your students learn from you". Constant feedback from students on their learning can give the teacher a clear perspective as to how can the course outline (not the syllabus), teaching methodology and teaching pedagogy can be reworked. Remember, 'syllabus is the minimum that a teacher should teach'. The concept of teacher-orchestrated classroom doing collaborative research with the students, really works in today's scenario as students bring in fresh blood (ideas) into the system of Management classroom by their innovative ideas.

As mentioned previously, the seniority in teaching field is measured in terms of the way of their attitude towards their profession, the knowledge that they possess their dedication towards their profession, zeal and enthusiasm in teaching, innovations in teaching methodologies. If there is collaboration between them, it shall result in synergy and help the students who are ultimately benefitted. The faculty can share a subject to be taught, do research together, publish together, and take up projects from local industries, and what not. The importance of understanding how faculty work together and share practices with learning purposes is reflected in articles that look at teacher networks and teams, communities of practice and communities of learning, as well as peer coaching (Beatrice Avalosa 2010). After all research is the ultimate fruit that can immerge as a by-product of rigorous involvement in teaching.

When we talk about the Extensions or contributions, there is a lot of self improvement in teaching, personality, grooming and inspiring the students. These are the contributions a teacher can give back to the society. Love and compassion for students builds an environment where there can be enjoyable interaction with them. By doing so, the teacher can groom and inspire the students to a great extent. This shall also help better co creation with the students and also help in gaining better teaching pedagogy, methodology and course outline. Direct experience in the classroom is the most effective resource, followed by discussions with other faculty, individual study and research and observations of other faculty. It is also significant that the debate on teaching excellence takes place almost exclusively in educational journals and conferences, which is perhaps why it does not enter the consciousness of mainstream academics, even if they are 'excellent teachers'. Whatever conception of teaching excellence is used it has to have clarity and alignment with what constitutes reality for academic staff.

The Management of the institute with motivating culture encourages faculty to engage in professional development programs at the institute or elsewhere. A motivated teacher learns from others and is more likely to attend various professional development activities. Motivation can be intrinsic or extrinsic which drives the teacher towards self improvement. Collegiality within the institute is part of the institute culture. If faculty cooperate, there is room for them to learn from each other.

**MODEL 2: 'GROWTH AND DEVELOPMENT OF A MANAGEMENT FACULTY'  
DEVELOPED BY: MRS. AFREEN NISHAT A. NASABI**



Teacher professional learning is a complex process, which requires cognitive and emotional involvement of faculty individually and collectively, the capacity and willingness to examine where each one stands in terms of convictions and beliefs and the perusal and enactment of appropriate alternatives for improvement or change (Beatrice Avalosa 2010). Successful professional development programmes have seen to make a noticeable impact on teacher' work, both in and out of the classroom. The actual development of a teacher occurs when they get matured. So what should lead to maturity in them? It is the observation they do, the experience in teaching, exposure and interaction with the industry and interaction and handling the students. They also have to develop lot of contacts and networks with people who are in the same field with much more experience than them. Knowledge sharing is also a key factor.

Maturity will result in self understanding, and one can be able to do a SWOT of them, thus leading to introspection. With maturity, the appetite for knowledge increases, the sensitivity towards students' learning increases. Pro activeness results in terms of wanting to find out new ways in teaching, research and a sincere 'quest for enquiry'. Maturity in handling both personal and professional life with the right kind of attitude, results in balancing both the worlds properly. This maturity in Management teaching profession leads to Autonomy in teaching and this facilitates teaching-learning process. If an individual teacher gets to decide on pedagogy, methodology of handling the subject by consulting the bunch of faculty from neighbouring institutes and also with the faculty with experience in handling the same courses, then the teaching with definitely get an added advantage to it. The teacher shall get to choose the right and wrong, dos and don'ts for the courses thus making them responsible towards their students.

As people gain education and experience in teaching, the understanding they express of classrooms they observe is characterized by an increase in a quantity and complexity of linkages among ideas and by a shift in the focus of these linked ides toward issues more central to classroom teaching including content taught and learned, pedagogical processes used and experienced, and basic educational purposes. Development of consultancy, research with collaborative

approach leads to growth and development of the individual teacher. Like I mentioned earlier, a good teacher is the one who learns, unlearns and relearns and moves towards a major shift from their present approach in teaching their courses.

The applications of the growth and development of the Management teacher are measure by the five parameters mentioned in the model. Individual professional growth plan includes an individualized learning activity by a single teacher e.g. a portfolio, an action research project. Professional growth in groups includes a single learning activity selected by two or more faculty e.g. a thematic classroom plan, technology integration plan. Peer coaching activity should include a learning activity in which colleagues gather and discuss descriptive and/or observational data or research questions about teaching and learning. Mentoring includes an experienced teacher assisting the professional growth and development of a new teacher prior to that teacher's permanent certification. (Teacher professional growth Edmonton Catholic Regional Division # 40 April, 1999)

## CONCLUSION

In summary, the professional development of faculty is a key factor in ensuring that reforms at any level are effective. Successful professional development opportunities for faculty have a significant positive effect on students' performance and learning. To grow, faculty must develop new understandings based on research and its application in the classroom; they must know how to transfer those understandings to the everyday world of their classrooms; and they must engage in all of these behaviours continuously in an effort to increase their expertise and students' achievement. The models developed by the author are practicable and applicable for the overall development of the Management teacher.

What underlies the thematic emphasis of the studies reviewed, their assumptions and inquiry methods, is recognition that teacher learning and development is a complex process that brings together a host of different elements and is marked by an equally important set of factors. But also, that at the centre of the process, faculty continue to be both the subjects and objects of learning and development. The effort to construct models of teacher development is also a way of searching for unifying threads in the midst of diversity. Cognitive theory and research have helped unveil some of the constant factors such as the role of prior beliefs and perceptions of self-efficacy as individual factors supporting or hindering change, while socio-cultural theory has directed the attention to the external situations that likewise affect change. The power of teacher co-learning emerges very strongly from the studies reviewed. The road starts with informal exchanges in school cultures that facilitate the process, continues in networking and interchanges among schools and situations and is strengthened in formalised experiences such as courses and workshops that introduce peer coaching or support collaboration and joint projects. In whatever way, the lesson learned is that faculty naturally talk to each other, and that such a talk can take on an educational purpose. It also is true that in many places classroom teaching continues to be a solitary activity. Therefore to move from co-learning through talk to co learning through observation and feedback is necessary as well as effective, as illustrated in experiences such as lesson study.

Finally I conclude by saying, support of the management of institutes is crucial for promoting teacher development and high quality education. If management is empowered it will be able to play their social and technical roles more efficiently. There are also informal practices initiated by faculty. These need to be nurtured and supported by all education stakeholders.

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## CUSTOMERS' SATISFACTION ON CORE BANKING: A STUDY WITH SPECIAL REFERENCE TO A NATIONALIZED BANK IN THIRUNELVELI

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### ABSTRACT

*The computerized environment of the branches paved the way for the development of core banking system (i.e) connecting branches through internet. The customers are no longer forced to deal with banks during the limited hours when their branches are open for business. The system of core banking provides various facilities to the customers such as ANYWHERE ANYTIME AND ANY BRANCH Banking. All the banks are opening their branches in cities urban area for maximizing profit. Most of the branches in urban and semi-urban areas have been computerized and are connected with each other through networks. The study of the core banking it to know fully it impact of core banking on the customers and the various benefits it has given to the customers in various ways. The core banking serves on a wide range of objectives after computerization in branches. Time consuming problems and errors can be reduced to the bank's customer after implementation of core banking. This study tries to know in detail about the facilities availed from core banking branch. The primary data were collected from the customers of a nationalized bank through e a questionnaire was prepare and 50 respondents were selected randomly .Result of the study is discussed in this paper.*

### KEYWORDS

Core Banking ,Coustomer's satisfaction.

### INTRODUCTION

Banking system occupies an important place in a nation's economy. It plays a vital role in accelerating the rate of economic growth by mobilizing the existing or potential savings and by making the disbursement of credit to commercial undertaking and priority areas.

Banking industry is marked by aggressive competition and ever changing customer demands. As a result, banks need to adopt themselves to the changing environment. It is essential for the banks to adopt appropriate various strategies to merge as the preferred bank of customers. Timely introduction of various products to suit the diverse needs of customers is a functional necessity to the banks. Technology gives the cutting edge to come out with customer centric products and delivery channels in time.

Presently, the braches of banks are using software under distributed environment by having data servers at the branch itself. The branches are not able to give round the clock service to the customers as the branches are closed after the business hours. To limited extent some branch customers are serviced through ATMs based on the balances updated by the branches after the day end. This has necessitated the banks to go in for alternate technology Viz, the core Banking.

The implementation of core banking will facilitate to meeting the customers various needs, providing them the facilities they need at the right time, 24 hours a day and 7 days a week. Thus core Banking is an integrated application that supports real time multi-Banking and Multi-Channel strategies. In early days, all the banking activities were carried on buy the bankers manually. It involves a lot of clerical work (i.e) paper work. All the transaction were recorded in the account books maintained by the bank for the purpose. The detail of every customer is recorded in those books and the bankers had to spend a lot time for verification of the customer's account. As a result, the customers had to wait for a long time. Thus it is a time consuming process.

### POST CORE BANKING IMPLEMENTATION

Technology in banking has evolved substantially from the days of back office automation to today's online, centralized and integrated solutions.

Ten years ago, most of the advanced banks had branch automation software with 'online' passbook printing facilities. At the branch level, banks were moving away from product-specific counters and trying any-counter service for all products. Most of the time, the biggest incentive for using technology was to improve internal housekeeping by virtue of automating interest applications, accruals, standing orders and processes. Many banks took the lead in branch computerization, but this competitive advantage was not significant since it did not have significant impact on customer service. Also, banks could really not use the infrastructure for introducing new products and services.

Then came the second wave of technology change in banking, when banks realized that they needed to move to centralized core banking solutions for offering services such as anywhere banking. This was a significant change from the Indian perspective, since centralized core banking solutions required banks to invest huge amounts of money towards building infrastructure. Once this infrastructure was in place, banks started venturing into newer opportunities in the area of ATMs, debit cards and internet banking, which in turn raised the expectations from core banking solutions. Additionally, banks started diversifying their product and service portfolios by offering mutual funds, insurance products and cash management services.

At present, every time banks decide to launch new services or products, new application software gets added to their data centre. This eventually means that customer interaction is not really 100 percent uniform across products and services. Even banks that have invested huge amounts in CRM software are finding it difficult to provide a unified view across all products and channels since different vendors have used different technologies.



**SCOPE OF THE STUDY**

The present study was undertaken to analyze the favorable and unfavorable factors of core banking. The scope of the study is limited to the development in banking sector after introducing the core banking. The study helps to the bank to recognize the customer expectations and provide effective service. It helps to overcome the problem faced by the customers. The study helps the customers to satisfy and it helps for developing awareness to be created by the bank.

**OBJECTIVES**

- To find out the awareness regarding the system of core banking among bank customer.
- To study in detail about the different delivery channels.
- To make suggestions to improve the customer service through the delivery channels.
- To identify the problem faced by the customers after the implementation of core banking.

**METHODOLOGY**

Primary data and secondary data were used for the study. The primary data were collected from the customers of a nationalized bank through a questionnaire was prepared and 50 respondents were selected randomly for the purpose of analyzing the data statistical tools such as percentages, averages were applied.

**TABLE 3.1: CUSTOMERS SATISFACTION ON CORE BANKING (FOR ALL RESPONDENTS)**

Particulars	No. of respondents	%
Not satisfactory	0	0
Satisfactory	30	60
Commercial	13	26
More convenient	7	14
Total	50	100

Source: Primary data

The above table 3.1 tabulates the customers opinion on the satisfaction of core banking in Nationalized bank. Out of the total respondents, Majority (i.e.) 60% of the customers of nationalized bank are satisfaction about the core banking followed by 26% of the respondents who have expressed their convenience in transacting with nationalized bank after networking of branch as it is easy to conduct their transaction in efficient way that is accurate and time saving. This table reveals that the customers are fully "satisfied" and enjoy convenience with regard to networking of Nationalized bank.

**TABLE 3.2: CUSTOMERS SATISFACTION ON CORE BANKING (OCCUPATION WISE)**

particulars	No of respondents									
	Not satisfied	Percentage	Satisfactory	Percentage	Convenient	Percentage	More Convenient	Percentage	Total	Percentage
Employee	0	0	11	61	6	33	1	6	18	100
SHG	0	0	4	44	3	33	2	22	9	100
Professional	0	0	11	69	3	19	2	12	16	100
Businessman	0	0	4	57	1	14	2	29	7	100

The above table 3.2 indicates the customers opinion on core banking. Out of the total respondents, Majority (i.e.) 69% of the professional are satisfied with the core banking operations of Nationalized bank. 57% of the business class and 44% of the SHG members are satisfied with the core banking system as it complies with their requirement.

**TABLE 3.3: CUSTOMERS SATISFACTION ON CORE BANKING (FOR DIFFERENT TYPE OF ACCOUNT HOLDER)**

particulars	Not satisfied	Percentage	Satisfactory	Percentage	Convenient	Percentage	More Convenient	Percentage	Total	Percentage
Current a/c	0	0	4	44	1	12	4	44	9	100
Saving a/c	0	0	23	68	9	26	2	6	34	100
Recurring a/c	0	0	1	25	2	50	1	25	4	100
Fixed a/c	0	0	1	50	1	0	0	0	2	100
More than one a/c	0	0	1	100	0	0	0	0	1	100

The above table 3.3 reveals the opinion of account holders about core banking. Out of the total respondents, 44% of the current a/c holders are satisfied and have mentioned that they enjoy more convenience with the core banking system functioning in the bank. 60% of the saving a/c holders are satisfied about core banking system, operating in Nationalized bank. 50% of the recurring account holders are expressed their convenience and 50% of the fixed account holders are comfortable and convenient with regard to networking of the branches. Majority (i.e.) 100% of the more than one account holder have expressed that they are satisfied about the core banking system.

**TABLE 3.4: PREFERENCE OF MULTI SERVICES DELIVERY CHANNELS.**

Particulars	Not satisfied	Percentage	Satisfactory	Percentage	Convenient	Percentage	More Convenient	Percentage	Total	Percentage
ATM	0	0	23	58	12	30	5	12	4	100
Mobile banking	0	0	1	100	0	0	0	0	1	100
Tele banking	0	0	1	100	0	0	0	0	1	100
Internet banking	0	0	2	50	1	25	1	25	4	100
More than one	0	0	3	75	0	0	1	25	4	100

Table 3.4 highlights the Customer preference towards multi services delivery channels. Out of the total respondents, Majority (i.e.) 100% of the customers are satisfied about the mobile banking as most of the customers prefer to adopt the mobile banking services in the near future. 58% of the customers are satisfied with the ATM and 50% of the customers are satisfied about internet banking. 75% of the customers are satisfied about more than one service. The following table highlights the fact that ATM and telebanking is the most used banking services by the customer.

**TABLE 3.5: CUSTOMERS OPINION ON BANKING CHARGES (FOR ALL RESPONDENTS)**

Particulars	No of respondents	percentage
Yes	30	60
No	20	40
total	50	100

Source: Primary data

Tables 3.5 pinpoint the opinion on banking charges. Out the total respondents, Majority (i.e.) 60% of the sample respondents have expressed the banking charges are reasonable while 40% of sample respondents are of opinion that the charges on banking services are not reasonable and they have to pay excessive charges.

**TABLE 3.6: CUSTOMERS OPINION ON BANKING CHARGES (OCCUPATION WISE)**

Particulars	yes	percentage	no	percentage	Total	percentage
employee	9	50	9	50	18	100
SHG	7	78	2	22	9	100
professional	8	50	8	50	16	100
Businessman	6	86	1	14	7	100

Source: Primary data

Table 3.6 pinpoints the opinion of the customer towards the banking service charges. Out of the total respondents Majority (i.e.) 86% of the Business class have mentioned the charges are reasonable in the bank and 50% of the employees have expressed the charges are reasonable. 78% of the SHG members and 50% of the professionals have expressed the banking charges are reasonable while 14% of the Business class have expressed the banking service charges are not reasonable.

**TABLE 3.7: CUSTOMERS OPINION ON BANKING CHARGES (FOR DIFFERENT TYPE OF ACCOUNT HOLDER)**

Particulars	yes	Percentage	no	percentage	total	percentage
Current a/c	8	89	1	11	9	100
Saving a/c	20	59	14	41	34	100
Recurring a/c	2	50	5	50	4	100
Fixed a/c	0	0	2	50	2	100
More than one a/c	0	0	1	100	1	100

Source: Primary data

Table 3.7 highlights the opinion of account holder on banking charges. Out of respondents, Majority (i.e.) 89% of the current account holders have stated that the chargers on banking services are reasonable. Which 59% of the saving account holder and 50% of recurring account holders have indicate that charges on banking service are reasonable. 50% of the fixed account holders are of opinion that the charges on banking services are not reasonable.

**TABLE 3.8: TIME TAKEN FOR SANCTIONING LOAN (FOR ALL RESPONDENTS)**

Particulars	No of respondent	Percentage
Yes	27	56
No	25	46

Source: Primary data

The table 3.8 highlights the customer’s opinion on the time taken for sanctioning the loan. Out of the total respondents, Majority (i.e.) 56% of the sample respondents are of opinion that the time taken for sanctioning the loan is not reasonable because the formalities is more so the time taken is more.

**TABLE 3.9: TIME TAKEN FOR SANCTIONING LOAN (OCCUPATION WISE)**

Particulars	yes	percentage	No	percentage	total	percentage
employee	9	50	9	50	18	100
SHG	7	78	2	22	9	100
professional	8	50	8	50	16	100
Businessmen	3	43	4	57	7	100

Source: Primary data

Table 3.9 shows that the customers opinion about the time taken for sanctioning the loan. Out of the respondents, Majority (i.e.) 78% of the SHG members and 50% of the employee have motioned that the time taken for sanctioning the loan is reasonable. 57% of the business class has stated that the time taken for sanctioning the loan is lengthier. Business class feels that the formalities are more for obtaining the loan so the processing time is taken more.

**TABLE 3.10: TIME TAKEN FOR SANCTIONING LOAN (FOR DIFFERENT TYPE OF ACCOUNT HOLDER)**

particulars	Yes	percentage	No	percentage	Total	percentage
Current a/c	4	44	5	56	9	100
Saving a/c	20	59	14	41	34	100
Recurring a/c	3	75	1	25	4	100
Fixed a/c	0	0	2	100	2	100
More than one a/c	0	0	1	100	1	100

Source: Primary data

Table 3.10 tabulates the customer opinion on time taken for sanctioning the loan. Out of the total respondents, Majority (i.e.) 75%of the recurring accounts holders and 59%of the saving a/c holders have stated that the time taken is reasonable for sanctioning the loan. 56%of the current account holder have expressed the time taken is not reasonable for sanctioning the loan. This is because the most of the current account holders are business people so the process of time taken is more.

**TABLE 3.11: SERVICES QUALITY (FOR ALL RESPONDENTS)**

Particulars	No of respondent	percentage
Yes	41	82
No	9	18

Source: Primary data

Table 3.11 reveals the customers opinion on the quality of improvement of core banking system. Out of the total respondents, Majority (i.e.) 82% of the sample respondents have mentioned that the core banking system has improved the quality of service. 18% of the sample respondents have expressed their opinion that the core banking system has not improved the quality of services.

**TABLE 3.12: SERVICES QUALITY (OCCUPATION WISE)**

Particulars	Yes	Percentage	No	Percentage	Total	Percentage
Employee	15	83	3	17	18	100
SHG	8	89	3	17	18	100
Professional	11	69	5	31	16	100
Businessman	7	100	0	0	7	100

Source: Primary data

Table 3.12 classifies the customer opinion on quality of services. Out the total respondents, Majority (i.e.) 89% of the SHG and 83% of the employees have expressed that core banking system has improved the quality of service. 17% of the employees and 17% SHG members have expressed that the core banking system has not improved the quality of services. The employee and SHG approach the banks regularly to conduct their transaction therefore they have realized the benefit of core banking.

**TABLE 3.13: SERVICES QUALITY (FOR DIFFERENT TYPE OF ACCOUNT HOLDER)**

particulars	Yes	Percentage	No	Percentage	Total	Percentage
Current a/c	9	100	0	0	9	100
Saving a/c	27	79	7	21	34	100
Recurring a/c	3	75	1	25	4	100
Fixed a/c	1	50	1	50	2	100
More than one a/c	1	100	0	0	1	

Source: Primary data

The table 3.13 pinpoints the customer’s opinion on the services quality. Majority (i.e.) 100% of the current account holders have stated their opinion about core banking has improved the quality of service. 79% of the saving account holders have mentioned the core banking system has improved the quality of service. 50% of the fixed account holders have expressed that core banking system has not improved the quality of banking services

**TABLE 3.14: RELATIONSHIP WITH THE BANKER (FOR ALL RESPONDENTS)**

particulars	No of respondent	Percentage
Yes	40	80
No	10	20

Source: Primary data

Table 3.14 shows that the customers opinion on the relationship with banker. Out of the total respondents, Majority (i.e) 80% of the sample respondents have expressed that they have good relationship with banker and 20% of the sample respondents have expressed that they have not maintained the good relationship with their banker.

**TABLE 3.15: RELATIONSHIP WITH THE BANKER (OCCUPATION WISE)**

Particulars	Yes	Percentage	No	Percentage	Total	Percentage
employee	14	78	4	22	18	100
SHG	9	100	0	0	9	100
professional	11	69	5	31	16	100
Businessman	6	86	1	14	7	100

Source: Primary data

Table 3.15 classifies the opinion of the customers on relationship with banker. Out of the total respondents, Majority (i.e.) 100% of SHG members and 78% of employees have expressed their opinion that they maintained a good relationship with the bankers as they meet their customers needs and requirements immediately. 31% of the employees have expressed that their relationship is not good with banker.

**TABLE 3.16: RELATIONSHIP WITH THE BANKER (FOR DIFFERENT TYPE OF ACCOUNT HOLDER)**

particulars	Yes	Percentage	No	Percentage	Total	Percentage
Current a/c	9	10	0	0	9	100
Saving a/c	27	79	7	21	34	100
Recurring a/c	3	75	1	25	4	100
Fixed a/c	1	50	1	50	2	100
More than one a/c	1	100	0	0	1	

Source: Primary data

Table 3.16 tabulates the customer’s opinion about relationship with banker. Out the total respondents, Majority (i.e.) 79% of the of the saving account holder have expressed their opinion about the customer maintain the good relationship with banker through core banking system. 50%of the fixed account holder has not maintained the good relationship with banker through core banking system.

**TABLE 3.17: FACILITIES OF NETWORKING (FOR ALL RESPONDENTS)**

Particulars	No of respondent	percentage
Enquiries	8	16
Cash payments	10	20
Cheque deposited	20	40
Cash deposited in linked branch	10	20
Cheque deposited in linked branch	2	4

Source: Primary data

Table 3.17 tabulates the customer’s opinion on facilities of networking. Out of the total respondents, Majority (i.e.) 40% of the respondents have mentioned that have deposited a cheque or cash for credit in to their account. 20% of the sample respondents have obtained the cash payment out of his account by offering a cheque and another 20%of the respondents have deposit the cash into account of some other person who has account an interlinked.16% of sample respondents were made enquiries about the balance.

**TABLE 3.18: FACILITIES OF NETWORKING (OCCUPATION WISE)**

Particulars	Enquiries	%	Cash payments	%	Cheque deposited	%	Cash deposited in linked branch	%	Cheque deposited in linked branch	%	Total	%
Employee	5	28	3	17	3	17	6	33	1	5	18	100
SHG	0	0	4	44	4	44	1	12	0	0	9	100
Professional	3	18	2	12	8	50	2	13	1	7	1	100
Businessman	0	0	1	14	5	71	1	15	0	0	7	100

Table 3.18 Pinpoints the customer’s opinion on the facilities of networking. Out of the total respondents, Majority (i.e.) 71 % of the business class and 50%of the professional 44% of the SHG members have deposited a cheque or cash for credit into their account. 33% of the employees have deposited the cash into account of some other person who has account in an interlinked the branch.

**TABLE 3.19: FACILITIES OF NETWORK (FOR DIFFERENT TYPE OF ACCOUNT HOLDER)**

Particulars	Enquiries	%	Cash payments	%	Cheque deposited	%	Cash deposited in linked branch	%	Cheque deposited in linked branch	%	Total	%
Current a/c	1	12	0	0	4	50	3	38	0	0	8	100
Saving a/c	6	17	7	21	13	38	6	18	2	6	34	100
Recurring a/c	1	25	2	50	1	25	0	0	0	0	4	100
Fixed a/c	0	0	1	33	1	33	1	34	0	0	3	100
More than one a/c	0	0	0	0	1	100	0	0	0	0	1	2

Table 3.19 highlights the opinion of the customers on the facilities of network. Out of the total respondents, Majority (i.e) 100% of the recurring account of holders have deposited a cheque or cash for credit into their accounts and 50%of recurring a/c holder has obtained cash payment out of their account by offering a cheque. 50% of the current account holders and 38% of the saving account holder have deposited a cheque or cash for credit into their account.

**TANBLE 3.20: FUTURE EXCEPTIONS (FOR ALL RESPONDENTS)**

Particulars	No of respondent	Percentage
Reasonable cost	13	26
Expected neither technique intervention nor quality services	21	42
Security	16	32

Source: Primary data

Table 3.20 reveals that the opinion of customers on future expectations. Out of the total respondents, Majority (i.e.) 42% of the sample respondents have mentioned that they would like operate their banking transactions in a core banking environment which is free from neither technical intervention such as computer connecting and 32% of the samples respondents expect the bank will provide security. 26% of the sample respondents have stated reasonable charges have to be imposed on their banking transaction.

**TABLE 3.21: FUTURE EXCEPTIONS (OCCUPATION WISE)**

Particulars	Reasonable cost	%	Expected neither technique intervention nor quality services	%	security	%	Total	%
employee	5	28	9	50	4	22	18	100
SHG	2	22	5	56	2	22	9	100
professional	4	25	3	19	9	56	16	100
Businessman	2	29	4	59	1	14	7	100

Source: Primary data

The table 3.21 reveals that the customer opinion about the expected customer. Out of the total respondents, Majority 59% of the businessman and 56% of the SHG and 50% of employees have mentioned that they would like operate banking transactions in a core banking environment which is free is from technical intervention such as computer connection. And 56% of the professionals are expect the bank will provide security.

**TABLE 3.22: FUTURE EXCEPTIONS (FOR DIFFERENT TYPE OF ACCOUNT HOLDER)**

particulars	Reasonable cost	%	Expected neither technique intervention nor quality services	%	security	%	Total	%
Current a/c	1	13	6	75	1	12	8	100
Saving a/c	7	21	13	38	14	41	34	100
Recurring a/c	4	100	0	0	0	0	4	100
Fixed a/c	0	0	2	67	1	33	3	100
More than one a/c	1	100	0	0	0	0	1	2

Source: Primary data

Table 3.22 tabulates the customer’s opinion on the expectations in the future. Out of the total respondents, Majority (i.e.)100% of the more than one account holders expect that the bank will provide the better quality of service at reasonable cost. 75% of the current a/c holders and 67% of the fixed account holders have mentioned that they would like to operate their banking transaction in a core banking environment which is free from technical intervention such as computer connectivity. 41% of the saving account holders expect that they would like to operate in environment free from security problem.

**TABLE 3.23: BENEFITS OF NETWORKING (FOR ALL RESPONDENTS)**

Particulars	No of respondents	percentage
Quick transfer of funds	30	60
Low transaction cost	15	30
Reduced error	4	8
More than one	1	2

Source: Primary data

The table 3.23 tabulates the customer opinion about the advantage of networking. Out of the total respondents, Majority (i.e.) 60%of the sample respondents have expressed that they have enjoyed the quick transfer of funds after the bank has been networked, 30% of sample respondents have expressed that they are enjoying the advantage of low transaction cost. 8% of the sample respondents have expressed that errors are considerably reduced after networking the branches. 2% of the sample respondents have mentioned that they have benefited by more than one advantage after networking of the branches.

**TABLE 3.24: BENEFITS OF NETWORKING (OCCUPATION WISE)**

Particulars	Quick transfer of fund	%	Low transaction cost	%	Reduced error	%	More than one	%	Total	%
employee	10	56	6	33	2	11	0	0	18	100
SHG	9	100	0	0	0	0	0	0	9	100
professional	7	44	7	44	1	6	1	6	16	100
Businessman	4	57	2	29	1	14	0	2	7	100

Source: Primary data

Table 3.24 pinpoints the opinion of customers on the advantage of networking. Out of the total respondents, Majority (i.e.) 100% of SHG members and 57%of business class and 56% of the employee have mentioned that the prevailing system has helped them to transfer their funds speedily. 44%of the professionals have expressed that the transaction cost is low.

**TABLE 3.25: BENEFITS OF NETWORKING (FOR DIFFERENT TYPE OF ACCOUNT HOLDER)**

Particulars	Quick transfer of fund	%	Low transaction cost	%	Reduced error	%	Total	%
Current a/c	1	13	6	75	1	12	8	100
Saving a/c	7	21	13	38	14	41	34	100
Recurring a/c	4	100	0	0	0	0	4	100
Fixed a/c	0	0	2	67	1	33	3	100
More than one a/c	1	100	0	0	0	0	1	100

Source: Primary data

The table 3.25 reveals the customer opinion about the advantages of networking. Out of the total respondents, Majority (i.e.) 100% of the more than one account holders have expressed that the quick transfer of funds is possible after networking. 100 % of the recurring account holders have mentioned the transaction cost is low .75%of the current account holder have stated the fund are quickly transferred and the 21% of the saving a/c holders have mentioned the funds are quickly transferred.

**TABLE 3.26: TIME TAKEN FOR VARIOUS TRANSACTION UNDER CORE BANKING**

Sl. No.	Particulars	Pre & Post Computerization	%	Post Computerization & Core Banking	%
1.	Deposit of Cash	17.8	45.3	12.02	55.9
2.	Withdraw of Cash	19.6	5.7	8.9	47
3.	Purchase of draft	18.02	48.5	8.2	42.9
4.	Issue of fixed depository receipts	18.56	48.15	10.2	51.04
5.	Transfer of funds	20.32	51.05	9.86	50.6
6.	Encashment of draft	18.8	49	9.76	51.6

Source: Primary data

Table 3.26 indicates the customer opinion about the core banking 55.9% of the respondents, 50.05%of the sample respondents and 50.6%of the sample respondents have expressed that deposit, of cash issue of fixed deposit receipt, encashment of draft taken approximately 20 minutes after networking of the bank. While during the pre computerization era the customers have to wait for considerably longer duration and during post computerization era, the customers have to wait for nearly 30 minutes.

This table reveals that after of networking of branches the waiting time of customers have been reduced to greater extent and the issue of fixed deposit receipt deposit of cash and encashment of draft are done speedily.

**FINDINGS**

- Majority (i.e.) 60% of the customers of nationalized bank are satisfaction about the core banking followed by 26% of the respondents who have expressed their convenience in transacting with nationalized bank after networking of branch as it is easy to conduct their transaction in efficient way that is accurate and time saving.
- Majority (i.e.) 69% of the professional are satisfied with the core banking operations of Nationalized bank .
- Majority (i.e.) 100% of the more than one account holder have expressed that they are satisfied about the core banking system
- Majority (i.e.) 100% of the customers are satisfied about the mobile banking as most of the customers prefer to adopt the mobile banking services in the near future.
- Majority (i.e.) 60% of the sample respondents have expressed the banking charges are reasonable while 40% of sample respondents are of opinion that the charges on banking services are not reasonable and they have to pay excessive charges.
- Majority (i.e.) 86% of the Business class have mentioned the charges are reasonable in the bank and 50% of the employees have expressed the charges are reasonable.
- Majority (i.e.) 89% of the current account holders have stated that the chargers on banking services are reasonable. Which 59% of the saving account holder and 50% of recurring account holders have indicate that charges on banking service are reasonable
- Majority (i.e.) 56% of the sample respondents are of opinion that the time taken for sanctioning the loan is not reasonable because the formalities is more so the time taken is more.
- Majority (i.e.) 78% of the SHG members and 50% of the employee have motioned that the time taken for sanctioning the loan is reasonable. 57% of the business class has stated that the time taken for sanctioning the loan is lengthier. Business class feels that the formalities are more for obtaining the loan so the processing time is taken more.
- Majority (i.e.) 75%of the recurring accounts holders and 59%of the saving a/c holders have stated that the time taken is reasonable for sanctioning the loan.
- Majority (i.e.) 82% of the sample respondents have mentioned that the core banking system has improved the quality of service. 18% of the sample respondents have expressed their opinion that the core banking system has not improved the quality of services.
- Majority (i.e.) 89% of the SHG and 83% of the employees have expressed that core banking system has improved the quality of service
- Majority (i.e.) 100% of the current account holders have stated their opinion about core banking has improved the quality of service.
- Majority (i.e) 80% of the sample respondents have expressed that they have good relationship with banker and 20% of the sample respondents have expressed that they have not maintained the good relationship with their banker.
- Majority (i.e.) 100% of SHG members and 78% of employees have expressed their opinion that they maintained a good relationship with the bankers as they meet their customers needs and requirements immediately
- Majority (i.e.) 79% of the of the saving account holder have expressed their opinion about the customer maintain the good relationship with banker through core banking system.
- Majority (i.e.) 40% of the respondents have mentioned that have deposited a cheque or cash for credit in to their account
- Majority (i.e.) 71 % of the business class and 50%of the professional 44% of the SHG members have deposited a cheque or cash for credit into their account

**SUGGESTIONS**

Based on the finding of the study, the following suggestions were made with a view to improved the customer service for which a view to improve the customer’s service in the core banking environment.

- With a view to save the valuable time of the customers, the staffs should try to complete the transactions as quickly as possible. For this purpose, the bank management should arrange training programs for their staffs
- Core banking supports real time mult – banking and mult – channels strategies. The system was introduced with a view to make the branch customer as the bank customers. So the bank should bring about this mind set change in the bank employees. The banks have to focus on quality of services and also the banks should. Try to charge a reasonable service charge.
- The banks introduced Multi-Service delivery channels among which the ATM is commonly used by the customer. There is lack of awareness towards phone, mobile and net banking, the banks and the bank employees should create awareness about these channels so that the customers can very well make use of it.

4. The major problems faced by the employees of the bank are connectivity problems and power failure problem. To overcome these problems the branches should set up a preventive measure.
  5. Errors may occur due to a number of sources such as development and amendment of computer programs, simple errors in data entry by terminal operator's etc. These errors may affect the completeness and accuracy of transactions. The bank should have a mechanism to ensure error free service to customers.
  6. The branch in rural area have been computerized but they are not connected through the core banking system. The management should take steps to introduce this glorious system in rural areas also.
  7. There is need for considerable and continuous up gradation of human resource skills and fine tuning of human resource management strategies with a view to enhancing the level of knowledge, sharpening skills and also to instill the necessary attitude and work culture.
- To conclude a personal touch is required to be added in its technological services for the bank which will be the key differentiator which will distinguish bank from the other banks. In this competitive world, it is a mandatory for banking equip themselves with effective strategy to attract and retain customer

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**A STUDY ON CUSTOMER SATISFACTION OF GOODKNIGHT PRODUCTS IN ERODE, TAMILNADU**

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**ABSTRACT**

*Customer satisfaction is the state of mind that customers have about a company when their expectations have been met or exceeded over the lifetime of the product or service. The achievement of customer satisfaction leads to company loyalty and product repurchase. The present study is to measuring customer satisfaction is to see where a company stands in the eyes of its customers, thereby enabling service and product improvements which will lead to higher satisfaction levels. The research is just one component in the quest to improve customer satisfaction.*

**KEYWORDS**

Marketing, Customer satisfaction, Goodknight products.

**INTRODUCTION**

 Organizations are increasingly interested in retaining existing customers while targeting non-customers; measuring customer satisfaction provides an indication of how successful the organization is at providing products and/or services to the marketplace. Customer satisfaction is an ambiguous and abstract concept and the actual manifestation of the state of satisfaction will vary from person to person and product/service to product/service. The state of satisfaction depends on a number of both psychological and physical variables which correlate with satisfaction behaviors such as return and recommend rate. The level of satisfaction can also vary depending on other options the customer may have and other products against which the customer can compare the organization's products.

Customer satisfaction research is not an end unto itself. The purpose, of course, in measuring customer satisfaction is to see where a company stands in this regard in the eyes of its customers, thereby enabling service and product improvements which will lead to higher satisfaction levels. The research is just one component in the quest to improve customer satisfaction.

Customer service is the provision of service to customers before, during and after a purchase. Its importance varies by product, industry and customer. As an example, an expert customer might require less pre-purchase service (i.e., advice) than a novice. In many cases, customer service is more important if the purchase relates to a service as opposed to a product".

**REVIEW OF LITERATURE**

Hansen, Torben; Jensen, Jan Møller; Solgaard, Hans Stubbe (2011) - Purpose - The purpose of this paper is to investigate whether consumer supermarket satisfaction is influenced by the mere composition of consumers' preference structure, as opposed to more widespread approaches where consumer satisfaction is regarded as the degree to which consumer expectations and/or preferences are met. Design/methodology/approach - Survey data were collected from 130 consumers using self-administered questionnaires. Structural equation modelling was used to test the authors' proposed hypotheses. Findings - According to consumers, not many supermarkets offer high quality at low prices, suggesting that consumers with a high-quality /low-price preference structure should be disconfirmed and thus dissatisfied.

Brakus, J. Joško; Schmitt, Bernd H; Zarantonello, Lia (2009)- Brand experience is conceptualized as sensations, feelings, cognitions, and behavioral responses evoked by brand-related stimuli that are part of a brand's design and identity, packaging, communications, and environments. The authors distinguish several experience dimensions and construct a brand experience scale that includes four dimensions: sensory, affective, intellectual, and behavioral. In six studies, the authors show that the scale is reliable, valid, and distinct from other brand measures, including brand evaluations, brand involvement, brand attachment, customer delight, and brand personality. Moreover, brand experience affects consumer satisfaction and loyalty directly and indirectly through brand personality associations

Beatson, Amanda; Coote, Leonard V.; Rudd, John M. (2006) .This paper expands research into self-service technology in the service encounter. Self-service technology is where customers deliver service themselves using some form of a technological interface. There is still a great deal unknown about self-service technology, in particular its impact on consumer satisfaction and consumer commitment. With that in mind, this empirical study explores the relative impact of self-service technology on consumer satisfaction and on a multidimensional measure of consumer commitment containing affective commitment, temporal commitment.

**OBJECTIVES OF THE STUDY**

1. To find out the customer satisfaction level for Goodknight products.
2. To find out the reason for purchasing the Goodknight products.
3. To suggest methods for product improvements in price, quality, and Performance and so on.

**RESEARCH METHODOLOGY**

In this study, determining sample size involves a great deal of time, and energy, which will allow a decision to be made concerning this problem. The sample size has to be determined by the formula of finite population. The size of the sample is 300 and it should be studied to get sufficiently accurate and reliable answer for this project study.

**DATA COLLECTION**

In dealing with any real life problem it is often found that data at hand are in adequate, and hence, it becomes necessary to collect data that are appropriate for this research study. There are several ways of collecting the appropriate data, which differ considerably in context of money costs, time and other resources at the disposal of the researcher. In this research process, data has to be collected from the customer to get relevant information about the GoodKnight and also from the given data to determine the customer satisfaction of this product. With help of the structured questionnaire the primary data is collected by the response of the respondents. The secondary data has been collected from the company records, journals and various websites.

**TOOLS FOR ANALYSIS**

To arrange and interpret the collected data the following statistical tools were used

- Percentage Method.
- Correlation Method.
- Chi-square analysis

**DATA ANALYSIS AND INTERPRETATION**

**TABLE 1: TABLE SHOWING THE PERSONAL PROFILE OF THE RESPONDENTS**

Group	Classification	No of respondents	Percentage
Age	>20	34	11.3
	21-30	65	21.6
	31-40	71	23.6
	40 above	130	43.3
OCCUPATION	Business	85	28.3
	Employee	55	18.7
	Farmer	120	40
	Others	30	10

**INTERPRETATION**

The above table found that 11.3% of the respondents are under the age level of below 20, 21.6% of the respondents are between 21-30, 23.6% of the respondents are between 31-40 and 43.3% of the respondents are comes under above 40. The above table found that 28.3% of the respondents are under the occupation of business , 18.7% of the respondents are in the status of employees, 40% of the respondents are doing farmer and others occupation

**TABLE 2: THE TABLE SHOWS THE RESPONDENTS ON THE BASIS OF TYPE OF GOOD KNIGHT**

ATTRIBUTES	NO. OF RESPONDENTS	PERCENTAGE
Coil	65	21.6%
Liquidators	55	18.3%
Lotion	63	21%
Mat	57	19%
Electric liquidators	60	20%
Total	300	100%

**INTERPRETATION**

The above table found that 21.6% of the respondents are desire to use liquidators, 18.3% of the respondents are prefer electric liquidator, 21% of the respondents are prefer in lotion and 19% of the respondents are prefer to use mat and 20% of the respondents are prefer to use coil

**TABLE 3: THE TABLE SHOWS THE RESPONDENTS ON THE BASIS OF TYPE OF GOOD KNIGHT**

ATTRIBUTES	NO. OF RESPONDENTS	PERCENTAGE
Martin	69	23%
All out	76	25.4%
Tortoise	65	21.6%
others	90	30%
Total	300	100%

**INTERPRETATION**

The above table found that 23% of the respondents'opinion about competitor is Martin, 25.4% of the respondents'opinion is All Out, and 216% of the respondents'opinion is Tortoise

**CHI-SQUARE TEST -1**

**Null hypothesis (Ho):**

There is no association between the respondents on the basis of age and type of Good Knight they prefer.

**Alternative hypothesis (Ha):**

There is association between the respondents on the basis of age and type of Good Knight they prefer.

*Chi-square Test:*

Observed frequency (O<sub>i</sub>)

Age	Type of Good Knight				
	Coil	Liquidators	Lotion	Electric Liquidators	Mat
Below 20	3	7	1	1	0
21-30	15	12	3	6	12
31-40	10	2	12	0	0
Above 40	8	3	8	17	0
Total	36	24	24	24	12



Expected frequency (Ei):

Type of Good Knight					
Age	Coil	Liquidators	Lotion	Electric Liquidators	Mat
Below 20	3.6	2.4	2.4	2.4	1.2
21-30	14.4	9.6	9.6	9.6	4.8
31-40	7.2	4.8	4.8	4.8	2.4
Above 40	10.8	7.2	7.2	7.2	3.6
Total	36	24	24	24	12

Calculated value = 69.83

Tabulated value = 21.26

Level of significance = 0.05

**INTERPRETATION**

Since the calculated value of chi-square is greater than the table value. So, reject the null hypothesis and conclude that there is association between the respondents on the basis of age and the type of Good Knight they prefer

**CHI-SQUARE TEST – 2**

**Null hypothesis (Ho):**

There is no association between the respondents on the basis of income of the respondents and the level of satisfaction in price and quality of the product.

**Alternative hypothesis (Ha):**

There is association between the respondents on the basis of income of the respondents and the level of satisfaction in price and quality of the product.

Chi-square Test:

**Observed Frequency (oi)**

Level of satisfaction in price and quality					
occupation	Highly satisfied	satisfied	No opinion	dissatisfied	Highly dissatisfied
Business	17	31	10	14	72
Employee	19	3	3	11	36
Farmer	0	3	1	6	12
others	0	0	0	0	0
Total	36	37	14	31	120

Expected frequency (Ei)

Level of satisfaction in price and quality					
occupation	Highly satisfied	satisfied	No opinion	dissatisfied	Highly dissatisfied
Business	21.6	22.2	8.4	18.6	1.2
Employee	10.8	11.1	4.2	9.3	0.6
Farmer	3.6	3.7	1.4	3.1	0.2
others	0	0	0	0	0
Total	36	37	14	31	120

Calculated value = 43.48

Tabulated value = 21.26

Level of significance = 0.05

**INTERPRETATION**

Since the calculated value of chi-square is greater than the table value. So, reject the null hypothesis and conclude that there is association between the respondents on the basis of income and level of satisfaction in price and quality of the product.

**ANALYSIS USING KARL PEARSON'S COEFFICIENT OF CORRELATION**

**HYPOTHESIS**

Ho: There is no significant relationship between respondent's age and the level of satisfaction about quality of the product.

**CALCULATION**

$\sum dx dy$

$r = \frac{\sum dx^2 * \sum dy^2}{\dots}$

$r = -0.29$

Testing of hypothesis:

$t = -133.3$

X is taken as the ages of the respondents

Y is taken as the level of satisfaction about the quality of the product.

**INTERPRETATION**

Hence there exists of positive correlation between respondent's age and customer level of satisfaction about the quality of the product. So there is significant relationship between the respondent's age and the level of satisfaction about the quality of the product.

**FINDINGS**

- Majority of the respondents are in the age group between 21-30 (39%).
- 29% of the respondents prefer electric liquidators and lower percentage of customer preferred Good Knight mat and Lotion because of Low price.
- 48% of the respondents are using this electric liquidators and 16% respondents quality, due to that ultimately they desire to use this Good Knight.
- Most of the respondents are recommend this product to their friends because of good brand image.
- Most of the respondents are feel the level of satisfaction about the product is good.
- The percentage of the respondent's feel that the price is reasonable when compared to other competitors.
- The opinion received from the respondents about the quality of the product should be improved in the future.

**SUGGESTIONS**

The company should give some sales promotional offer to the customer in the form of effective advertisement. These will be creating the sales in future. The company, GoodKnight Sara Lee Limited can initiate steps to reduce the price of its various models to increase their sales volume as more than fifty percentage of the respondent's opinion that the price structure is high. To increase the sales so it is advisable to maintain the quality of product. Quality maintains can bring to a positive attitude towards Good Knight products. The company can introduce more specialized models for different segments of the people like, powder and

sprays to reduce the power consumption. Promotion activity must be improved through personal selling, sales promotion and advertising. It should be creating brand image of Good Knight. The company should give a competitive selling price, which will be creating more market share.

## CONCLUSION

This study reveals that GoodKnight Sara Lee Limited has good brand image in Puducherry. The focus of this study is to find customer satisfaction with regard to Good Knight for GoodKnight Sara Lee Limited, Puducherry.

The objectives of this study are to know the level of satisfaction among the consumer based on product quality, price, brand image, sales and performance of the Good Knight.

Thus from the above research it was found that each supplier is responsible to this customer in the following matters

- Regular supply of right quality goods at right time and place
- Charge reasonable price
- Prompt, adequate and continuous service
- Solving customer complaint

Therefore better the firm understands its consumer more likely the company will become successful in market place. From the study, it can be concluded that the customers of Good Knight have high level of satisfaction, brand image, quality, price are the main factors in influencing customer satisfaction towards GoodKnight Sara Lee Limited products.

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**ASSOCIATION BETWEEN DIVIDEND DECISION AND FINANCIAL PERFORMANCE: AN EMPIRICAL ANALYSIS**

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**ABSTRACT**

*Dividend decision is an important function of the managers. This study attempts to find the relationship between the profitability ratios, operating ratios, liquidity ratios, with the dividend payout ratio of the company. For this study companies listed on the BSE 200 index are taken from the year 2006-2008 through PROWESS and ICICI DIRECT. There are three research questions addressed by this study. The first is to examine the significance of dividend decision due to financial performance indicator of the firms. The second is to examine the significance of dividend decision to the dividend yield percentage. The third is to examine the significance of dividend decision to the average annual return. Financial performance/indicator here is measured in terms of liquidity ratio, profitability ratio, and the operating ratio. Descriptive statistics was used along with the non parametric test of significance i.e. Chi-square test to find out the significant association between the dividend decision and the financial performance of the companies. Also the strength of the association was also calculated using Cramer's V.*

**KEYWORDS**

BSE 200 INDEX, CHI-SQUARE TEST, CRAMER'S V, ICICI DIRECT, PROWESS.

**INTRODUCTION**

Dividend decision is an important function of the managers. Literature suggests that dividend decision of the firm is influenced by various company specific factors and industry specific factors. Prior studies suggest that dividend decision of the firm is influenced by the cash flow of the firm, liquidity of the firm and profitability of the firm. Few studies have investigated the association between dividend decisions and financial performance/indicator of the firms (Anand, 2000; Bhattacharya, 1979; Davis & Pain, 2002; Linter, 1956a; Linter, 1956b; Modigliani & Miller, 1958; Miller & Modigliani, 1961). The study investigates the association between dividend decisions of the company with its financial performance/indicator measured in terms of liquidity, profitability and operating performance. The survey on BSE 200 companies suggests that liquidity measures are associated with dividend decisions which support the existing state of literature. Surprisingly the study did not find significant association between dividend decision and profitability. The study supports the findings that the dividend decision of the firm is very less associated with the financial performance/indicator of the firm (Anand, 2002; Omet, 2004).

This study attempts to find the relationship between the profitability ratios, operating ratios, liquidity ratios, with the dividend payout ratio of the company. For this study companies listed on the BSE 200 index are taken and the financial performance/indicator is measured through their different ratio like profitability ratio, operating ratio, liquidity ratio.

**STATEMENT OF THE PROBLEM**

In this paper, we examine whether the change in the financial position of the companies which is measured through the indicator of profitability ratios, the operating ratios, the liquidity ratios of the firm can explain their dividend decision in an emerging economy like India. Using detailed financial performance of 200 BSE listed Indian corporate firms over the period 2006-08; we try to answer some of the questions raised herewith. Is the financial performance of the firm influence the dividend decision of the firm?

These are some of the important questions which researchers are trying to explore in the recent literature of factor influence the dividend policy decision of the corporate India. In this context, we investigate Indian corporate firms in order to provide new evidence on how the financial performances influence the dividend decision. In finance literature the relationship between the financial performance and the dividend decision has received the considerable attention. According to the Manoj Anand there exists very less correlation between the firm financial position and dividend decision of the firm. The Argument tells us that –there are very less but positive correlation between the dividend payout ratio and the market value of the firm. According the finding of the paper in (1961) which declares dividend as irrelevant in a world without taxes, transaction cost, or other market imperfection and financial performance decision of the firm is not affected by the dividend. According to Lazo (1999) study find out that companies use dividends as a signal of their future earnings. There is a significant negative correlation between the variables –‘dividend payout ratio’ and ‘investors are indifferent between receiving dividends and capitals gains.

**REVIEW OF LITERATURE**

The nature of relation between the dividend decision and the financial performance/indicator of the firm's, have been the core issue in the factor influence the dividend decision policy of the corporate India. From a firm's point of view, dividend decision is affected by the profitability and liquidity of the firm. The most important internal factor is that dividend decision of the company depends upon on company board of director. The effectiveness of every firm depends on the effectiveness of the board. There are many factors which may affect the performance of the firm life the board of directors holding in the company, promoters holding, non promoters holding, individuals holding, foreign investors holding, etc. Various studies have been done in this aspect examining the factor affecting the dividend decision and the performance of the company. In general, public sector firms are argued to be less efficient than private sector firms due to low powered managerial incentives and interest alignment. There could be reasons as government pursues multiple objectives, some of which are hard to be contracted upon. Shareholding pattern in such cases can make a difference in terms of firm's performance in the framework to capture the different dimensions influencing the dividend policy decisions of the corporate India. Linter (1956) made an analysis of the dividend policy of the companies and concluded that firms have three important concerns. Firstly, firms have long-run target dividend payout ratios. The payout ratio is high in case of mature companies with stable earnings and low in case of growth companies. Secondly, the dividends change follows shift in long-term sustainable earnings. The managers are more concerned with dividend changes than on absolute level. Finally, manager does not intend to reverse the change in dividends.

Fama and Babiak (1968) test of Linter's model suggest that it provides a good explanation of how companies decide on dividends rate. Asquith and Mullins Jr. (1983) study investigates the impact of dividends on stockholders' wealth by analyzing 168 firms that either pays the first dividend in their corporate history. Subsequent dividend increases for same the sample of firms have also been investigated. The findings are consistent with the view that dividends convey unique and valuable information to the investor. Lang and Litzenberger (1989) study suggest that information content of negative changes in dividends is greater than that of positive changes. Bond and Mougoue (1991), and Benartzi et al(1997) critically examined the applicability of the Lintner's mathematical model to describe the dividend decision process. Most of these studies have been done to identify the factors that corporate finance managers consider in laying down the dividend policy. The study samples a large cross section of 474 private sector and top 51 public sector top firms of corporate India based on market capitalization. In all, 81 Chief Financial officers (CFOs) form a broad cross section of the firms responded to the survey, for a response rate of 15.43%. According to the Anand survey the company they have selected are the India's most valuable 500 companies and ranks them based on their market capitalization. These reports consist of the private sector and India's 75 most valuable PSUs for the year 1999-2000. These constitutes the extent of the corporate India for the present study. So they exclude the 26 NBFCs from the private sector bank so they take the sample size of the 474 firms in the private sector. The study by the Anand use

some factors which accounted for 18.95%, 13.5% and 11.05% of the total variance explained. This show that the variation is very less while taking the dividend decision but it affected by the dividend payout ratio.

**RESEARCH METHODOLOGY**

There are three research questions addressed by this study. The first is to examine the significance of dividend decision due to financial performance indicator of the firms. The second is to examine the significance of dividend decision to the dividend yield percentage. The third is to examine the significance of dividend decision to the average annual return. Financial performance/indicator here is measured in terms of liquidity ratio, profitability ratio, and the operating ratio.

**RESEARCH HYPOTHESES**

The following is the list of the hypotheses that are to be tested in this study.

- Hypothesis 1: There is no significant association between quick ratio and the dividend payout ratio.
- Hypothesis 2: There is no significant association between current ratio and the dividend payout ratio.
- Hypothesis 3: There is no significant association between cash ratio and the dividend payout ratio.
- Hypothesis 4: There is no significant association between average PBT/total income ratio and the dividend payout ratio.
- Hypothesis 5: There is no significant association between ROCE and dividend payout ratio.
- Hypothesis 6: There is no significant association between PAT/net sale ratio and the dividend payout ratio.
- Hypothesis 7: There is no significant association between Debt equity ratio and the dividend payout ratio.
- Hypothesis 8: There is no significant association between Debt to capital ratio and the dividend payout ratio.
- Hypothesis 9: There is no significant association between proprietary ratio and the dividend payout ratio.
- Hypothesis 10: There is no significant association between dividend yield and the dividend payout ratio.
- Hypothesis 11: There is no significant association between annual return and the dividend payout ratio.

**RESEARCH DESIGN**

This study was conducted in three stages. In the first stage, relevant literatures were reviewed to propose the hypothesis on the dividend decision and the financial performance of the company. In the second stage, Dividend payout ratio and the financial performance indicator of the BSE 200 listed companies for the year 2008 was collected from the CMIE database PROWESS and then the data for various financial performance parameters for the year 2006-2008 was collected from PROWESS and ICICIDIRECT. In the next stage, association between the various dividend decision of the company and financial performance was measured. The total companies in the study were 200 from the BSE 200 listed companies.

**STATISTICAL METHOD USED**

Descriptive statistics was used along with the non parametric test of significance i.e. Chi-square test to find out the significant association between the dividend decision and the financial performance of the companies. Also the strength of the association was also calculated using Cramer’s V.

**ANALYSIS AND RESULTS**

1. Null Hypothesis: There is no significant association between quick ratio and the dividend payout ratio.  
 To measure the association between of the quick ratio of these company and dividend payout ratio cross tabulation was used. The results were shown in Table. The results state that there is no significant association between the quick ratio of the company and dividend payout ratio. To test if the quick ratio of the company and dividend payout ratio is statistically associated with each other, chi-square test was conducted. The result of the chi-square test suggests that the above two variables are not statistically associated and the result was not found to be significant at 0.1 levels. Further, the strength of the association was measured by Cramer’s V. The value of .135 shows weak association between the above two variables. Hence the hypothesis that there is no significant association between quick ratio of the company and dividend payout ratio is accepted.

**TABLE 1a: QUICK RATIO OF THE COMPANY AND DIVIDEND PAYOUT RATIO**

		Dividend payout ratio					
			Less than .5325	.5325-.9000	.9000-1.8025	Above 1.8025	Total
Quick Ratio	Low	Count	11	7	16	15	49
		Expected Count	12.3	11.8	12.5	12.5	49
		% within quick ratio	22.40%	14.3%	32.7%	30.60%	100.00%
	Low-Moderate	Count	7	16	11	12	46
		Expected Count	11.5	11.0	11.7	11.7	46
		% within quick ratio	15.2%	34.8%	23.9%	26.1%	100.00%
	Moderate-High	Count	14	12	10	14	50
		Expected Count	12.5	12.0	12.8	12.8	50
		% within quick ratio	28.0%	24.0%	20.0%	28.0%	100.00%
	High	Count	50	48	51	51	55
		Expected Count	50.0	48.0	51.0	51.4	55
		% within quick ratio	25.0%	24.0%	25.5%	25.5%	100.00%
Total	Count	50	48	51	51	200	
	Expected Count	50	48	51	51	200	
	% within quick ratio	25.0%	24.0%	25.5%	25.5%	100.00%	
<b>Chi-Square Tests</b>							
		Value	Df	Asymp. Sig. (2-sided)			
	Pearson Chi-Square	10.948 <sup>a</sup>	9	0.279			
	Likelihood Ratio	11.236	9	0.260			
<b>Strength of association test</b>							
		Value	Approx. Sig.				
	Cramer's V	0.135	0.279				

2. Null Hypothesis: There is no significant association between current ratio and the dividend payout ratio.  
 To measure the association between current ratio and the dividend payout ratio cross tabulation was used. The results were shown in Table. The results state that there is significant association between current ratio and the dividend payout ratio. To test if the current ratio and dividend payout ratio is statistically associated with each other, chi-square test was conducted. The result of the chi-square test suggests that the above two variables are statistically associated and the result was found to be significant at 0.1 levels.  
 Further, the strength of the association was measured by Cramer’s V. The value of .167 shows weak association between the above two variables. Hence the hypothesis that there is no significant association between current ratio and dividend payout ratio is rejected.

**TABLE 2a: CURRENT RATIO AND THE DIVIDEND PAYOUT RATIO**

		Dividend payout ratio					
			Less than 1.080	1.080-1.4800	1.4800-2.2175	Above 2.2175	Total
Current ratio	Low	Count	9	8	13	19	49
		Expected Count	11.5	12.5	8.9	14.2	49
		% within current ratio	18.4%	16.30%	32.40%	38.80%	100.00%
	Low-Moderate	Count	5	18	9	14	46
		Expected Count	10.8	11.7	10.1	13.3	46
		% within current ratio	10.90%	39.10%	19.60%	30.4%	100.00%
	Moderate-High	Count	14	11	10	15	50
		Expected Count	11.8	12.8	11.0	14.5	50
		% within current ratio	28.0%	22.0%	20.0%	30.0%	100.00%
	High	Count	19	14	12	10	55
		Expected Count	12.9	14	12.1	16	55
		% within current ratio	34.5%	25.50%	21.80%	18.2%	100.00%
Total	Count	47	51	44	58	200	
	Expected Count	47	51	44	58	200	
	% within current ratio	23.50%	25.50%	22.0%	29.0%	100.00%	
<b>Chi-Square Tests</b>			Value	Df	Asymp. Sig. (2-sided)		
		Pearson Chi-Square	16.724 <sup>a</sup>	9	0.053		
		Likelihood Ratio	17.107	9	0.047		
<b>Strength of association test</b>			Value	Approx. Sig.			
		Cramer's V	0.167	0.053			

3. Null Hypothesis: There is no significant association between cash ratio and the dividend payout ratio.

To measure the association between cash ratio and the dividend payout ratio cross tabulation was used. The results were shown in Table. The results state that there is no significant association between the cash ratio and the dividend payout ratio. To test if the cash ratio and the dividend payout ratio is statistically associated with each other, chi-square test was conducted. The result of the chi-square test suggests that the above two variables are not statistically associated and the result was not found to be significant at 0.1 levels. Further, the strength of the association was measured by Cramer's V. The value of .134 shows weak association between the above two variables. Hence the hypothesis that there is no significant association between cash ratio and the dividend payout ratio is accepted.

**TABLE 3a: CASH RATIO AND DIVIDEND PAYOUT RATIO**

		Dividend Payout Ratio				
			Less than .5500	.5500-1.3750	1.3750-3.1225	Above 3.1225
Cash ratio	Low	Count	8	15	10	16
		Expected Count	11.5	12.7	12.5	12.3
		% within cash ratio	16.3%	30.6%	20.40%	32.7%
	Low-Moderate	Count	11	10	16	9
		Expected Count	10.8	12	11.7	11.5
		% within cash ratio	23.9%	21.7%	34.8%	19.60%
	Moderate-High	Count	12	9	15	14
		Expected Count	11.8	13	12.8	12.5
		% within cash ratio	24.0%	18.0%	30.0%	28.0%
	High	Count	16	18	10	11
		Expected Count	12.9	14.3	14	13.8
		% within cash ratio	8.0%	32.70%	18.2%	20.0%
Total	Count	47	52	51	50	
	Expected Count	47	52	51	50	
	% within cash ratio	23.50%	26.0%	25.50%	25.0%	
<b>Chi-Square Tests</b>			Value	Df	Asymp. Sig. (2-sided)	
		Pearson Chi-Square	10.750 <sup>a</sup>	9	0.293	
		Likelihood Ratio	10.863	9	0.285	
<b>Strength of association test</b>			Value	Approx. Sig.		
		Cramer's V	0.134	0.293		

4. Null Hypothesis: There is no significant association between PBT/total income ratio and the dividend payout ratio.

To measure the association between PBT/total income ratio and the dividend payout ratio cross tabulation was used. The results were shown in Table. The results state that there is no significant association between the PBT/total income ratio and the dividend payout ratio. To test if the PBT/total income ratio and the dividend payout ratio is statistically associated with each other, chi-square test was conducted. The result of the chi-square test suggests that the above two

variables are not statistically associated and the result was not found to be significant at 0.1 levels. Further, the strength of the association was measured by Cramer's V. The value of .110 shows weak association between the above two variables. Hence the hypothesis that there is no significant association between PBT/total income ratio and the dividend payout ratio is accepted.

**TABLE 4 a: PBT/TOTAL INCOME AND DIVIDEND PAYOUT RATIO**

		Dividend Payout Ratio					
			Less than 9.5200	9.5200-16.3200	16.3200-25.8750	Above 25.8750	Total
PBT/Total income	Low	Count	14	10	12	13	49
		Expected Count	12	12	13	12	49
		% within PBT/Total income	28.60%	20.4%	24.50%	26.5%	100.00%
	Low-Moderate	Count	11	15	10	10	46
		Expected Count	11.3	11.3	12.2	11.3	46
		% within PBT/Total income	23.90%	32.6%	21.70%	21.7%	100.00%
	Moderate-High	Count	7	12	16	14	50
		Expected Count	12.3	12.3	13.3	12.3	50
		% within PBT/Total income	14.0%	26.0%	32%	28.0%	100.00%
	High	Count	17	11	15	12	55
		Expected Count	13.5	13.5	14.6	13.5	55
		% within PBT/Total income	30.90%	20.0%	27.3%	21.8%	100.00%
Total	Count	49	49	53	49	200	
	Expected Count	49	49	53	49	200	
	% within PBT/Total income	24.5%	24.5%	26.5%	24.50%	100.00%	
<b>Chi-Square Tests</b>			Value	df	Asymp. Sig. (2-sided)		
		Pearson Chi-Square	7.268 <sup>a</sup>	9	0.583		
		Likelihood Ratio	7.519	9	0.983		
<b>Strength of association test</b>							
			Value	Approx. Sig.			
		Cramer's V	0.110	0.609			

5. Null Hypothesis: There is no significant association between ROCE and dividend payout ratio.

To measure the association between ROCE and dividend payout ratio cross tabulation was used. The results were shown in Table. The results state that there is no significant association between ROCE and dividend payout ratio. To test if the ROCE and dividend payout ratio is statistically associated with each other, chi-square test was conducted. The result of the chi-square test suggests that the above two variables are not statistically associated and the result was not found to be significant at 0.1 levels. Further, the strength of the association was measured by Cramer's V. The value of .145 shows weak association between the above two variables. Hence the hypothesis that there is no significant association between ROCE and dividend payout ratio is accepted.

**TABLE 5a: ROCE AND DIVIDEND PAYOUT RATIO**

		Dividend payout ratio					
			Less than 6.6500	6.6500-16.3200	16.3200-25.8750	Above 25.8750	Total
ROCE	Low	Count	15	13	11	10	49
		Expected Count	11.8	12.7	12.3	12.3	49
		% within ROCE	30.6%	26.5%	22.4%	20.4%	100.00%
	Low-Moderate	Count	12	16	10	8	46
		Expected Count	11	12	11.5	11.5	46
		% within	26.10%	34.8%	21.7%	17.4%	100.00%
	Moderate-High	Count	7	16	13	14	50
		Expected Count	12	13	12.5	12.5	50
		% within ROCE	14.0%	32.0%	26%	28.0%	100.00%
	High	Count	14	7	16	18	55
		Expected Count	13.2	14.3	13.8	13.8	55
		% within ROCE	25.5%	12.70%	29.1%	32.7%	100.00%
Total	Count	48	52	50	50	200	
	Expected Count	48	52	50	50	200	
	% within ROCE	24.0%	26.0%	25.0%	25.0%	100.00%	
<b>Chi-Square Tests</b>			Value	df	Asymp. Sig. (2-sided)		
		Pearson Chi-Square	12.580 <sup>a</sup>	9	0.183		
		Likelihood Ratio	13.595	9	0.137		
<b>Strength of association test</b>							
			Value	Approx. Sig.			
		Cramer's V	0.145	0.183			

6. Null Hypothesis: There is no significant association between PAT/net sale ratio and the dividend payout ratio.

To measure the association between PAT/net sale ratio and the dividend payout ratio cross tabulation was used. The results were shown in Table. The results state that there is no significant association between the PAT/net sale ratio and the dividend payout ratio. To test if PAT/net sale ratio and the dividend payout ratio is statistically associated with each other, chi-square test was conducted. The result of the chi-square test suggests that the above two variables are statistically associated and the result was not found to be significant at 0.1 levels. Further, the strength of the association was measured by Cramer's V. The value of .124 shows weak association between the above two variables. Hence the hypothesis that there is no significant association between PAT/net sale ratio and the dividend payout ratio is accepted.

TABLE 6a: PAT/NET SALE RATIO AND DIVIDEND PAYOUT RATIO

		Dividend payout ratio					
			Less than 3.5500	3.5500-8.1250	8.1250-16.3850	Above 16.3850	Total
PAT/net sale	Low	Count	17	12	9	11	49
		Expected Count	11.8	12.7	12.3	12.3	49
		% within PAT/net sale	34.70%	24.5%	18.4%	22.4%	100.00%
	Low-Moderate	Count	13	12	12	9	46
		Expected Count	11	12	11.5	11.5	46
		% within PAT/net sale	28.3%	26.1%	26.10%	19.6%	100.00%
	Moderate-High	Count	9	11	13	17	50
		Expected Count	12	13	12.5	12.5	50
		% within PAT/net sale	18%	22%	26%	34%	100.00%
	High	Count	9	17	16	13	55
		Expected Count	13.2	14.3	13.8	13.8	55
		% within PAT/net sale	16.4%	30.9%3	29.1%	23.6%	100.00%
	Total	Count	48	52	50	50	200
		Expected Count	48	52	50	50	200
		% within PAT/net sale	24.0%	26.0%	25.0%	25.0%	100.00%
<b>Chi-Square Tests</b>							
			Value	df	Asymp. Sig. (2-sided)		
		Pearson Chi-Square	9.234 <sup>a</sup>	9	0.416		
		Likelihood Ratio	9.113	9	0.427		
<b>Strength of association test</b>							
			Value	Approx. Sig.			
		Cramer's V	0.124	0.416			

7. Null Hypothesis: There is no significant association between Debt equity ratio and the dividend payout ratio.

To measure the association between Debt equity ratio and the dividend payout ratio cross tabulation was used. The results were shown in Table. The results state that there is no significant association between the Debt equity ratio and the dividend payout ratio. To test if the Debt equity ratio and the dividend payout ratio is statistically associated with each other, chi-square test was conducted. The result of the chi-square test suggests that the above two variables are not statistically associated and the result was not found to be significant at 0.1 levels. Further, the strength of the association was measured by Cramer's V. The value of .113 shows weak association between the above two variables. Hence the hypothesis that there is no significant association between Debt equity ratio and the dividend payout ratio is accepted.

TABLE 7a: DEBT EQUITY RATIO AND THE DIVIDEND PAYOUT RATIO

		Dividend Payout ratio					
			Less than .2025	.2025-.6200	.6200-1.2000	Above 1.2000	Total
Debt equity ratio	Low	Count	11	17	9	12	49
		Expected Count	11	13.5	12.3	12.3	49
		% within debt equity ratio	22.4%	34.7%	18.4%	24.50%	100.00%
	Low-Moderate	Count	7	10	13	16	46
		Expected Count	10.4	12.7	11.5	11.5	46
		% within debt equity ratio	15.2%	21.7%	28.3%	34.8%	100.00%
	Moderate-High	Count	12	14	15	9	50
		Expected Count	11.3	13.8	12.5	12.5	50
		% within debt equity ratio	24.0%	28.0%	30%	18.0%	100.00%
	High	Count	15	14	13	13	55
		Expected Count	12.4	15.1	13.8	13.8	55
		% within debt equity ratio	27.3%	25.5%	23.6%	23.6%	100.00%
	Total	Count	45	55	50	50	200
		Expected Count	45	55	50	50	200
		% within debt equity ratio	22.5%	27.5%	25.0%	25%	100.00%
<b>Chi-Square Tests</b>							
			Value	df	Asymp. Sig. (2-sided)		
		Pearson Chi-Square	7.642 <sup>a</sup>	9	.571		
		Likelihood Ratio	7.686	9	.566		
<b>Strength of association test</b>							
			Value	Approx. Sig.			
		Cramer's V	0.113	.571			

8. Null Hypothesis: There is no significant association between Debt to capital ratio and the dividend payout ratio.

To measure the association between Debt to capital ratio and the dividend payout ratio cross tabulation was used. The results were shown in Table. The results state that there is no significant association between the Debt to capital ratio and the dividend payout ratio.

To test if the Debt to capital ratio and the dividend payout ratio is statistically associated with each other, chi-square test was conducted. The result of the chi-square test suggests that the above two variables are statistically associated and the result was not found to be significant at 0.1 levels. Further, the strength of the association was measured by Cramer's V. The value of .124 shows weak association between the above two variables. Hence the hypothesis that there is no significant association between Debt to capital ratio and the dividend payout ratio is accepted.

**TABLE 8a: DEBT TO CAPITAL RATIO AND DIVIDEND PAYOUT RATIO**

		Dividend payout ratio					
			Less than .1425	.1425- .4000	.4000-.5900	Above .5900	Total
Debt to capital ratio	Low	Count	11	16	11	11	49
		Expected Count	11.3	13	12.3	12.5	49
		% within debt to capital ratio	22.4%	32.70%	22.40%	22.40%	100.00%
	Low – Moderate	Count	7	10	11	18	46
		Expected Count	10.6	12.2	11.5	11.7	46
		% within debt to capital ratio	15.2%	21.7%	23.00%	39.10%	100.00%
	Moderate-High	Count	13	15	14	8	50
		Expected Count	11.5	13.3	12.5	12.8	50
		% within debt to capital ratio	26.0%	30.%	28.0%	16.0%	100.00%
	High	Count	15	12	14	14	55
		Expected Count	12.7	14.6	13.8	14.0	55
		% within debt to capital ratio	27.3%	21.8%	25.5%	25.5%	100.00%
	Total	Count	46	53	50	51	200
		Expected Count	46	53	50	51	200
		% within debt to capital ratio	23.%	26.5%	25.%	25.50%	100.00%
<b>Chi-Square Tests</b>							
			Value	df	Asymp. Sig. (2-sided)		
		Pearson Chi-Square	9.263 <sup>a</sup>	9	0.413		
		Likelihood Ratio	9.197	9	0.419		
<b>Strength of association test</b>							
			Value	Approx. Sig.			
		Cramer's V	0.124	0.413			

9. Null Hypothesis: There is no significant association between proprietary ratio and the dividend payout ratio.

To measure the association between proprietary ratio and the dividend payout ratio cross tabulation was used. The results were shown in Table. The results state that there is no significant association between the proprietary ratio and the dividend payout ratio. To test if the proprietary ratio and the dividend payout ratio is statistically associated with each other, chi-square test was conducted. The result of the chi-square test suggests that the above two variables are not statistically associated and the result was found to be significant at 0.1 levels. Further, the strength of the association was measured by Cramer's V. The value of .123 shows weak association between the above two variables. Hence the hypothesis that there is no significant association between proprietary ratio and the dividend payout ratio is accepted.



TABLE 9a: PROPRIETARY RATIO AND THE DIVIDEND PAYOUT RATIO

V9			Dividend Payout ratio				Total
			Less than 4.7300	4.7300-7.990	7.9900-12.4750	Above 12.4750	
Proprietary ratio	Low	Count	17	12	11	9	49
		Expected Count	12.3	12.3	11.5	13	49
		% within proprietary ratio	34.7%	24.5%	22.4%	18.4%	100.00%
	Low-moderate	Count	13	11	13	9	46
		Expected Count	11.5	11.5	10.8	12.2	46
		% within proprietary ratio	28.3%	23.9%	28.3%	19.6%	100.00%
	Moderate-High	Count	8	14	10	18	50
		Expected Count	12.5	12.5	11.8	13.3	50
		% within proprietary ratio	16.0%	28.0%	20.0%	36.0%	100.00%
	High	Count	12	13	13	17	55
		Expected Count	13.8	13.8	12.9	14.6	55
		% within proprietary ratio	21.8%	23.6%	23.6%	30.9%	100.00%
Total	Count	50	50	47	53	200	
	Expected Count	50	50	47	53	200	
	% within proprietary ratio	25.0%	25.0%	23.5%	26.5%	100.00%	
<b>Chi-Square Tests</b>							
			Value	df	Asymp. Sig. (2-sided)		
		Pearson Chi-Square	9.020 <sup>a</sup>	9	0.435		
		Likelihood Ratio	9.081	9	0.430		
<b>Strength of association test</b>							
			Value	Approx. Sig.			
		Cramer's V	0.123	0.435			
			Dividend Payout ratio				
			Less than 4.7300	4.7300-7.990	7.9900-12.4750	Above 12.4750	Total
Average of proprietary ratio	Low	Count	17	12	11	9	49
		Expected Count	12.3	12.3	11.5	13	49
		% within proprietary ratio	34.7%	24.5%	22.4%	18.4%	100.00%
	Low-moderate	Count	13	11	13	9	46
		Expected Count	11.5	11.5	10.8	12.2	46
		% within proprietary ratio	28.3%	23.9%	28.3%	19.6%	100.00%
	Moderate-High	Count	8	14	10	18	50
		Expected Count	12.5	12.5	11.8	13.3	50
		% within proprietary ratio	16.0%	28.0%	20.0%	36.0%	100.00%
	High	Count	12	13	13	17	55
		Expected Count	13.8	13.8	12.9	14.6	55
		% within proprietary ratio	21.8%	23.6%	23.6%	30.9%	100.00%
Total	Count	50	50	47	53	200	
	Expected Count	50	50	47	53	200	
	% within proprietary ratio	25.0%	25.0%	23.5%	26.5%	100.00%	
<b>Chi-Square Tests</b>							
			Value	df	Asymp. Sig. (2-sided)		
		Pearson Chi-Square	9.020 <sup>a</sup>	9	0.435		
		Likelihood Ratio	9.081	9	0.430		
<b>Strength of association test</b>							
			Value	Approx. Sig.			
		Cramer's V	0.123	0.435			

10. Null Hypothesis: There is no significant association between yield and the dividend payout ratio.

To measure the association between yield and the dividend payout ratio cross tabulation was used. The results were shown in Table. The results state that there is no significant association between of yield and the dividend payout ratio. To test if the yield and the dividend payout ratio is statistically associated with each other, chi-square test was conducted. The result of the chi-square test suggests that the above two variables are statistically associated and the result was found to be significant at 0.1 levels. Further, the strength of the association was measured by Cramer's V. The value of .371 shows weak association between the above two variables. Hence the hypothesis that there is no significant association between yield and the dividend payout ratio is rejected.

TABLE 10a: DIVIDEND YIELD AND DIVIDEND PAYOUT RATIO

			Dividend Payout Ratio				Total
			Less than 25.6700	25.6700-72.1650	72.1650-152.3300	Above 152.3300	
Dividend yield	Low	Count	32	9	6	2	49
		Expected Count	11.8	13.2	11.5	12.5	49
		% within dividend yield	65.3%	18.4%	12.2%	4.1%	100.00%
	Low-Moderate	Count	8	21	10	7	46
		Expected Count	11	12.4	10.8	11.7	46
		% within dividend yield	17.4%	45.7%	21.7%	15.2%	100.00%
	Moderate-High	Count	1	10	18	21	50
		Expected Count	12	13.5	11.8	12.8	50
		% within dividend yield	2.0%	20%	36%	42%	100.00%
	High	Count	7	14	13	21	55
		Expected Count	13.2	14.9	12.9	14	55
		% within dividend yield	12.7%	25.5%	23.6%	38.2%	100.00%
Total	Count	48	54	47	51	200	
	Expected Count	48	54	47	51	200	
	% within dividend yield	24%	27%	23.5%	25.5%	100.00%	
<b>Chi-Square Tests</b>							
			Value	Df	Asymp. Sig. (2-sided)		
		Pearson Chi-Square	82.460 <sup>a</sup>	9	0.000		
		Likelihood Ratio	82.015	9	0.000		
<b>Strength of association test</b>							
			Value	Approx. Sig.			
		Cramer's V	0.371	0.000			

11. Null Hypothesis: There is no significant association between annual return and the dividend payout ratio.

To measure the association between annual return and the dividend payout ratio cross tabulation was used. The results were shown in Table. The results state that there is no significant association between annual return and the dividend payout ratio. To test if the annual return and the dividend payout ratio is statistically associated with each other, chi-square test was conducted. The result of the chi-square test suggests that the above two variables are not statistically associated and the result was not found to be significant at 0.1 levels. Further, the strength of the association was measured by Cramer's V. The value of .154 shows weak association between the above two variables. Hence the hypothesis that there is no significant association between annual return and the dividend payout ratio is accepted.

TABLE 11a: ANNUAL RETURN AND DIVIDEND PAYOUT RATIO

			Dividend Payout Ratio				Total
			Less than 15.2675	15.2675-37.6550	37.6550-70.1975	Above 70.1975	
Annual return	Low	Count	18	8	9	14	49
		Expected Count	12.3	11.8	12.7	12.3	49
		% within annual return	36.7%	16.3%	18.4%	28.60%	100.00%
	Low-Moderate	Count	10	13	8	15	46
		Expected Count	11.5	11	12	11.5	46
		% within annual return	21.7%	28.3%	17.4%	32.6%	100.00%
	Moderate-High	Count	8	15	18	9	50
		Expected Count	12.5	12	13	12.5	50
		% within annual return	16%	30%	36%	18%	100.00%
	High	Count	14	12	17	12	55
		Expected Count	13.8	13.2	14.3	13.8	55
		% within annual return	25.5%	21.8%	30.9%	21.8%	100.00%
Total	Count	50	48	52	50	200	
	Expected Count	50	48	52	50	200	
	% within annual return	25%	24.0%	26.0%	25.0%	100.00%	
<b>Chi-Square Tests</b>							
			Value	Df	Asymp. Sig. (2-sided)		
		Pearson Chi-Square	14.288 <sup>a</sup>	9	0.112		
		Likelihood Ratio	14.351	9	0.110		
<b>Strength of association test</b>							
			Value	Approx. Sig.			
		Cramer's V	0.154	0.112			

**CONCLUSION**

Dividend decision is an important function of the managers. Literature suggests that dividend decision of the firm is influenced by various company specific factors and industry specific factors. Prior studies suggest that dividend decision of the firm is influenced by the cash flow of the firm, liquidity of the firm and profitability of the firm. Few studies have investigated the association between dividend decisions and financial performance/indicator of the firms (Anand, 2000; Bhattacharya, 1979; Davis & Pain, 2002; Linter, 1956a; Linter, 1956b; Modigliani & Miller, 1958; Miller & Modigliani, 1961). The study investigates the association between dividend decisions of the company with its financial performance/indicator measured in terms of liquidity, profitability and operating performance. The survey on BSE 200 companies suggests that liquidity measures are associated with dividend decisions which support the existing state of literature. Surprisingly the study did not find significant association between dividend decision and profitability. The study supports the findings that the dividend decision of the firm is very less associated with the financial performance/indicator of the firm (Anand, 2002; Omet, 2004).

Null hypothesis	Chi square test at .1 level of significance	Cramer's v	Results
There is no significant association between quick ratio and the dividend payout ratio.	.279	.135	Not significant so null hypothesis accepted
There is no significant association between current ratio and the dividend payout ratio.	.053	.167	Significant ,so null hypothesis is rejected
There is no significant association between cash ratio and the dividend payout ratio.	.293	.134	Not significant ,so null hypothesis accepted
There is no significant association between PBT/total income and the dividend payout ratio.	.583	.110	Not significant ,so null hypothesis accepted
There is no significant association between ROCE and the dividend payout ratio.	.183	.183	Not significant ,so null hypothesis accepted
There is no significant association between PAT/Net sale and the dividend payout ratio.	.416	.124	Not significant ,so null hypothesis accepted
There is no significant association between Debt equity ratio and the dividend payout ratio.	.571	.113	Not significant ,so null hypothesis accepted
There is no significant association between debt to capital ratio and the dividend payout ratio.	.413	.124	Not significant ,so null hypothesis accepted
There is no significant association between proprietary ratio and the dividend payout ratio.	.435	.123	Not significant ,so null hypothesis accepted
There is no significant association between dividend yield and the dividend payout ratio.	0.00	.371	Significant ,so null hypothesis is rejected
There is no significant association between annual return and the dividend payout ratio.	.112	.154	Not significant ,so null hypothesis accepted

**SUMMARY OF THE FINDINGS**

This study provides the relationship between the dividend decision and the financial performance of the company. The study finds the relationship between the dividend of the company and its performance measured by various indicators. And we find that there is no significant association between the dividend decision and the financial performance of the company. Only on the debt equity ratio and the PBT/total income of the company is affected by the promoters holding in the company which in higher in case of companies with dividend decision.

In case of other financial performance indicator, we find that there is no significant relation between the financial performance and dividend decision of the companies. We find that there is no effect of dividend decision of the company with the liquidity ratio (quick ratio, cash ratio, current ratio), profitability ratio (avg. of PAT/Total income, avg. of ROCE, avg. of PAT/net sale), and operating ratio (Debt equity, debt to capital, proprietary ratio).

The results for the dividend given by the company, its price earnings ratio, dividend payout ratio are significant.

**IMPLICATIONS OF THE FINDINGS**

The finding of this study does not support the overall hypothesis of association between dividend decision and financial performance/indicators of the company. The findings of the study are in line with other studies conducted in this area (Anand, 2000; Pain, 2002). Further the study supports the belief that liquidity position of the company is associated with dividend decision of the company. There are large numbers of theoretical literature supporting this argument (Miller and Modigliani, 1958; Casey & Dicken, 2000). The study supports the argument of the importance of liquidity in dividend decision of the company. Hence the findings of the study is key to various class of investors in the equity market specifically retail investors investing to get current return from investment in terms of dividend earnings. The current ratio can be used as an important heuristics to compare companies while making investment decision. This becomes more important with the fact that there are large amount of information prevailing in the market and retail investors find difficult in assimilating information. Further the study can be expanded by increasing the sample size and the period of study to get further insight. The study can further be elaborated by developing the causal relationship between liquidity and dividend decision.

**LIMITATION AND SUGGESTION FOR FUTURE RESEARCH**

There are several key implications that deserve the attention of future research as a result of the findings and limitations of this study those implications will be discussed in this study.

First, data regarding the key variables were selected for three year period. The period was small to draw meaningful results. Further the period does not take into account economic cycle and the business cycle of the company. An expanded period may give more insights into the relationship studied.

Second, the study only reveals the association and does not measure the causal relationship. Further studies can expand on this direction.

Third limitation of the study is that we seen the results at 10% significance level. A more stringent process might further influence the findings of the study

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## AN EMPIRICAL INVESTIGATION OF CAPITAL BUDGETING PRACTICES IN INDIA

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### ABSTRACT

*Capital expenditure planning has assumed new dimension and has been given much attention both in finance literature and in practice. This is because capital expenditures involve committing huge sum of money, whose benefits extend well ahead into the future, and the future is related with risk and uncertainty, and, once committed, capital expenditure is irreversible. Thus, capital expenditure has huge impact on the future profitability and value creation of a company. The present study intends to focus on capital budgeting practices being followed by selected companies in India. The study being empirical in nature relies on primary data to achieve the objectives. The study found that the major firms in India are utilizing many of the tools of analysis presented in the financial theory for analyzing capital budgeting projects.*

### KEYWORDS

Capital budgeting, Capital rationing, Financial goals, Risk analysis.

### INTRODUCTION

Capital investment is one of the areas that not only consumes a lot of resources in today's business, but demands the attention of all managers and sundry from inception of a project through growth stage to its maturity. However, in the finance literature, capital investments are often described as long-term investments. Long-term investments are difficult to deal with because risk and uncertainty must be accounted for, in addition to series of forecasting, implementation and monitoring of long-range decisions. Capital budgeting determines the shape and structure of a company and affects its competitive advantage. **Levary and Seitz (1990)** describe complex capital investment as a strategic decision with components and considerations of resource limitations and goal trade-offs.

In recent times, capital expenditure planning has assumed new dimension and has been given much attention both in finance literature and in practice. This is because capital expenditures involve committing huge sum of money, whose benefits extend well ahead into the future, and the future is said to be beclouded with risk and uncertainty, and, once committed, capital expenditure is irreversible. Thus, capital expenditure has huge impact on the future profitability and value creation of a company. **Farragher et al. (1999)** note that for a successful and effective capital expenditure planning, certain activities are necessary and shall be given attention. These are strategic analysis, establishing investment goals, searching for investment opportunities, forecasting cash flows of the investment, evaluating the risk of adjusted future cash flows, decision making, and implementing accepted opportunities and post audit procedures.

However, in the case of complex capital decisions there is the need for an objective analysis and evaluation of an investment together with a healthy intelligent judgment that has a solid base of knowledge about that investment, through the use of quantitative methods, such as mathematical programming (e.g., linear programming, goal programming and new financial techniques), as opposed to just a simple, sometimes subjective, judgment. Other wise the amount involved and all the efforts put in nursing the project will become what the accountants called sunk costs. Depending upon its magnitude the survival of the enterprise may be at stake.

Sound capital budgeting practices, among others, promote allocation of scarce resources and hence profitability of business. The process of capital budgeting decision making exists in every organization whether it is in public or private sector. Day in and Day out a significant portion of companies resources are being spent on different types of capital investments. There are several methods to evaluate capital investment decisions. Given the importance of capital investment, not only for the country as a whole, but also for the creation of shareholder wealth for individual firms, it may be helpful to investigate the practices used to evaluate these projects.

### REVIEW OF LITERATURE

Over the past four decades, research in the area of corporate finance has examined various methods of capital budgeting preferred by industry. It has been noted that majority of the financial managers and academicians have not been in full agreement as regards the most appropriate capital budgeting method. The key findings of some of the existing studies are highlighted here.

### INTERNATIONAL STUDIES

**Prather et al. (2009)** they surveyed members of the Durant, Oklahoma Chamber of Commerce to ascertain the level of sophistication that small rural businesses exhibit in capital expenditure decision making. This survey covered a variety of discounted cash flow (DCF) and other traditional techniques and also examined the incidence and treatment of capital rationing. Finally, they examined the methods used to determine the required return and the use of sensitivity analysis, scenario analysis, and simulation. Results reveal that 71% of the sample firms do not have a written business plan and 66% use managerial judgment in project selection.

**Kantudu (2007)** made an attempt to identify the most widely used techniques of appraising capital investment among quoted firms in Nigeria. He employed questionnaire method of primary data collection. The respondents were drawn from 200 finance and management staff of 100 quoted firms in Nigeria. The results revealed that firms favored a combination of investment appraisal techniques but the payback period is ranked highest among other techniques. He also found that simplicity, understandability and effectiveness to be the major preferential factors in the choice of a particular project appraisal technique. It is recommended that coordination, documentation, and communication of capital expenditure plans should be transparent and in line with the business interest of the firm.

**Farragher et al. (2001)** an attempt has been made to measure the relationship between capital budgeting sophistication and business performance. The results of the study do not support the hypothesis that companies with higher performance employ more sophisticated capital budgeting processes than do companies with lower performance. While they observe a negative sign for the degree of capital budgeting sophistication variable, the sophistication variable is statistically insignificant.

**Graham and Harvey (1999)** surveyed 392 CFOs about the cost of capital, capital budgeting, and capital structure. Large firms rely heavily on present value techniques and the capital asset pricing model, while small firms are relatively likely to use the payback criterion. Firms are concerned about maintaining financial flexibility and a good credit rating when issuing debt, and earnings per share dilution and recent stock price appreciation when issuing equity. They find some support for the pecking-order and trade-off capital structure hypothesis but little evidence that executives are concerned about asset substitution, asymmetric information, transactions costs, free cash flows, or personal taxes.

**INDIAN STUDIES**

Gupta et. al. (2007) carried out a research to explore which capital budgeting techniques are being used by industries in Punjab, and the influence of factors such as size of capital budget, age and nature of the company, and education and experience of the Chief Executive Officer. Towards this end, they conducted a primary survey. The survey reveals that the status of capital budgeting techniques in the state of Punjab is still far from satisfactory. Majority of the sample companies still use non-discounted cash flow techniques, mostly Payback Period criterion to evaluate any new project. Only a very few companies use DCF, and among them a very negligible number use NPV techniques to evaluate a project. Further, the study did not find any association between the size of capital budget, age of the company, nature of industry and capital budgeting techniques.

Anand (2002) surveyed 81 CFOs of India to find out about their corporate finance practices vis-à-vis capital budgeting decisions, cost of capital, capital structure, and dividend policy decisions. It analyses the responses by the firm characteristics like firm size, profitability, leverage, P/E ratio, CFO's education, and the sector. The analysis reveals that practitioners do use the basic corporate finance tools like NPV, CAPM and WACC. The study also reveals that the corporate finance practices vary with firm size.

Jain and Kumar (1998) found that companies were making regular investment for replacement and maintenance. One-fourth of the sample companies invested for expansion and diversification. The most preferred method was 'Pay Back period' followed by NPV and IRR. Preference for Pay Back Period method was due to its simplicity, less cost, less time, and easy understanding. For hurdle rate, WACC was preferred followed by 'Arbitrary rate' and 'Marginal cost of additional funds'. The companies, for incorporating risk preferred the 'Sensitivity Analysis' followed by 'Higher cut off rate' and 'Shorter Pay Back Period'.

In a comprehensive study by Porwal (1976), it was found that ARR was preferred over IRR. Companies also preferred Payback Period due to the shortage of funds, obsolescence, and easy calculations. The most preferred rate of discount was WACC. The risk factors that were considered by the companies were 'chances of unavailability of inputs', probability of not achieving a target return' and 'uncertain market potential'. For incorporation of risk, 'Shorter payback Period' and 'Higher cut off rate' were preferred. Further, for rationing, 'Priorities' and 'higher rate of return' were the two main aspects for resolving conflicts among different departments.

Chandra (1975) selected 20 firms to examine the influence of size, industry group and capital intensity on the choice of investment evaluation techniques. The study revealed that 'Pay Back Period' method was mostly used for evaluating large size investments, the corporate preferred ARR. To evaluate investments, companies also looked at profit per rupee invested, cost saving per unit of product and investment required to replace a worker.

**NEED OF THE STUDY**

Capital investment decisions are the most important among the decisions involved in the functions of finance. More and more awareness is developing on the part of the companies about the need for using sophisticated methods for capital investment appraisal in place of traditional methods. As the magnitude and opportunities of investment are increasing it has become necessary for the companies to follow sophisticated capital budgeting methods rather than following rule of thumb methods which would lead to misleading decisions.

Recent times have seen a marked shift in favor of privatization, globalization, and free trade in many economies considered non-capitalist. India is no exception. More recent governments have shown a definite bias in favor of privatization and liberalized trade policies. A change from a policy of protectionism to a policy of free trade exposes Indian business to intense global competition. Businesses in India have to be more cost and quality conscious and allocate their scarce resources rationally, if they desire to meet the challenges of an increasingly competitive global market.

These kinds of situations are giving boost to conduct more and more research studies in this area. This study makes an attempt to find out the capital budgeting practices being followed by selected companies in India. Moreover, a brief perusal of review of literature reveals that vast number of studies in the area of capital investment decisions has been conducted in the global context but in India, there are a few numbers of studies in the area of capital budgeting (Prasanna Chandra- 1975, L S Porwal- 1976, Pandey-1989, Sahu-1989, Jain and Kumar-1998, Anand- 2002, Gupta et al.-2007). So, the existing literature on the subject brings home the fact that there is a need for conducting a study on capital budgeting practices in India.

**STATEMENT OF THE PROBLEM**

Looking at the gap in practice and in theory represented in the brief results of the previous studies and the theoretical assumptions, it is noticed that no agreed upon generalization can be made on the best technique to be used (Chandra, 1975; Porwal, 1976; Deolanker, 1996; Vanhorne, 2002; Pandey, 2002; Arnold, 2008). So, the perception of the advantages and disadvantages of each technique, and the type of the investment are important factors when selecting the technique to be used.

The researchers believe that each previous study is a special case and every new study tells something about capital budgeting practices at the time of conducting the study (Pike, 1996). So this leads to the fact that any new further study will bring a new insight into the use of the capital budgeting at the different time with different applications, keeping this into mind, the researcher made an attempt to study capital budgeting practices of selected companies in India.

**RESEARCH OBJECTIVES**

1. To identify the financial goals followed by the companies.
2. To determine which capital budgeting techniques are most commonly used by the selected companies.
3. To determine the methods used by the selected companies to consider risk in capital budgeting decisions.
4. To identify the major causes for capital rationing in India.

**METHODOLOGY**

The population chosen was a group of top 500 companies on the basis of market capitalization as published by Capital market. Owing to financial and time constraints, only the first 300 were selected as a sample. The information used in this study was obtained from questionnaires sent to the selected sample. Responses were encoded and the data was analyzed using the SPSS software. The study being empirical in nature relies on primary data to achieve the objectives. Primary data for the research will be collected with the help of self-administered questionnaire.

**THE SAMPLE & CHARACTERISTICS**

While data was collected from as many as 300 companies, there were only 125 companies in case of which the information is adequate to be included in analysis. Grouped into 9 industries, the sample had 25.6% of public sector and 74.4% of private sector companies.

**A. SECTOR WISE BREAKUP OF THE COMPANIES IS AS GIVEN BELOW:****TABLE 1: OWNERSHIP OF THE FIRMS**

Ownership	Frequency	Percent
Public	32	25.6
Private	93	74.4
Total	125	100.0

## B. BREAK UP OF THE COMPANIES ACCORDING TO INDUSTRY CLASSIFICATION

TABLE 2: INDUSTRY PROFILE OF THE FIRMS

Industries	Frequency	Percent
Auto/Steel	20	16.0
Diversified/finance	20	16.0
Cement/Engineering/Construction	24	19.2
Telecom/IT	10	8.0
Oil/Gas/Food processing	13	10.4
Chemicals/Pharma	13	10.4
Power/Electrical	8	6.4
Trading/Misc	14	11.2
Textiles/Logistics	3	2.4
Total	125	100.0

## SURVEY RESULTS &amp; DISCUSSION

On the basis of review of empirical research and theoretical literature on finance, thirteen financial objectives were identified. The respondent companies were asked to rate each objective on a five-point scale (most significant to insignificant) according to the relative significance attached to it. The weighted average score have been calculated.

TABLE 3: RELATIVE SIGNIFICANCE OF FINANCIAL GOALS

Goals	Most Significant	Moderately significant	Significant	Less Significant	Insignificant	Mean	St.dev
Maximizing							
Book Value of Net Worth	52 (41.6)	20 (16.0)	31 (24.8)	13 (10.4)	9 (7.2)	3.74	1.29
Market value per share	85 (68.0)	33 (26.4)	5 (4.0)	1 (0.4)	1 (0.4)	4.60	.68
Cash flow per share	30 (24.0)	17 (13.6)	52 (41.6)	21 (16.8)	5 (4.0)	3.36	1.13
Operating profit before interest and taxes	57 (45.6)	15 (12.0)	35 (28.0)	10 (8.0)	8 (6.4)	3.82	1.27
Price earning ratio	36 (28.8)	25 (20.0)	43 (34.4)	14 (11.2)	7 (5.6)	3.55	1.18
Market rate of return	6 (4.8)	25 (20.0)	58 (46.4)	12 (9.6)	24 (19.2)	2.81	1.10
Return on Investment	74 (59.2)	25 (20)	6 (4.8)	15 (12.0)	5 (4.0)	4.18	1.20
Net Profit to Net Worth	39 (31.2)	30 (24.0)	41 (32.8)	15 (12.0)	-	3.74	1.03
Net Profit margin	65 (52.0)	14 (11.2)	26 (20.8)	17 (13.6)	3 (2.4)	3.96	1.22
Market share	98 (78.4)	13 (10.4)	8 (6.4)	6 (4.8)	-	4.62	0.80
Earning per share	30 (24.0)	25 (20.0)	54 (43.2)	12 (9.6)	4 (3.2)	3.52	1.05
Total assets	30 (24.0)	30 (24.0)	45 (36.0)	14 (11.2)	6 (4.8)	3.51	1.11
Sales	71 (56.8)	16 (12.8)	17 (13.6)	18 (14.4)	3 (2.4)	4.07	1.22

Note: Figures in parentheses represent percentages.

Table 3 depicts the relative significance of financial goals as perceived by the respondent companies. It can be observed from the table that three top priority goals on the basis of mean and standard deviation. Maximizing market Share (WAS 4.62), Maximizing market value per share (WAS 4.60) and Maximizing return on investment (WAS 4.18) have been perceived as the main financial goals by the companies. However the financial goals of Maximizing market rate of return (WAS 2.81), Maximizing cash flow per share (WAS 3.36) and Maximizing total assets (WAS 3.51) have been perceived as the lowest preferred goals.

Table 4 reports findings on capital budgeting techniques most commonly used by the respondent companies, this shows that the discounted pay back period (92%) is most commonly used by the companies followed by Pay back period (82.4%), Internal rate of return (70.4%) and Net present value (66.4%).

In a survey by **Anand (2002)**, 85% of the respondents considered IRR as a very important project choice criterion. About 65% of the respondents almost or always used NPV. The Payback method was also popular at 67.5%. In **Rao (1996)**'s study of 74 Indian companies, 51% favored IRR as the project appraisal technique.

TABLE 4: CAPITAL BUDGETING TECHNIQUES

Capital budgeting techniques	Frequency	Percent
Accounting rate of return	66	52.8
Pay back period	103	82.4
Post pay back profitability	2	1.6
Discounted pay back period	115	92
Net present value	83	66.4
Internal rate of return	88	70.4
Profitability Index	21	16.8
Terminal value	7	5.6
Real options	36	28.8
Adjusted present value	60	48
Modified internal rate of return	48	38.4

Table 5 represents the risk analysis methods used by the respondent companies to incorporate risk in capital budgeting decisions. In this case, there seems to be a high incidence of multiple responses. It can be observed from the table that maximum respondents favor sensitivity analysis technique (70.4%) for incorporating risk followed by shorter pay back period (69.6%) and break even analysis (48.8%) respectively.

TABLE 5: RISK ANALYSIS TECHNIQUES

	Frequency	Percent
Shorter Pay back period	87	69.6
Higher cut-off rate	14	11.2
Sensitivity analysis	88	70.4
CAPM	32	25.6
Scenario Analysis	85	68
Break-even analysis	61	48.8
Monte Carlo simulation	27	21.6
Decision tree	20	16
Certainty equivalent approach	7	5.6
Conservative Estimates of future cash flows	16	12.8

\*Multiple responses have been given by some respondent companies

As Table 6 below illustrates the principal causes of capital rationing. Majority of respondents regard limit placed on borrowing by internal management (67.2%) as the major cause of capital rationing. But when the causes of borrowing limitations imposed by outside agreements (10.4%) or external management (5.6%) are added, the total of 83.2% suggest that capital rationing results from some type of debt limitation.

TABLE 6- CAUSES OF CAPITAL RATIONING

	Frequency	Percent
Debt limit imposed by outside agreement	13	10.4
Debt limit placed by external management	7	5.6
Limit placed on borrowing by internal management	84	67.2
Restrictive policy imposed upon RE for dividend payout	2	1.6
Maintenance of P/E ratio	19	15.2
Total	125	100.0

## SUMMARY AND CONCLUSION

This paper has presented the findings of a survey of capital budgeting practices sent to a sample of 300 companies. Based upon the 125 usable responses received, the findings were analyzed on the basis of four major areas. The first section presented basic statistics describing respondent firms. The second section is on goal of the firms which disclosed that the major goal of the firm is to maximize market share followed by maximizing market value per share. The third section showed the capital budgeting techniques used by the firms for their investment decision making. It was found that most of the firms prefer discounted pay back period method as the important capital budgeting technique. The fourth section showed that most firms use sensitivity analysis followed by shorter pay back period method to adjust for risk. The final section found that the limit placed on borrowing by the internal management is the major cause of capital rationing.

In summary, it is evident that the major firms in India are utilizing many of the tools of analysis presented in the financial theory for analyzing capital budgeting projects. As indicated by the previous research that firms is continuing to move forward in the adoption of capital budgeting practices for their investment decision making.

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