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IMPACT OF MOBILE MARKETING IN THE CURRENT INDIAN SCENARIO

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ABSTRACT

Innovation creates Marketing opportunities and challenges. MOBILE ADVERTISING, an area of mobile commerce, is a form of advertising that targets users of handheld wireless devices such as mobile phones and PDAs. It can reach the target customers anywhere anytime. In order to promote the selling of products or services, all the activities required to communicate with the customers are transferred through mobile devices. The study also aims to concretize some features enhancing the acceptability / utility of mobile marketing / advertising and suggests an appropriate strategic initiative for the same. The major findings reveal that the perception of consumers towards mobile marketing can be broadly categorized in to following factors:1)Lack of personalization of mobile ads 2) troublesome nature of mobile ads 3) perceived usefulness of mobile ads. Further results indicate that mobile marketing / advertising does not have a significant impact on the purchase / brand decision of consumers. Mobile marketing is relatively at a emerging stage in india. Distinct preferences were expressed by customers regarding the desirable content of such messages. Customers are looking for customization of mobile marketing messages as per their individual requirement, tastes and preferences. Hence the need of hour appears to be CUSTOMERIZATION.

KEYWORDS

Mobile Advertising, Customerization, Telecom industry.

INTRODUCTION

Technology developments have created new marketing communication channels or media such as email, SMS (Short Messaging Service) and MMS (Multimedia Messaging Service).

These digital media are considered to potentially improve the possibilities to reach consumers by allowing personalization of the content and context of the message (Forrester Report2001). Simultaneously there is a potential downside to the development of new digital channels. In a Forrester report companies using SMS expressed fear for invasion of consumer privacy (80%) and negative consumer reaction (60%) as disadvantages of the media (Forrester Report 2001, p. 3). A crucial question is thus whether there are obstacles for the marketer to use mobile media to its potential. Are customers more reluctant to receive marketing information through mobile media than through traditional media or is it the other way round.

Mobile advertising, which is an area of mobile commerce, is a form of advertising that targets users of handheld wireless devices such as mobile phones and Personal Digital Assistants (PDAs). In Comparison with traditional advertising, the main advantage of mobile advertising is that it can reach the target customers anywhere anytime. In order to promote the selling of products or services, all the activities required to communicate with the customers are transferred through mobile devices. Combining with the customer's user profile and context situation, advertising companies can provide the target customers exactly the advertisement information they desire, not just "spam" them with advertisements they are not interested in.

The devices on which these value-added services are pushed onto or downloaded to, operate in an environment that imposes constrains such as: wireless network environments are unreliable and bandwidth is low, and the very mobility of devices increases the risk that a connection will be lost or degraded. More importantly, mobile services must work within the daunting constraints of the devices themselves, which include: memory, processing power, input capabilities, and size of display. It is therefore important that mobile advertisements take into account the user's context, optimize resource usage, and minimize input effort imposed on the user.

What reaching means when considering the empowered and active Consumer. In permission marketing context it has been argued that if the consumers have agreed to pay attention it would be easier to reach them about offerings (Godin 1999). A key issue is the responsiveness of the consumer to marketing communication. Responsiveness depicts the consumer's willingness to receive and respond to marketing communication and can be viewed as a function of the content and the context of the message. Any channel can and should be evaluated according to consumer responsiveness in order to understand communication effects and effectiveness. Consumer responsiveness is potentially more effective than permission because it assumes consumer attention rather than merely permission.

OBJECTIVE OF THE STUDY

The primary objective of this research study is to gain an insight into the perception of mobile users, towards mobile advertising and their utility value in terms of impact on the purchase decision. Hence we are attempting to explore consumers' responsiveness to mobile marketing, taking into cognizance the impact of demographic factors like age, gender, occupation, etc. From the marketer's perspective it is crucial to know the utility of mobile advertising, as far as having an impact on purchase decision of a customer is concerned.

From an academic perspective the issue of responsiveness to a media is interesting in itself. The media in use influences the effect of the marketing communication in addition to the Marketing message. Finally an attempt has also been made to broadly concretize some features enhancing the acceptability/

utility of mobile marketing/ advertising. Also a strategic initiative (*Intelligent Software Agents*) has been proposed, so as to incorporate the entire positive attributes perceived as important by the customers.

LITERATURE REVIEW

A study done by Heinonen & Strandvik (2003) showed that mobile channels are perceived to be more personal than traditional and e mail channels. This creates high expectations for the relevance of marketing communication messages. A consumer expects messages to be personal and of high interest and this makes the disappointment greater when they get undesired messages. Mobile advertising may even step over the line of discretion and invade consumers’ privacy because of the personal nature of the mobile device. Li et al (2002) discusses how negative reactions like irritation arise through intrusion advertising. The channel influences consumer responsiveness to marketing communication by being perceived as either disturbing or acceptable (Abernethy 1991). If the consumer considers marketing communication via a channel as disturbing it may negatively affect the attention to and perception of the message. In contrast, the channel may also enhance the acceptance of the marketing communication if it is perceived as appropriate for the specific marketing communication. Also, some consumers may perceive the channels as neutral, i.e. it is neither disturbing nor accepted.

According to the descriptions of the new model (Informed 2001) advertising attentiveness is considered to be a measure of the degree to which those exposed to the advertising are focused on it. Advertising communication refers to information retained by the consumer after exposure to the message. Advertising persuasion measures shift in attitudes and/or intentions produced by the communication and advertising response is other consumer response than purchasing. This would for example, include click-through, lead generation, mail response and coupon redemption.

METHODOLOGY

The research design chosen for the study is conclusive (cross sectional descriptive design). A survey instrument was developed based on previous studies done on consumer perceptions of mobile advertising. Quota sampling (multi stage) has been employed with the questionnaires being sent to approximately 1000 respondents. However 660 questionnaires were found complete in all respects. The response rate was 66%. An attempt has been made to keep the sample fairly representative across the demographic variables by constructing quotas according to these factors e.g. age, gender, occupation, and level and purpose of mobile usage. Almost 54% of the respondents belonged to the age group of 20 to 30 years and approximately 30% of the respondents belonged to the age group of more than 30 years. 30% of the respondents were students, 27% were in service, 14% were housewives and 29% were in business. 59.7% were males and 40.3% were females. Almost 85% of the respondents rated their usage of mobile in the range of medium to high. 75% of the respondents used their mobiles primarily for personal communication. The area of our sampling is the city of Lucknow (mobile density in Lucknow is at par with the major cities in India). The time frame of the study was June 2007 to October 2007. Primary- stage sampling units were the mobile users, while the secondary stage sampling units were markets, shopping malls, institutions and localities of Lucknow. In order to make the sample representative, sampling was performed in various market places, shopping malls, office complexes and some residential localities considering the desired quotas. A group of respondents were also chosen from Lucknow Telephone Directory using systematic sampling scheme.

The study used a likert scale of 1-5 to elicit response of mobile users. The statistical Techniques used to analyze the data are factor analysis, discriminant analysis, perception maps and non-parametric two-independent samples test.

We have examined the reliability of the data to check whether random error causing Inconsistency and in turn lower reliability is at a manageable level or not, by running Reliability test. For various sets of important associated factors used in the questionnaire, values of coefficient alpha (Cronbach’s alpha) have been obtained. Amongst the reliability tests that were run, the minimum value of coefficient alpha (Cronbach’s alpha) obtained was 0.732 (Table.1.1-1.4) (which is substantially higher than 0.6) which shows that data has satisfactory internal consistency reliability.

TABLE 1: CASE PROCESSING SUMMARY

	N	%
Cases Valid	660	100.0
Excluded(a)	0	.0
Total	660	100.0

TABLE 1.1: RELIABILITY STATISTICS (PURCHASE DECISION & BRAND DECISION)

Cronbach's Alpha	N of Items
.785	2

TABLE 1.2: RELIABILITY STATISTICS (PERCEPTION TOWARDS MOBILE ADVERTISING)

Cronbach's Alpha	N of Items
.732	4

TABLE 1.3: RELIABILITY STATISTICS (POSITIVE REACTIONS TOWARDS MOBILE ADVERTISING)

Cronbach's Alpha	N of Items
.788	3

TABLE 1.4: RELIABILITY STATISTICS (DESIRED ATTRIBUTES OF MOBILE ADVERTISING)

Cronbach's Alpha	N of Items
.757	7

FINDINGS

Consumer Perception about Mobile Advertising

TABLE 2 TOTAL VARIANCE EXPLAINED

Component	Rotation Sums of Squared Loadings		
	Total	% variance	Cumulative %
1	2.572	29.781	29.781
2	2.429	23.685	53.466
3	1.891	17.550	71.016

On drawing a perception map, in order to study the impact of an individual’s occupation on his reactions’ towards mobile advertising, it was found that there were significant differences in the reactions of Businessmen and other Self-Employed people. The businessmen reacted with confusion towards the plethora of information and advertising that they were subjected on their mobiles, whereas the self-employed respondents found the information (pertaining to either their work interests or leisure interests) relayed through their mobiles useful. It can hence be inferred that incorporating attributes like contextualization, relevant utility value.

The **factor analysis** results are shown in table 2, 2.1 & 2.2. The variance explained by the initial solution, extracted components and the rotated components are displayed in Table 2.

The total variance shown in table 2, accounted for by all of the three components explains nearly 71% of the variability in the original 13 variables. So we can reduce the original data set by using these three components (Eigen values greater than 1 as shown in Table 2.) with only 29% loss of information.

The Rotated Component Matrix reveals three factors (which represent the three perceptual dimensions about mobile advertising) derived from 13 variables (which represent the perception of mobile users towards mobile advertising). The components of each factor have been highlighted in Table 2.2.

Factor 1 comprises of the variables- mobile ads being less informative, not suiting personal needs, inappropriate timing, and clutter. Since all these variables are related to lack of contextualization and personalization, this factor can be labeled '**Lack of contextualization**'.

Factor 2 has components- brand recall, recall of sales/promotion information, recall of product/services, ad positioning, and repetitive nature of mobile ads and positive impact of mobile ads. Since all this components are related to perceived usefulness of mobile advertising, this factor can be labeled '**perceived usefulness**' of mobile ads.

Factor 3 has components- disturbance at work, busy work schedule, wastage of time, loss of privacy. Since all these components are related to disturbance caused due to mobile advertising, this factor can be labeled '**disruptive nature**' of mobile ads.

Further to gain an insight into the perception of mobile users towards mobile marketing vis a vis their demographic characteristics, a series of **Perception Maps** were also prepared.

ANALYSIS OF DESIRED ATTRIBUTES (IN MOBILE MARKETING/ ADVERTISING) - SO AS TO ENHANCE THE OVERALL ACCEPTANCE OF MOBILE MARKETING/ ADVERTISING

This study also attempts to broadly concretize some features or attributes, which will enhance the overall acceptance and utility of mobile marketing and advertising. For this purpose the non parametric Two-Independent-Samples tests were performed. The results (Table 4) revealed that customization of mobile marketing messages according to the demographic characteristics and individual tastes and preferences (P value >0.05), would enhance the overall acceptance of mobile marketing messages, and have a positive impact on the purchase decisions being made by these consumers. Hence the mobile users are apparently seeking customization of mobile marketing messages as per their individual requirements, tastes and Preferences. Thus the marketing firms need to combine **Mass Customization** and **Customized Marketing** i.e **CUSTOMERIZATION**. Customerization combines operationally driven mass customization with customized marketing in a way that the company is able to respond to individual customers by customizing its products, services, and messages on a one-to-one basis. Another desired attribute as per consumer perception is that they would prefer *session based* messages, which would *self delete* after a given period of time- hence saving the mobile users the hassle of clearing the clutter of marketing messages in their inbox and occupying unnecessary memory space.

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FARMER'S SUGGESTIONS TO IMPROVE THE TANK SYSTEMS PERFORMANCE WITH SPECIAL REFERENCE TO MADURAI DISTRICT

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ABSTRACT

This study clearly shows that well water depleted year by year due to poor maintenance in non-modernized tank of farmers. The present study clearly indicates almost all the respondents are highly preferred clearing of supply channel. Once the supply channel is damaged, tanks could not get water. Highest source of revenue was preferred by the respondents to the cutting tree irrespective of the group of respondents. The water availability is more in modernized tank system. This paper discuss the how tank modernization can help farmers to increase irrigation utility. The primary data were collected from the farmers in Madurai District and analyzed with suitable statistical data.

JEL CODE

Q10, Q15, Q18, Q19.

KEYWORDS

Agriculture Growth, Funds Utilization, Irrigation, Tank System.

I. INTRODUCTION

Low agricultural growth is a concern for policymakers as some two-thirds of India's people depend on rural employment for a living. Current agricultural practices are neither economically nor environmentally sustainable and India's yields for many agricultural commodities are low. Poorly maintained irrigation systems and almost universal lack of good extension services are among the factors responsible. Farmers' access to markets is hampered by poor roads, rudimentary market infrastructure, and excessive regulation.

The earlier studies clearly observed tank irrigation is the main viable source to meet the irrigation demands in future (Karmegam Gomathinayagam.,1999). Modernizations of tanks with farmers' participation have to be practiced to derive maximum benefit (Rajagopal.,2001). It shows that irrigation development has reduced poverty. Tank modernization enabled the farmers to go for an additional crop.

The water availability is more in modernized tank system. This paper analysis how tank modernization with farmers participation to tank system can help farmers to increase irrigation utility. The irrigation is an important factor in determining rates of poverty reduction (Gargi Parsai.,2009) The significant poverty reduction in many parts of India is attributed to the availability of irrigation, which not only boosted agricultural production but also made possible the adoption of modern farming technology – seeds fertilizers and pesticides – that further reduced poverty.

II. METHODOLOGY

2.1. STATEMENT OF THE PROBLEM

The Irrigation System can be divided into two types i.e. System and Non-System Tank. The awareness to do Tank Modernization with the help of Water User's Organization has been popular at present. As a Researcher is interested to suggest the needed policy interventions in improving the Tank performance based on farmers' opinion

2.2. OBJECTIVES OF THE STUDY

To suggest the needed policy interventions in improving the Tank performance

2.3. RESEARCH HYPOTHESIS

Ho: The types of system tanks do not have significant association with sluice, surplus weir, Supply Channel, Field Channel, Irrigation Practice, Tank, and Damage Opinion.

Ho: The types of non system tanks do not have significant association with sluice, surplus weir, Supply Channel, Field Channel, Irrigation, Practice, and Tank Damage Opinion.

2.4. RESEARCH METHODOLOGY

In the present study, both primary and secondary sources of data were collected for analysis. Primary data were collected from farmers to know family details, religion, type of house, asset position, farm size, irrigation particulars, availability of water for season, well water depth, condition of irrigation structure, sources of revenue generation, farmers suggestion in view to improve tank system maintenance, cost of cultivation, yield and income etc.

Secondary data were collected with regard to gather basic statistics, total number of irrigation tanks, sources of irrigation, net area irrigated, rainfall and cultivation particulars. The Secondary data were collected from VAO's of sample farmers' tank, taluk office, PWD office, Department of Statistics and Economics.

2.5. SELECTION OF TANKS AND FARMERS

In Madurai District, World bank was funded to modernize system tanks in 1985-1988. The EEC has funded to the State Government through PWD to modernize Non System Tanks during 1990-1992. This study try to find out which tank system of modernization is more beneficial to farming community. Both system and non-system tanks are available in Madurai district. In Madurai district, agriculture is the main occupation. The system tanks are more concentrated in Vadipatti block where Non system tanks are also available. Non system tanks are concentrated in Thirumangalam block. An economic study of farmers Participation in tank irrigation water management and comprising system and non system tanks have not been studied so far in Madurai District. So, it requires an in depth analysis and exploration of the farmers participation in tank irrigation water management.

Madurai district is selected for the study. In Madurai district, the total number of tanks are 292 (greater than 40 ha) out of which 17 tanks are selected for the study covering six system tanks and eleven non system tanks. Out of six tanks, three tanks were chosen from modernized and three tanks from non modernized. In non system tanks, six tanks were chosen from modernized and five tanks were chosen from non modernized. The above tanks were selected on the basis of concentration of tanks in two blocks of Madurai namely Vadipatti and Thirumangalam. In Vadipatti, system tanks are more in numbers. In Thirumangalam, Non

system tanks are more in numbers. Three tanks from Madurai block were also selected which are very near to the selected blocks. Hence the selection of tanks is purposive.

Purposive sampling is followed in the selection of farmers also. A total of 227 farmers were selected from both system and Non system tanks. 147 farmers were selected from non system tanks in view of large numbers of non system tanks in the study areas. In view of small numbers of system tanks, only 80 farmers were selected from system tanks. Equal representation is given for head, middle and tail reach areas as well as to marginal, small and large farmers.

2.6. STATISTICAL TOOLS AND TECHNIQUES USED FOR THE STUDY

The data collected were analyzed through descriptive statistics like percentage mean and standard deviation to know the condition of tank structure, well water depth, renovation work required, sources of revenue generation, mobilization of funds and other details related tanks opinion and suggestions in connection with tanks. Statistical tools such as Chi-square, t-test, one way ANOVA were used to analyze and interpret the data for get results.

T test was used to test for significant difference between two group means.

III. REVIEW OF LITERATURE

Karmegam Gomathinayagam (1999) revealed that the lining of canals and On Development works With Farmer's cooperative resulted in the reduction of travel time of water to reach tail end area. The reduction in time ranged from 20 to 50%. They also found that the water availability in tanks, in terms of days of storage have increased ranging 20 to 40 days. This enabled the farmers to go for an additional crop and added employment days for laborers. It stated that it has proved in the monitoring and Evaluation study conducted by Anna University taking in to consideration of 5 tanks, that the yield of paddy, during the pre-project period was 3797 kg/ha and it was increased to 4741 kg/ha in post project and they concluded that by improving efficiency of irrigation system with farmers involvement will rise the return per unit of water.

Rajagopal (2001) in his study titled "Water Management in Agriculture, Role of Institutions (Both Farmers Organization and Irrigation Bureaucracy) in a South Indian canal system. It deals with the role of farmers organizations especially traditional and their interaction with irrigation bureaucracy in performing different task related to Water Management viz appropriation of water from the main canal, distribution of the supply among farmers in a village, maintenance of the irrigation structure, arbitration of conflict arising out of these task and overall impact on crop production.

Bhattarai and Narayanamoorthi (2003) have empirically shown that in irrigation and rural literacy are the two most important factors for agricultural growth in India. Ranade (2003) in his study "Future Trends in water resource development in India to strengthen rural economy through Development of Irrigated Agriculture",

Kei Kajisa, Palanisamy and Takeshi Sakurai (August 2004) have examined the factors underlying decline in the collective management of tank irrigation system and the impact of those declines on rise yield and house hold income / consumption. They finds from the study, declines in the collective management of tank irrigation and their impact on income distribution and poverty in Tamil Nadu.

Eabenson (2005) concluded that it is imperative to recognize that the water shed development programme will not be effective unless the affected people understand the rationale of the works and changes in land use to be brought about in their areas and accept the changes and co-operate in maintaining the facilities.

Ashok Gulati, Ruth Meinzen Dick and Raju (2005) examined the nature and scope of the problems of large-scale surface Irrigation in India, the authors of Institutional reforms in Indian Irrigation focus on options for Institutional reforms and the outcomes of several pilot reform programs. They use qualitative and quantitative techniques to examine actual experience with irrigation reforms in India.

Shivashankar (2005) in his study found that we are emptying our most precious treasure of water so soon and are thus destroying our Eco-systems. Let us pause a bit and readjust our life-styles. This indeed, is the urgent task of all the "Resource-Management Agenda" for the whole of humanity.

Shivappa in his study (2006) examined the importance, impact and progress of Irrigation in Karnataka. The study is based on both Secondary and Primary data. Primary data has been collected by personal interviews from 360 farmers selected randomly in De ranger and Chitrudunga Districts in 2005-2006 during survey method. The analysis of data revealed that irrigation changed the cropping pattern infavour of high valued crops such as sugarcane. The small and marginal farmers income increased by 341% and that of the medium and large farmers by 364% per acre in Devangore block in Devangore District. In Hiriyur taluk in Chitradurga district the marginal and small farmers and medium and larger farmers earned 348% and 365% more income per acre respectively. Farm employment increased by 120% to 177% the yield of crop has increased by 100% to 380% over 50% of the sample farmers raised two crops while some enterprising farmers also cultivated three crops.

Lakshmanan Poucheppa Raju and Sendhil (2006) in their study "Impact of water shed development on crop productivity and income distribution, An economic Analysis, observed that the difference in crop productivity and changes in costs and returns of cultivating paddy and groundnut crops in water shed treated areas (WTA) and Non Treated Areas (NTA). It also describes the income distribution and inequalities existing among the farmers in WTA and NTA. The authors have evaluated the benefits of watershed development over non watershed area and this may help the policymakers for better implementation of watershed development programs in other dry land areas.

IV. RESULTS AND DISCUSSION

Table 1 showed the conditions of tank structure. 94.7 percent of the respondents reported that the tank bund was good. In the System category, all the respondents in the modernization group and non modernized group felt the tank bund was good. In the non system category, all the respondents of modernized group and 82.1 percent of the non modernized group were satisfied with the condition of the tank bund.

Majority of the respondents (69.2 percent) were satisfied with the conditions of tank sluice. In the system category, 69 percent of the modernized group and all the respondents belonging to the non modernized group felt well with sluice conditions. In the non system category, 61.2 percent of them felt good. Among them, most of the modernized group (67.5 percent) and the non modernized group of respondents (53.7 percent) were satisfied in this regard.

TABLE -1: OPINION ABOUT THE CONDITIONS OF TANK STRUCTURE

Conditions of Irrigation Structure		Type of Tank											Table Total		
		System				Group Total		Non-system				Group Total		No.	%
		Modernised		Non-Modernised		No.	%	Modernised		Non-Modernised		No.	%		
		No.	%	No.	%			No.	%	No.	%				
Tank Bund	Bad	-	-	-	-	-	-	-	-	12	17.9	12	8.2	12	5.3
	Good	42	100.0	38	100.0	80	100.0	80	100.0	55	82.1	135	91.8	215	94.7
Sluice	Bad	13	31.0	-	-	13	16.3	26	32.5	31	46.3	57	38.8	70	30.8
	Good	29	69.0	38	100.0	67	83.8	54	67.5	36	53.7	90	61.2	157	69.2
Surplus Weir	Bad	14	33.3	-	-	14	17.5	13	16.3	49	73.1	62	42.2	76	33.5
	Good	28	66.7	38	100.0	66	82.5	67	83.8	18	26.9	85	57.8	151	66.5
Supply Channel	Bad	13	31.0	38	100.0	51	63.7	25	31.3	58	86.6	83	56.5	134	59.0
	Good	29	69.0	-	-	29	36.3	55	68.8	9	13.4	64	43.5	93	41.0
Field Channel	Bad	17	40.5	18	47.4	35	43.8	26	32.5	48	71.6	74	50.3	109	48.0
	Good	25	59.5	20	52.6	45	56.3	54	67.5	19	28.4	73	49.7	118	52.0
Table Total		42	100.0	38	100.0	80	100.0	80	100.0	67	100.0	147	100.0	227	100.0

Source: Compiled from respondents schedule

Majority of the respondents (66.5 percent) were satisfied with the conditions of surplus weir. In the system category, 66.7 percent of them of the modernized group and all the respondents belonging to the non modernized group felt good with tank structure. In the non system category, 57.8 percent of them felt good. Majority of the respondents (59 percent) were not satisfied with the conditions of supply channel. In the system category, 69 percent of the modernized group felt well with irrigation conditions and all the respondents belonging to the non modernized group felt bad with these conditions. In the non system category, 59 percent of them felt bad. Most of the modernized group (68.8 percent) of respondents was satisfied in this regard and most of the non modernized group of respondents (86.6 percent) was felt bad with the conditions of surplus weir.

Regarding the field channel, majority of the respondents (52 percent) were satisfied with the conditions. In the system category, 59.5 percent of the modernized group and 52.6 percent of the respondents belonging to the non modernized group felt well with field channel. In the non system category, 52 percent of them felt good. Most of the modernized group (67.5 percent) was satisfied in this regard and most of the non modernized group of respondents (71.6 percent) was felt bad with the conditions of the surplus weir.

TABLE -2: OPINION OF RESPONDENTS ON THE DAMAGE OF TANK

Tank Damage Opinion	Type of Tank											Table Total			
	System				Group Total		Non-system				Group Total		No.	%	
	Modernised		Non-Modernised		No.	%	Modernised		Non-Modernised		No.	%			
	No.	%	No.	%			No.	%	No.	%					
Encroachment	4	9.5	10	26.3	14	17.5	7	8.8	6	9.0	13	8.8	27	11.9	
Siltation/Chocking	1	2.4	9	23.7	10	12.5	38	47.5	16	23.9	54	36.7	64	28.2	
Road	29	69.0	19	50.0	48	60.0	23	28.7	35	52.2	58	39.5	106	46.7	
Urbanization	8	19.0	-	-	8	10.0	12	15.0	10	14.9	22	15.0	30	13.2	
Table Total		42	100.0	38	100.0	80	100.0	80	100.0	67	100.0	147	100.0	227	100.0

Table 2 revealed the opinion of respondents on the damage of tanks. Among the total respondents, 46.7 percent of the respondents opined that Construction of roads was the major reason for the damage of tanks.

In the system category, Most of the modernized (69 percent) group of respondents revealed that construction of roads was the main reason for the damage to the tanks. Urbanization was the next reason indicated by the modernized group of respondents belonged to System category. They stated that Encroachment (9.5 percent) and Siltation/Choking (2.4 percent) were also the reasons for the damage. 26.3 percent of the non-modernized group of respondents and 23.7 percent of them respectively had revealed the same reasons causing damage to their tanks.

In the modernized non – system Category, Siltation/Choking was the main reason stated by the respondents (47.5 percent) whereas Construction of road (52.2 percent) was the major reason stated by the Non-modernized non system group of respondents.

TABLE -3: KENDALLS COEFFICIENT OF CONCORDANCE FOR THE MOBILIZATION OF FUNDS

Mobilization of Funds	Type of Tank					Table Total	
	System		Group Total	Non-system			Group Total
	Modernised	Non-Modernised		Modernised	Non-Modernised		
Govt Assistance	4.86	4.92	4.89	4.05	3.85	3.96	4.29
Membership	1.10	1.08	1.09	2.03	2.87	2.41	1.94
Water Less	1.90	2.00	1.95	1.53	2.43	1.94	1.94
Assistance from NGO	3.40	3.08	3.25	3.86	2.66	3.31	3.29
Tree/Fish Resource	3.60	3.92	3.75	3.70	3.34	3.54	3.61
Kendall's W(a)	.920	.924	.916	.523	.114	.260	.425

Looking at the above table it was recognized that there was only moderate level of similarity among the respondents in assigning the ranks to the five items under mobilization of funds.

The Kendall's W varies between as low as 0.114 in the case of Non modernized group of respondents belonged to Non-system category and the maximum of 0.924 in the case of Non-modernized group of respondents belonged to System category.

In the System category, the highest priority was given to Government assistance for both modernized and non modernized groups of respondents recording the mean rank of 4.86 and 4.92 respectively. It shows clearly that still farmers have highly depended on government fund to maintain the tanks. The low priority was given to the membership for these two groups recording the mean rank of 1.10 and 1.08 respectively. Farmers felt that it was very difficult to mobilize funds through membership contribution.

In the Non-system category, the highest priority was given to Watercess for the both modernized and non modernized groups of respondents recording the mean rank of 4.05 and 3.85 respectively. The low priority was given to the membership for these two groups recording the mean rank of 1.53 and 2.43 respectively. The farmers could not give membership subscription to WUA due to economic backwardness.

TABLE-4: CHI-SQUARE ANALYSIS BETWEEN DIFFERENT HYPOTHESES

Hypothesis	Chi-Square Value	Result
System tanks and sluice	11.862	Null Hypothesis is rejected
System tanks and surplus weir	13.132	Null Hypothesis is rejected
System tanks and supply channel	38.224	Null Hypothesis is rejected
System tanks and field channel	.156	Null hypothesis is accepted.
System tanks and irrigation practice	41.923	Null Hypothesis is rejected
Non system tanks and sluice	2.361	Null Hypothesis is accepted
Non system tanks and surplus weir	46.075	Null Hypothesis is rejected
Non- system tanks and supply channel	43.166	Null Hypothesis is accepted
Non system tanks and irrigation practice	60.959	Null Hypothesis is rejected

Note: The table value is 6.635 at 1% level of significance.

V.FINDINGS, SUGGESTIONS AND CONCUSION

5.1. FINDINGS

- In the case of conditions of tank structure, 94.7 percent of the respondents reported that tank in the tank bund was good. In the System category, all the respondents in the modernization group and non modernized group felt the tank bund was good. In the non system category, all the respondents of modernized group and 82.1 percent of the non modernized group were satisfactory with the conditions of the tank bund.
- 25 years back, well water depth at the head reach, mean stood at 19 feet with the SD of 9.16. In the system category, the mean modernized group and the non modernized group stood at 11.91 feet and 12.77 feet respectively. In the non system category, the mean modernized group and the non modernized group was 13.50 feet and 29.06 feet respectively. It is clearly shows that well water depleted year by year due to poor maintenance in non modernized tank farmers.
- Majority of the respondents (55.5 percent) were highly satisfied with the equity of sharing water. 11.5 percent of them and 13.7 percent of them were dissatisfied and highly dissatisfied respectively in this regard.
- Though 60.8 percent opined that tank revenue has been properly spent, the rest of them did not have this same opinion. They indicated that the tank revenue has been spent for religious purposes (29.1) and for the both tank maintenance and religious purposes (10.1)
- Loss of water was the primary reasons for poor maintenance in the tank irrespective of the group of respondents belonged to the system category
- In the non system category, the primary reason was mentioned by the modernized group of respondents (3.86) to the excessive use of water at field and by the non modernized group of respondents to the inadequate maintenance (3.72)

5.2. SUGGESTIONS

- Tank themselves can generate more resources for maintenance. The present practices do not seem to be exploiting the full potential of tank resources. Individual membership contribution from farmers is so poor due to economic backwardness. The right to augment the revenue from tank sources should be given to Water User's Associations. Such a measure would strengthen the local village tank water users own fund for maintaining tanks.
- Disappearance of the supply Channel is very common due to urbanization, population explosions, encroachment by common man in catchment area. The blocking or damaging supply channel sources results in to poor storage of water in the tank even though the rainfall is normal. More WUA's(Water Users Association) should be established to educate farmers in view of importance of tank irrigation maintenance. Many farmers associations are established only on paper. WUA's should function in an efficient and democratic manner.
- The tail end farmers often have problems in receiving water especially in years of low rainfall and poor storage. At such times, the problems of equitable distribution of water between the source and tail end farmers worsen. This can be avoided by modernizing tank with farmers participation.
- The economic analysis shows that irrigation contributes to increase in yields and net income due to modernization. So, Government should initiate more tank rehabilitation programmes through PWD, Agriculture Department, Agricultural Engineering Department and NGO's by involving farmers in designing, planning, execution and sustained maintenance.

- WUA's cannot function without government support. So tanks should not be parted away from the government for any reasons. The misuse of tanks such as construction of government building instead of tanks should be stopped. Stringent law should be enacted to safeguard tanks from encroachment and decay.
- The general awareness on tank ecosystems needs to be build up at all levels. The young children and youth should be facilitated to play an important role by properly motivating them to care for tank ecosystems. Appropriate environmental programmes and promotional efforts to involve various segment of the society needs to be operationalized.
- Compare with system and non system tank farmers, the non system tank farmers do not get adequate water as they depend on their own catchment area. Government should initiate more modernized schemes for non system tank farmers. Socio economically poor farmers own the land in tail end areas they belong to lower caste.
- Community wells should be installed in the tank water spread area to provide little supplementary irrigation for non well farmers during critical periods. Tank and its structures is an asset. It should be protected for our future generations.

5.3. CONCLUSION

In this study, it is clearly shows that well water depleted year by year due to poor maintenance in non modernized tank farmers. In this present study, it clearly shows almost all respondents highly preferred clearing of supply channel. Once the supply channel is damaged, tanks could not get water. Highest source of revenue was preferred by the respondents to the cutting tree irrespective of the group of respondents. It is clearly seen that modernized programme has helped to augment more water resources by practicing effective water management programme with the help of water users associations.

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A COMPARATIVE STUDY OF PROBLEMS FACED BY CONSUMERS WHILE USING SERVICES OF INDIA POST AND PRIVATE COURIER SERVICE IN WESTERN MUMBAI

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ABSTRACT

The present study is an academic attempt to compare the India post and Private courier services in Western Mumbai with reference to problems faced by consumer while sending and receiving mails. The study has concluded using frequency analysis and 'independent paired t test' that consumer faces fewer problems with India Post than private courier service provider. It further concludes that there is a stiff competition between India post and Private Courier services especially in western Mumbai.

KEYWORDS

India Post, Private Courier, Mail, Consumer.

1. INTRODUCTION

1.1. POST OFFICE: It includes every house, building, room, carriage or place used for the purposes of the Post Office, and every letter-box provided by the Post Office for the reception of postal articles;

1.2. POSTAL ARTICLE: It includes a letter, postcard, newspaper, book, pattern or sample packet, parcel and every article or thing transmissible by post:

1.3. PRIVATE COURIER AGENCY: It means a any person engaged in the door-to-door transportation of time –sensitive documents, goods or articles utilizing the services of a person, either directly or indirectly, to carry or accompany such documents, goods or articles; (Section 65(33) of the Finance Act, 1994).

1.4. INDIAN POST OFFICE NETWORK

India has the largest Postal Network in the world with over 1, 55,015 Post Offices (as on 31.03.2009) of which 1, 39,144 (89.76%) are in the rural areas. At the time of independence, there were 23,344 Post Offices, which were primarily in urban areas. Thus, the network has registered a seven-fold growth since Independence, with the focus of this expansion primarily in rural areas. On an average, a Post Office serves an area of 21.21 Sq. Km and a population of 7175 people

1.5. GLOBALIZATION IMPACTS IN INDIA POST IN TWO DIFFERENT WAYS:

- a) A high rate of economic growth opens up opportunities for expansion and participation in the new economic activity. With growth of business transactions into and from India, the role of multinational firms as competitors to India Post poses a major challenge.
- b) It also opens up India Post's formerly protected internal market to competition from multi-national providers with international brand images, deep pockets and experience in modern and technologically driven methods of doing business.

1.6. ENTRY OF THE PRIVATE SECTOR– with the entry of private sector (for e.g. Shree Maruti Courier services, DTDC, Blue Dart, Vichare, The Professionals, The First Flight, etc.) in the traditional monopoly business of India Postal overplaying field needs to be established by legislative action. While the multi-national providers are providing high priced and speedy service in mail delivery, the low priced services offered by domestic couriers are undercutting India post's business. In this context legislative process will have to carefully ensure that its interests are not adversely affected while ensuring fairs to rules and regulations for all providers.

1.7. RULES AND REGULATIONS LED DOWN BY INDIA POSTAL ACT FOR PRIVATE COURIER AGENCIES

Each year in India 16 billion items of post (mail) are sent. 7 billion of these items are delivered by private firms which employ over 1 million people. There are more than 2500 of these firms ranging from large multi-nationals to small local companies with a fleet of bicycles. The government, however, is keen to gain much of that business for its own postal service, India Post, and is intending to change the law governing the Indian postal industry. Others say that these changes are necessary as India Post is the world's biggest postal network with more than 155000 branches, 89% of which serve rural areas. Private firms operate largely in urban areas and India Post is left with the unprofitable task of delivering post in the rural areas where revenues can cover only 15% of the costs.

2. REVIEW OF LITERATURE

Parthapratim Pal (2010) concluded in his study that with the department of posts facing competition in its traditional monopoly market from private players, the provision of a new postal bill, which is in the process of being drafted, can have a major impact on postal, courier and express delivery sectors. The bill is expected to define the USO in the Indian context, and will presumably discuss what privilege or special treatment the national post office will get for fulfilling the USO. It was concluded that it will not be an easy task to strike a right balance. There is a possibility that the bill will have strong political ramifications as it can have impact on livelihood of a large number of people involved in courier/EDS service.²

Adithya Krishna Chintapanti (2012) tried to explain in his studies that with the entry of private courier service providers and the gradual liberalization of the sector, jurisdictions across the world are grappling with the aspects of postal regulation. From a public policy perspective, the social, economic and developmental implications of the postal regulatory regime are significant. In this article the concern of service providers and consumers regarding the proposed draft post office bill, 2011. It recorded department rather ended elements for inclusion in the long awaited legislative overhaul to other of the postal sector, in the light of other jurisdictions and the regulatory architecture for other network industries. It also pointed out postal regulation under legislative options as Restructuring the GPSP, Defining USO, Recognition of CSP and formulation of service standards, Establishing sectoral regulator and Role of Department of post after restructuring. All the above changes should ensure a dynamic, organized and disciplined postal sector in greater consumer interest.³

Economic Survey of 2011-2012 (2012) highlighted some important points about India Post as it has the largest postal network in the world with 154886 post offices across country as on March 31, 2011. On average each post office serves 7814 persons with coverage of approximately 21.23 sq. km. As many as 139040 post offices are in rural areas and remaining in urban areas. In additions to its own network, the Department of Post also serves through 1155 franchisee outlets in areas where it is not possible to open post offices. Government has launched Project Arrow in 2008 to transform the existing India Post infrastructure across the country by upgrading key postal operations such as mail delivery, remittance, and banking services. Various other functions were assigned to post offices as

to disburse wages to beneficiaries of Mahatma Gandhi National Rural Employment Guarantee Act through 96895 post offices. The postal network is also being used by other government department/agencies to collect data like the rural consumer price index. The postal sector needs to keep pace with changing times as many of its services have become redundant with growth with technology and takeover by other players. Quick Decisions and actions to stay abreast of the times including switching over to new activities and downsizing could realize a lot of resources from this sector for use elsewhere.⁴

Arpita Mukherjee, Partha Pratim Pal and Ramneet Goswami, (2012) One of the core issues for India is that domestic regulation of postal services is evolving. India Post offers courier/EDS services. The Department of Posts is in the process of framing a new regulation that is likely to affect the courier/EDS industry. Based on a primary survey, this study found that the regulation should be transparent and fair; it should clearly define the reserved area and distinguish between Universal Service Obligation (USO) and competitive services. It should also mention how the USO will be funded. The regulation should encompass global best practices like removal of cross-subsidization and should facilitate competition. The need for a postal regulatory regime will arise if the public postal service provider is privatized. The regulator should be independent. The objective of the new regulation should be to lay down a form path for India Post and the primary role of the regulator should be to monitor the USO.⁵

Paul Dudley and Others (2009) found that, With liberalizing postal sector in UK (though not completely) since past four years, there is a considerable growth in volumes around over 20% of total inland addressed postal market and larger portions of the market for consumers sending large postings. It was evident that entrants have not much lead in total delivered volumes in UK. The margin set between end to end and an access product is an important element in this development. The ex ante price control is set keeping in mind appropriate level of margin. If it is set below, it will reduce the likelihood of entry and increase the prospect of an ex post investigation. If it is set above the level expected from ex post regulation promotes greater entry. High margins enabled entrants as compared to Royal Mail, UK to compete for customer's unsorted mails and to expand market beyond the bulk mail posting.⁶

3. IMPORTANCE OF THE STUDY

The present study signifies consumer behavior towards choosing mail service provider and it will also signify India post to develop new ways to serve better and to capture and to face competition in market.

4. PROBLEM OF THE STUDY

The problem of the study is with the advent of private courier services in demand; demand for India post is declining. Thus, the present study is an academic attempt to find the problems faced by consumer using such services.

5. OBJECTIVE OF THE STUDY

To analyze the problems faced by consumer while sending and receiving their mails through India Post and Private Courier Service Provider.

6. HYPOTHESIS OF THE STUDY

Null hypothesis :(H₀)

H₀: Respondent faces lesser problems while using/receiving services of Indian Postal Services than Private Courier Services.

Alternative hypothesis: (H₁):

H₁: Respondents faces more problems while using/receiving services of Indian Postal Services than Private Courier Services.

7. RESEARCH METHODOLOGY

For the purpose of the above study and to achieve the objectives, the researcher has focused on primary and secondary data as a source of information. Primary data is collected from officials, employees of post offices and private couriers and from consumers using services from post offices and consumers using private courier's services in Mumbai. A survey was conducted from consumers to examine their satisfaction level. The survey is based on the structured questionnaire designed for the same. The secondary data for the study will be based on Annual Reports, Newspapers, Journals, Published and Unpublished Books, Dissertation, mimeographed, official reports, research papers and other sources.

8. RESULT AND DISCUSSIONS

For the present study, Researcher has collected data through structured questionnaire filled by 50 respondents from western Mumbai region. Respondents sample was chosen by deliberately random sampling technique. Table No.1 indicates detailed profile of respondents. Out of 50 respondent, 22 (44%) were Male, 24 (48%) were Female and 4 (8%) were Institutions such as Banks and Educational institutions. Distribution of respondents according to age wise, 5 respondents belongs to age group of 18 years to 24 years, 23 belongs to 25 years to 31 years, 17 belongs to 32 years to 38 years, 5 belongs to 39 years to 45 years and no respondents of age above 45. Educational level of respondents. 2(4%) respondents were Graduates, 38(76%) respondents were Post Graduates and 10 (20%) were Professionals. According to income (in Rs. per month), 13 Respondents were having income below Rs. 25,000; 23 were having between Rs. 25,000 to Rs. 50,000; 7 were having between Rs. 50,000 to Rs. 75,000; no respondent has income between Rs. 75,000 to Rs. 1,00,000 and 7 respondent were having income above Rs. 1,00,000. According to occupation wise, 31 respondents are salaried, 2 were self employed, 6 were carrying their own business and 11 were professionals.

TABLE NO.1: DETAILED PROFILE OF RESPONDENTS

Point of Consumer Profile	Sub Points	Number of Respondents	Percentage (%)
Gender	Male	22	44
	Female	24	48
	Institutions	04	8
Age	18-24	5	10
	25-31	23	46
	32-38	17	34
	39-45	5	10
	46 and above	0	0
Educational Level	Graduates	2	4
	Post Graduates	38	76
	Professional	10	20
Level of Income (in Rs.)	Below Rs. 25,000	13	26
	25,000 – 50,000	23	46
	50,000 – 75,000	7	14
	75,000 – 1,00,000	0	0
	1,00,000 & above	7	14
Occupation	Salaried	31	62
	Self-Employed	2	4
	Business	6	12
	Profession	11	22

Source: Compiled from Primary Data

Table No.2 indicates use of mailing services by the respondents as Individual, Business and both. It is known from the table, that 46% respondent uses mailing services as individual only, 18% as business only and 36% as both business and individual. Despite of technological development use of mailing services is still higher as individual.

TABLE NO. 2: DISTRIBUTION OF RESPONDENT REGARDING USE OF MAILING SERVICES

Respondent as	Number of respondents	Percentage
Individual	23	46
Business	9	18
Both	18	36
Total	50	100

Source: Primary Data

Table no.3 indicates preference of respondent while choosing mail service provider for sending mails. It was reveal from the table that only 4% respondent chooses only Indian Postal Services for sending mails, 46% chooses only Private Courier service provider for sending mail and 50% chooses both. Thus it is concluded that respondents choosing both switches from one service provider to other depending upon their need.

TABLE NO. 3: DISTRIBUTION OF RESPONDENTS REGARDING PREFERENCE OF MAIL SERVICE PROVIDER

Service Provider	Number of respondents	Percentage
Indian Postal Services	2	4
Private Courier Services	23	46
Both	25	50
Total	50	100

Source: Primary Data

Hypothesis 1:

Null hypothesis :(H₀)

H₀: Respondent faces lesser problems while using/receiving services of Indian Postal Services than Private Courier Services.

Alternative hypothesis: (H₁)

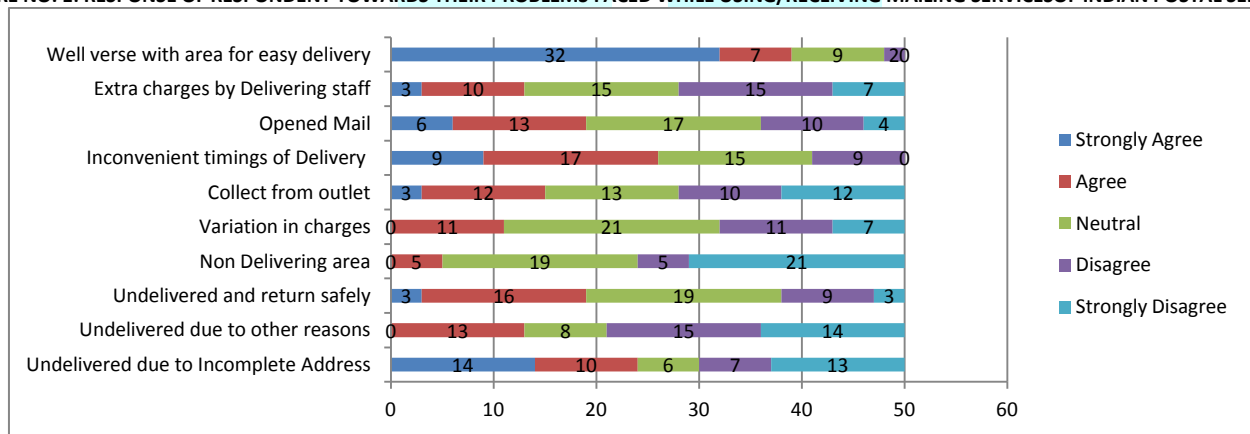
H₁: Respondents facesmore problems while using/receiving services of Indian Postal Services than Private Courier Services.

TABLE NO. 4: RESPONSE OF RESPONDENT TOWARDS THEIR PROBLEMS FACED WHILE USING/RECEIVING MAILING SERVICES OF INDIAN POSTAL SERVICES

Sr. No.	Particulars	5	4	3	2	1	Total	Average
1	Undelivered due to Incomplete Address	14	10	6	7	13	50	2.90
2	Undelivered due to other reasons	0	13	8	15	14	50	3.60
3	Undelivered and returned safely	3	16	19	9	3	50	2.86
4	Non Delivering Area	0	5	19	5	21	50	3.84
5	Variation in charges	0	11	21	11	7	50	3.28
6	Call from office to come and collect the mail from outlet	3	12	13	10	12	50	3.32
7	Inconvenient timings for receiving delivery	9	17	15	9	0	50	2.48
8	Already opened mail	6	13	17	10	4	50	2.86
9	Extra charges collected by delivering staff	3	10	15	15	7	50	3.26
10	Delivering staff well verse with area for easy delivery	32	7	9	2	0	50	1.62
	Over all Mean Score							3.02

Source: Primary Data

FIGURE NO. 1: RESPONSE OF RESPONDENT TOWARDS THEIR PROBLEMS FACED WHILE USING/RECEIVING MAILING SERVICESOF INDIAN POSTAL SERVICES



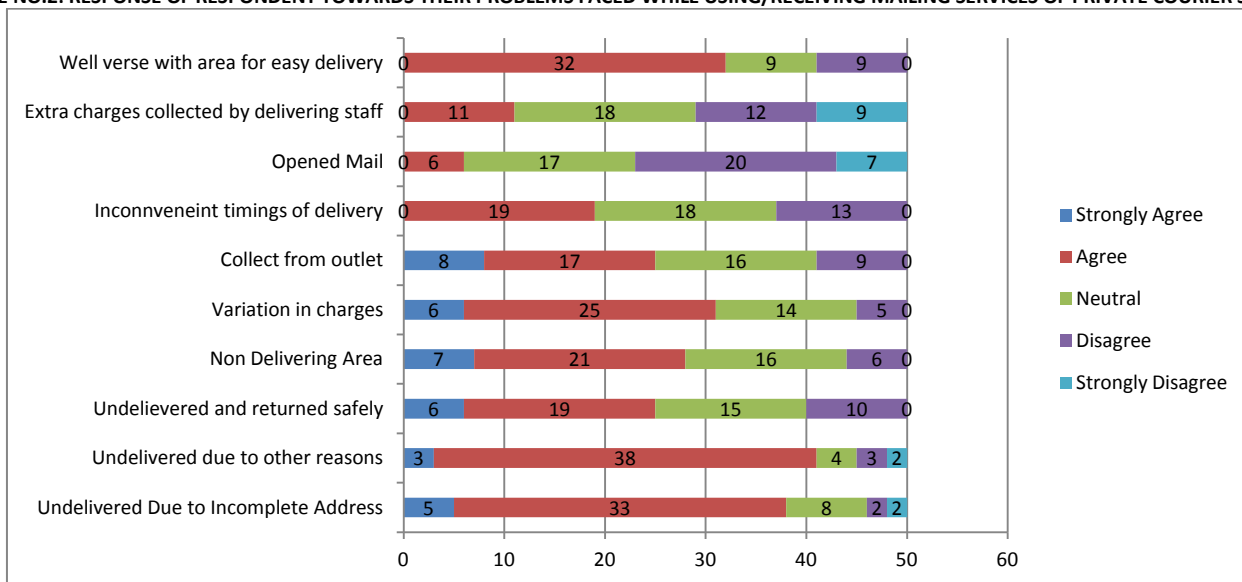
Source: Primary Data

TABLE NO. 5: RESPONSE OF RESPONDENT TOWARDS PROBLEMS FACED WHILE USING/RECEIVING MAILING SERVICES OF PRIVATE COURIER SERVICES

Sr. No.	Particulars	5	4	3	2	1	Total	Average
1	Undelivered due to Incomplete Address	5	33	8	2	2	50	2.26
2	Undelivered due to other reasons	3	38	4	3	2	50	2.26
3	Undelivered and returned safely	6	19	15	10	0	50	2.58
4	Non Delivering Area	7	21	16	6	0	50	2.42
5	Variation in charges	6	25	14	5	0	50	2.36
6	Call from office to come and collect the mail from outlet	8	17	16	9	0	50	2.52
7	Inconvenient timings for receiving delivery	0	19	18	13	0	50	2.88
8	Already opened mail	0	6	17	20	7	50	3.56
9	Extra charges collected by delivering staff	0	11	18	12	9	50	3.38
10	Delivering staff well verse with area for easy delivery	0	32	9	9	0	50	2.54
	Over all Mean Score							2.676

Source: Primary Data

FIGURE NO.2: RESPONSE OF RESPONDENT TOWARDS THEIR PROBLEMS FACED WHILE USING/RECEIVING MAILING SERVICES OF PRIVATE COURIER SERVICES



Source: Primary Data

To test above hypotheses, parametric paired 't' test was applied for data related to mean scores of satisfaction levels of service in Indian Postal Services & Private Courier services.

The result of the same is tabulated in following table no. 6.

TABLE 6: PARAMETRIC PAIRED 't' TEST APPLIED FOR DATA RELATED TO SATISFACTION LEVELS OF SERVICE

	Mean (weighted Average)	S.D.	n	Parametric paired 't' test value	
				d. f.	t value
Indian Postal Services	149.9	41.615	10	9	-2.47
Private Courier services	166.2				

INTERPRETATION

As p value is 0.8766 which is greater than $\alpha = 0.05$ (5% significant level) we failed to reject null hypothesis. It is also observed that calculated 't' value is -2.47 is more than - 2.764 (table value of at 1% significant level, upper tailed and d.f.9). Hence we failed to reject null hypothesis Ho.

9. FINDINGS

It is found through the study that though people faces less problems while using India Post but though they uses private courier services as it is convenient and more reliable.

10. RECOMMENDATIONS

With the growing need of quick services in fast city like Mumbai, India Post has to take severe measures to improve the quality of services especially time lag in delivering mails. It has the biggest strength in terms of coverage and man power, it has to deploy it in such a way to reap more benefits and attract more consumers to serve better.

11. CONCLUSIONS OF THE STUDY

Respondent faces lesser problems while using/receiving services of Indian Postal Services than Private Courier Services while sending or receiving mails.

12. LIMITATIONS OF THE STUDY

The present study faces with the limitations of areas as it has covered consumers from the western Mumbai Region only. It also has limitations of educated respondents only. It also has limitations of number of respondents.

13. SCOPE OF THE STUDY

There is further scope of the present study with the development in India Post in order to compete healthily with private courier service provider and its impact on share of delivering mails across the country.

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ANNEXURE

QUESTIONNAIRE
PERSONAL DETAILS

NAME OF THE RESPONDENT: _____

Gender: 1. Male 2. Female 3. Institutions (Bank/Educational/Companies Offices).

Age: 1. Below 18 years 2. 18-24 3. 25-31 4. 32-38 5. 39-45 6. 46 and above.

Educational Level: 1. None 2. Below SSC 3. SSC 4. HSC 5. Graduates 6. Post Graduates 7. Professional

Income (in Rs. per month): 1. Less than 25,000 2. 25,000-50,000 3. 50,000-75,000 4. 75,000-1,00,000 5. 1,00,000 and above.

Occupation: 1. Unemployed 2. Salaried 3. Self Employed 4. Profession 5. Business

QUESTIONS ON BEHAVIOR OF USING MAILING SERVICES

1. Do you use mailing services for sending letters and documents? 1. Yes 2. No
 2. Which service provider do you use to send your mails (letters and documents)? 1. Indian Postal Services 2. Private Courier Services
 3. Both
 3. You use mailing services as: 1. Individual 2. Business 3. Both

RESEARCH RELATED QUESTION ON LEVEL OF PROBLEM FACED

4. Kindly rank both the service provider.

Indian Postal Services					Sr. No.	Problems faced	Private Courier Services				
1	2	3	4	5			1	2	3	4	5
While sending Mails											
					1	Undelivered due to Incomplete Address					
					2	Undelivered due to other reasons					
					3	Undelivered and return safely					
					4	Non Delivering area					
					5	Variation in charges					
					6	Collect from outlet					
					7	Inconvenient timings of Delivery					
					8	Opened Mail					
					9	Extra charges by Delivering staff					
					10	Well verse with area for easy delivery					

(1= Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree)

Thank you for your kind response and sparing valuable time.



POLICY OF NATIONALISM GUIDANCE THROUGH IN TRADITIONAL MARKET MANAGEMENT IN CENTRAL JAVA

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ABSTRACT

A research on policy nationalism guidance through in traditional markets management in the province of Central Java is implemented in "Pasar Gede Solo" with qualitative methods. The reason for selecting "Pasar Gede Solo" because of Solo City has a lot of cultural heritages that are still held strong until today. The cultural heritage is the local identity. The Local identity can develop into the province identity, then to be the national identity. A strong national identity shows high Nationalism which reflected from loyalty, passion and pride of the nation itself. The number of local identities in "Pasar Gede Solo" is likely to evolve into national identity should be encouraged to preserve the Government's policy to strengthen Indonesia Nationalism.

KEYWORDS

local Identity, national identity, Nationalism.

INTRODUCTION

Province of Central Java has one city that depicts the culture of The Central Java, it is Solo City. Solo or Surakarta city has a palace which still maintains its existence until today. Preservation of the cultural heritage of Solo City as very support toward nationalism. Strength and the progress state achieved if nationalism is maintained. Nationalism is a political attitude of the nation society who share the same culture and region as well as in common ideals and goals, so that the nation society feel a deep loyalty to the nation itself (pancasila.weebly.com). Nationalism in Indonesia include of loyalty toward Pancasila, the National Constitution of the Republic of Indonesia (UUD NRI) 1945, the Republic of Indonesia and *Bhinneka Tunggal Ika*. *Bhinneka Tunggal Ika* is the diversity of nation which is the national identity of Indonesia. National identity is maintained on substantially describe love and pride of the people in the culture. Nationalism as a form of affection of society toward the nation's culture, it can be seen in a traditional market. Condition of the culture in a region is a local identity. A local identity in turn supports national identity.

Research on policy of nationalism guidance attractives to be implemented in traditional market in Solo city, because of Solo is a city in Central Java that cultural preservation is maintained. Preservation of the culture to be observed, is it still up in the traditional market in the Solo City, that is Pasar Gedhe? This study proposes the formulation of problems:

1. What are the local identity are maintained continuously in the traditional market of Solo to strengthen nationalism in Central Java?
2. What are the patterns of interaction in the traditional market of Solo city to strengthen nationalism in Central Java?

This research aims to : 1) Describe and analyze local identity of the traditional market of Solo to strengthen nationalism in Central Java; 2) Describe and analyze patterns of interaction in traditional markets to strengthen nationalism in Central Java; 3) Formulate appropriate policies for fostering nationalism through a traditional market in Central Java.

This study try to analyze the phenomenon under study, namely the local identity and interaction patterns that can increase nationalism. Chairman of UPTD as a key informant, then it is forwarding into snowball sampling, it will seek a new informant provided by informant early or key person. By using a qualitative approach, as befits the naturalistic study, informant is only source that can provide information. The number of informant is not determined in advance. In the process of data collection, if the variation of informant had not found any more, then no need to look for new informant. The data source of this study consisted of primary data and secondary data. The main instrument in this study is the researcher herself. This study will also use other supporting instruments such as observation, interview guidelines and documentation guidance. Analyzing qualitative data in this study will be carried out by the steps: data reduction, data display, conclusion and verification. This study uses the technique of data validity through credibility, transferability, dependability and confirmability. Limitations of this study because of it is only done in Pasar Gede of Solo City in Central Java province, while guidance of nationalism is a national problem, requiring research in all provinces in Indonesia.

DISCUSSION

The identity of the local food and goods are bought and sold in Pasar Gede Solo are dawet telasih consisting of sticky rice tape/ *tape beras ketan*, coconut milk, *sum sum* porridge, *telasih*, *cendol*; sweet and salty rice crust; *brem*; chips of claw, lung, intestine, and chicken gizzards; *Lenjongan/jajan pasar*/traditional snack consisting of *gatot*, *tiwul*, *klepon*, *cetil*, *lopis*; *Jaddah blondo*; *Jaddah of bananas*; *nngarut*; *pecel ndeso*; sesame sauce; *mato maling/skin of mlinjo*; *serundeng solo*; crackers of *karak*; *rambak* of buffalo leather; *rabuk rambak* consisting of *ketupat*, coconut and sesame oil; *cenil*; *angkringan* coffee; chicken of *cemani*; Salt of *Krasak*; scrub of spices; *Lerak* used to wash a *batik*; *jebuk sari* powder for acne; pottery; striated *batik/batik lurik*; teak leaves China as a herbal slimming drink. Interaction pattern seen from the relationship between market manager with the merchant that occurs as a result of the facilities that provided from market managers to the traders. This facility also raises the pattern of interaction between the public market with manager. It can be described as follows:

1. INTERACTIONS OF MANAGERS WITH TRADERS

Employees at Pasar Gede were 30 who consist of 10 civil servants/ PNS, 7 freelances, 13 outsourcing (per year) including security. The harmony and intimacy between employees very well established course it is manifested by various efforts are built. Similarly, the form of discipline and integrity to every employee who looks very high.

The existence of several rules in the traditional clothes worn by the employees is one manifestation of acts of discipline itself. It can be seen in the use of *keki* on every Monday and Tuesday; uses *Batik Krishna* on Wednesday for civil servants; *beskap* to use a male employee and *kebaya* for female employees on Thursday, and free of batik on Friday.

The use of batik as uniforms for employees Pasar Gede Solo, is one way to instill a sense of community among employees, by wearing batik raises awareness that they are both residents of Solo who uphold local culture in terms of fashion is '*Batik Krishna*'. *Batik Krishna* itself is a part of the Indonesia State's cultural heritage and became the Identity of Indonesia State .

The use of batik creates a feeling of togetherness and love of country on the employees, whereas training through *gamelan* and *sinden* shared between employees and traders to realize the harmonious relationship between them. Employees and market traders practice of *gamelan* and *sinden* on Wednesday and Friday at two o'clock. They take on the role of each according to their talents and interests that they want to play *gamelan* and *sinden*. The joint training was held at the office of Pasar Gede itself. Market manager providing facilities for the *gamelan* practice by providing the *gamelan* tools necessary. The *gamelan* training has the objective to be staged on the anniversary of Surakarta City.

Interaction managers and traders can also be seen from both sides active role in providing the courtesies smile every face to face to make the gap between managers and traders that do not exist. They feel the same, need each other and have their respective roles in the market. It can be seen from the awareness of

market managers in give attention to the needs of traders in operating their trade in market by giving some facilities, such as the mosque, toilets, brooms, *engkrak*, boot shoes, the presence of fire extinguisher, hydrant and the presence of health services on every Thursday. The manager listens to the complaints of the merchants actively in order to improve the quality of *Pasar Gede* itself. So it is just the merchants who pro-active in keeping the facilities provided by the market managers.

2. INTERACTION OF MANAGERS WITH SOCIETY

In interacting with general society, the managers of *Pasar Gede Solo* has an identity, namely they use the thumb to point toward something. The use of the thumb is to show courtesy and respect for the other person. It shows that the system is still firmly held courtesy of Solo residents that reflect the eastern culture of Indonesia.

Concern of market manager toward society is also seen in the absence of parking facilities are arranged neatly so as to provide flexibility to the public for shopping, although the visitor of *Pasar Gede* quite a lot but did not make the parking area becomes chaotic. Pedicab parked neatly lined up in order to provide comfort to people who want to use the services of pedicab after tired cause shopping at the *Pasar Gede*.

3. INTERACTION OF TRADERS WITH SOCIETY

In the interaction between the traders and society, they use two languages, Indonesian and local languages. It was seen in the transaction process of buying and selling activities among merchants and buyers who use both languages to communicate, sometimes they do over language/ mixing languages and varied dialects are used greatly because of they come from different regions.

In determining the price of any traders, there are traders who set prices fit and those that can be negotiable. It depends on the type of goods sold.

4. INTERACTION OF INTER-ETHNICITY

In the *Pasar Gede Surakarta*, the assimilation between Javanese ethnic and Chinese ethnic clearly seen, for example in trading, calls of "*koh*" is commonly used to summon Chinese citizens men and "*cik*" is used in calling a Chinese citizen woman. Togetherness of two ethnic groups, namely Java and the Chinese realized through *Grebek Sudirowajan* which is a blend of Javanese and Chinese every February (Imlek Day) for three weeks. *Grebek Sudirowajan* is featuring lion/*barongsai* whose players come from residents of *Avalokiteswara* temple where its located next to *Pasar Gede Solo*.

In terms of dress, intermingling between Javanese and Chinese are still visible in founding *kebaya* and *jarit* that used by traders and buyers by ethnic Javanese, while Chinese ethnic whereas both merchants and shoppers are already wearing modern dress.

Procurement of chicken *cemani* by local merchants also provide fresh air for the Chinese ethnic who so needs when they are going to carry out religious ceremonies for their male sons were growing up or just used as an herbal medicine or treatment for boys who had puberty but Adam's apple (the bulge on the neck of the male) has not been seen out.

CONCLUSION

Local identity can develop into provincial identity, then became national identity. National identity shows high Nationalism which reflected in the loyalty, love and pride to the nation itself.

1. LOCAL IDENTITY

Local identity of *Pasar Gede Solo* is *dawet* *telasih* consisting of sticky rice *tape*, coconut milk, *sum sum* porridge, *telasih*, *cendol*, *brem*, *Jaddah blondo*; Sesame Sauce; *Moto maling/skin of mlinjo*; *rabuk rambak* consisting of *ketupat* and sesame oil.

Local identity that is potentially to be national identity is a sweet and salty rice crust which is became typical food for Magelang regency; chips of claw, lung, intestine, and chicken gizzards, became the typical food for Magelang regency too; *Lenjongan* consisting of *gatot*, *tiwul*, *klepon*, *cecil*, *lopis*) in the other regions in Java called the market */jajan pasar*. Currently in Indonesian market snack is starting to become snacks are sold in malls, supermarkets, restaurants and hotels of international class; *Jaddah* of bananas, in Semarang City called *getuk* of bananas; *Nggarut*, widely sold in traditional markets in Central Java; sauce of *pecel*, widely sold in traditional markets and malls in Indonesia; *serundeng*, became the typical food throughout Central Java; crackers of *rambak* Stubborn and buffalo skin is also a typical food in Indonesia; *Cenil* (in another area called water lettuce) is ordinary used for vegetables, in Wonosobo regency used it for *pecel*, the way to cook it by boiled then eaten with sauce of *pecel*; *angkriangan* coffee, in another area known as *sego kucing*; Salt of Krasak; Scrub of spices; *Lerak* used to wash a batik; *Jebuk Sari* powder for acne; pottery; Batik striated; teak leaves China as an herbal slimming drink which is very popular in Solo's women to keep her awake slenderness.

2. PATTERNS OF INTERACTION

Interaction patterns of language, culture and local identity is being developed into a national identity. The pattern of this interaction occurs between managers, between managers with the traders, interaction between the traders and buyer and the interaction between market managers, traders and buyers. These interactions led to local identity in the form of the use of the Java language mixed with Chinese, the use of batik and *kebaya* uniforms and *beskap* for managers, product merchandise depicting Javanese ethnic intermingling with the Chinese.

SUGGESTIONS

1. Preservation of local identities of *Pasar Gede Solo* should be improved in order to develop into local identity of Central Java province, and in turn develop into Indonesian national identity. Because it is must be supported by government policies for the preservation of the local identities.
2. Traders are still became a minority should be given training in order to make merchandise products more interesting, that is in demand by buyers and a lot of people who are interested to trade these products. The product is *rabuk rambak*; *Jaddah blondo*; *Lenjongan*; *Sambal* of sesame/*sambel ndeso*.

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GREEN PURCHASING BEHAVIOUR OF YOUNG CONSUMERS IN THOOTHUKUDI**DR. K. MARIAMMAL****HEAD****DEPARTMENT OF COMMERCE****GOVINDAMMAL ADITANAR COLLEGE FOR WOMEN****TIRUCHENDUR****M. SHUNMUGAVALLI****ASSOCIATE PROFESSOR****DEPARTMENT OF ECONOMICS****GOVINDAMMAL ADITANAR COLLEGE FOR WOMEN****TIRUCHENDUR****ABSTRACT**

Protection of environment is an issue of key concern which has permeated into all spheres of life. Consumers are increasingly becoming concerned about the environment and various issues related to it at the global level. This change has encouraged a couple of organizations and has also compelled many organizations to respond with 'environmentally' friendly products. Green marketing is perceived as an opportunity by many organizations to achieve their long term goals. Green strategy can be effectively implemented only by persuading the consumers to buy green products. Hence the indepth study on green purchasing behaviour and their attitude towards green products is of crucial importance today. The focus on young consumers is understandable as this group is representing a new generation of consumers with a strong potential impact on green environment. Hence 130 young consumers of green products in the age group of 18 – 25 years in Thoothukudi are selected as sample by adopting snow ball random sampling method. The primary data are collected directly from the respondents through a structured questionnaire. Secondary data are collected from journals and websites. Statistical tools like simple percentages, weighted mean score, Pearson's Product Moment Correlation and Two-way ANOVA are used to analyse data. It is found from the analysis that 'Consumer Beliefs', 'Environmental Attitude', and 'Social Influence' have a positive influence on the green purchasing behaviour. The influential factor on green purchasing behaviour namely 'Consumer Beliefs', 'Environmental Attitude', 'Social Influence' and 'Quality of Products' are significantly related with the overall green purchasing behaviour of the respondents. The findings of the study also insist the importance of educating the young consumers about the green environment. Hence if the suggestions given in the study are carried out both by the marketers and the young consumers, definitely India will shine as super power in the years to come.

KEYWORDS

green environment, green products, young consumers.

1. INTRODUCTION

Today, society is cluttered with marketing activities and these activities surround us constantly. Among the issues of marketing, a vital part that influences human roles and activities is 'environment' more specifically the 'green environment'. The green environment is now a leading concern for marketers. The concept of environmentalism and becoming green was not so prominent before the late 1980s. The green movement started in Great Britain; British consumers played an initial role of "Greening" movement. Company's contribution to environmental degradation and damage influenced consumers to adopt the greening movement. Thus, eco-friendly marketing concepts spread beyond the Great Britain boundary. Furthermore, some realists raised their voices about sustainable green consumerism that does not harm environment. The evolution of green marketing issues becomes more apparent since the 1990s. Thus, Green marketing is nothing but only the development and improvement of pricing, promoting and distributing the products which do not damage the environment. Therefore, marketers have to establish and communicate a strong environmental image by promoting the green purchase behaviour of the people. Moreover, it is the prime duty of each and every citizen of India to protect the environment by purchasing green products. Therefore, an indepth study is made on the intention of people to buy green products which helps to keep the environment green.

2. REVIEW OF PREVIOUS STUDIES

Aditya Mahaeshwari and Dr.Gunjan Malhotra (2011) in their study, "Green Marketing : a Study on Indian Youth", focused on the youth and have tried to understand the awareness level of green products, their perception about green products and the parameters they consider for buying green products. They also suggested that green marketing should be combined with educating the people about the benefits of purchasing green products.

Barua Promotosh and Islam Md. Sajedul (2011) in their study "Young Consumers' Purchase Intentions of Buying Green Products", examined the young consumers' green purchase intentions based on the Theory of Planned Behavior (TPB). At the same time, this study also intended to detect variables that influence young consumers' intentions of buying green products. They concluded that the 'parental influence' was the top predictor among all the variables studied.

Booi-Chen Tan and Teck-Chai Lau, (2009) in their article, "Examining Sustainable Consumption Patterns of Young Consumers : Is there a cause for concern?" studied the patterns of sustainable consumption behaviour of young consumers. The results indicated that there were no significant differences between gender and courses pursued with consumers overall sustainable consumption behaviour. The findings also showed that young consumers exhibit a moderate level of sustainable consumption behaviour and concluded that there was no cause of concern for over-consumption behaviour among young consumers.

3. IMPORTANCE OF THE STUDY

The growth of ecologically favourable consumer behaviour is increasing due to the present environmental degradation. Previous studies have reported that people use products and services for their physical comfort, mobility, relief from labour, enjoyment, power status, personal security, maintenance of tradition and family, etc. But now a different view is that people are now more concerned about their consumption styles. The focus of consumers has shifted towards environmental protection. As a citizen of India, everyone have the responsibility to make environment green. Hence the awareness about the importance of green environment becomes an important ingredient of green strategy. Hence the indepth study on green purchasing behaviour and their attitude towards green products is of crucial importance today.

4. STATEMENT OF THE PROBLEM

The focus on young consumers is understandable as this group is representing a new generation of consumers with a strong potential impact on the type of goods and services offered in the market. The demand for green products can vary due to differences in ethnical beliefs and people's active participation on environmental issues. The ethnical beliefs and attitudes towards environmental friendly affairs also differ through socio economic characteristics. Among these

socio-economic characteristics, 'age' is a strong determinant that influences consumer's buying behaviour and buying patterns greatly. For example, old people tend to spend more time on reading and recycling than young people. On contrary, young people are more willing to participate in outdoor activities, and like to join group events. Hence they are always induced by the peer group in some way or other in almost all the purchase decision. The purchase of green products is no exception to this. Hence the study probes into young consumers' purchase behaviour of green products.

Thoothukudi is chosen as the study area since it is a port city with many industries and export oriented units and crowded with dense population.

5. OBJECTIVES OF THE STUDY

The main objectives of the study are as per following:

- to analyse the determinants of green purchasing behaviour of the respondents.
- to find out the interrelationship between the determinants of green purchasing behaviour of the respondents.
- to examine the relationship between the determinants of green purchasing behaviour and the demographic variables of the respondents.

6. HYPOTHESES

- The determinants of green purchasing behaviour are not significantly related to the overall green purchasing behaviour of the respondents.
- The overall green purchasing behaviour is independent of the demographic variables of the respondents.

7. METHODOLOGY

130 young consumers of green products in the age group of 18 – 25 years in Thoothukudi are selected as sample by adopting snow ball random sampling method. The primary data are collected directly from the respondents through a structured questionnaire. Secondary data are collected from journals and websites.

Statistical tools like simple percentages, weighted mean score, Pearson's Product Moment Correlation and Two-way ANOVA are used to analyse data. Likert's five point scaling technique is used to quantify the green purchasing behaviour of the respondents

8. ANALYSIS AND INTERPRETATION

The data collected with the help of questionnaire are analysed in three parts:

- Determinants of green purchasing behaviour
- Interrelationship between the determinants of green purchasing behaviour
- Relationship between the determinants of green purchasing behaviour and the demographic variables of the respondents.

8.1 DETERMINANTS OF GREEN PURCHASING BEHAVIOUR OF YOUNG CONSUMERS

The green purchasing behaviour of young consumers is influenced by many factors which are considered as the significant predictors in influencing the green purchasing intention of young consumers. The determinants of green purchasing behaviour include the following four factors:

- Consumer beliefs
- Environmental attitude
- Social influence
- Quality of green products

Six statements are framed for each influential factor with the score on overall factors to range from 6 to 30, with the neutral point of 18. The mean scores and 't' value are calculated and given in Table 1.

TABLE 1: DETERMINANTS OF GREEN PURCHASING BEHAVIOUR

S.No.	Determinants	Mean	Standard deviation	Coefficient of variation	't' value
1.	Consumer beliefs	27.22	3.82	14.03	9.56
2.	Environmental attitude	23.4	4.42	18.89	6.16
3.	Social influence	19.85	3.72	18.74	5.66
4.	Quality of green products	9.36	2.33	24.89	1.75

Source : Primary data

The mean score of determinants of green purchase behaviour for 'Consumer beliefs', 'Environmental attitude' and 'Social influence' are above the neutral point. Hence these factors have a positive influence on the green purchasing behaviour. 't' values also show that they are significant at 0.05 level.

The mean score of 9.36 for the determinant 'Quality of green products' is below the neutral point. Hence 'Quality of the green products' does not influence the green purchasing behaviour of the respondents. It is also evident from the 't' value which is insignificant at 0.05 level.

8.2 INTERRELATIONSHIP BETWEEN THE DETERMINANTS OF GREEN PURCHASING BEHAVIOUR

The interrelationship between the determinants of green purchasing behaviour is analysed with the use of Pearson's product moment correlation. The null hypothesis framed for this purpose is, "The determinants of green purchasing behaviour are not significantly associated with the overall green purchasing behaviour of the respondents". The results of Pearson's product moment correlation are given in Table 2.

TABLE 2: INTERRELATIONSHIP BETWEEN DETERMINANTS OF GREEN PURCHASING BEHAVIOUR

Determinants	Consumer beliefs	Environmental attitude	Social influence	Quality of products	Green purchase behaviour
Consumer beliefs	1	0.107	-0.19	-0.61	** 0.29
Environmental attitude		1	-0.15	-0.71	** 0.86
Social influence			1	** 0.46	0.15
Quality of products				1	-0.56
Green purchase behaviour					1

Source: Primary data

* - 0.05 level of significance

** - 0.01 level of significance

From Table 2, it is inferred that negative correlation exists between the pairs of determinants of green purchase behaviour, namely 'Consumer beliefs and Social influence', 'Consumer beliefs and Quality of products', 'Environmental attitude and Social influence', 'Environmental attitude and Quality of products' and 'Quality of products and Green purchasing behaviour'. Hence it may be concluded that weaker relationship exists between the above pairs of determinants of green purchasing behaviour.

It is also inferred from Table 2 that there is a high degree of correlation between the 'Environmental attitude and Green purchasing behaviour' and moderate degree of correlation between 'Social influence and Quality of products'.

It is also clear from Table 2 that the determinants namely 'Consumer beliefs and Environmental Attitude' are closely associated with the 'Overall green purchase behaviour' at 0.01 level of significance. The determinant 'Environmental attitude' had a strong association with the 'overall green purchasing behaviour' at 0.05 level of significance. But the other determinants are neither closely associated at 0.01 level nor at 0.05 level of significance with the overall green purchasing behaviour.

The inter relationship between the pairs of the determinants to green purchase behaviour namely 'Social influence and Quality of products' is proved to be significant both at 0.01 and 0.05 level.

8.3 GREEN PURCHASE BEHAVIOUR AND THE DEMOGRAPHIC VARIABLES OF THE RESPONDENTS

The determinants of green purchasing behaviour are related to the demographic variables of the respondents by using Two-way ANOVA. The null hypothesis framed is "The overall green purchase behaviour' is independent of the demographic variables of the respondents". The results of ANOVA are presented in Table 3.

TABLE 3: GREEN PURCHASE BEHAVIOUR AND DEMOGRAPHIC VARIABLES OF THE RESPONDENTS

S.No	DEMOGRAPHIC VARIABLES	Calculated value	Table value	Inference
1	Marital Status	4.87	4.9646	NS
2	Age	7.31	3.6823	S
3	Educational qualification	2.467	3.0984	NS
4	Size of the family	5.3	3.6823	S
5	Locality	6.0	3.6823	S

Source : Primary data

S - Significant

NS - Not Significant

The calculated 'F' values for the marital status and the educational qualification of the respondents are less than the table values at 5% level of significance. Hence it can be concluded that the overall green purchase behavior of the respondents is independent of their marital status and educational qualification.

9. FINDINGS

- 'Consumer Beliefs', 'Environmental Attitude', and 'Social Influence' have a positive influence on the green purchasing behaviour.
- The influential factor on green purchasing behaviour namely 'Consumer Beliefs', 'Environmental Attitude' 'Social Influence' and 'Quality of Products' are significantly related with the overall green purchasing behaviour of the respondents.
- The overall green purchasing behaviour of the respondents is independent of their marital status and the educational qualification.

10. RECOMMENDATIONS AND SUGGESTIONS

From the major findings of the study, the following suggestions are given to make the environment green:

SUGGESTIONS TO MARKETERS

- Efficient marketing campaigns are to be arranged in order to capture the attention of young consumers and encourage them to convey important information with their peer groups.
- Since education and knowledge act as a potential background factors for young consumers' attitude formation, the marketers should deliver positive and emotional appeals to educate young consumers' product preferences.
- Marketers should conduct innovative and thought-provoking educational programmes to heighten awareness for the issues relating to green products.
- It is necessary for the marketers to dedicate their attention to educate young consumers via different knowledge constructing activities like providing free samples along with aligning knowledge constructing competition for pioneering ideas.

SUGGESTIONS TO YOUNG CONSUMERS

- Young Consumers Forum is to be formed and the members of the forum are to be educated through awareness programmes like seminars, symposiums etc.
- Young consumers should be made aware of the benefits of using green products like cost savings, eco-friendly nature etc.
- Young consumers should participate in the knowledge building activities like forest camp, field trips, tree plantations etc. arranged by the marketers which is solely meant to point out the importance of green environment.
- Young consumers should be made to realize their prominent and effective role concerning the environmental issues.

11. CONCLUSION

In order to make the dream of a 'Green Prosperous India' to be true, the country will have to rely on its most valuable asset namely its youth. Global issues are not solved within the four walls of a scientist's laboratory. They need to be brought to the knowledge of an average individual and informing youth is the best way to begin. Many of the best ideas come from young minds; the Indian youth is, and must be, the builder of a new society. The findings of the study also insist the importance of educating the young consumers about the green environment. Hence if the aforesaid suggestions are carried out both by the marketers and the young consumers, definitely India will shine as super power in the years to come.

12. LIMITATIONS

- The findings and suggestions of this study may not be suitable to all respondents since it is based on the opinions and views of 130 respondents only.
- The snow ball random sampling method used in the selection of sample may affect the accuracy of the data.

13. SCOPE FOR FURTHER RESEARCH

The consumers in India are showing a positive response towards green products and services. Hence future research studies may concentrate on the impact of green strategies so as to develop the concept of 'going green' as the young consumers are the supporting pillars of the future nation.

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A RESEARCH ON THE EFFICACY OF EMPLOYEE TRAINING IN MANUFACTURING COMPANY, PUNE

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ABSTRACT

Training today is the fastest growing business in the country. In the face of the global competition it is likely to grow even faster in the next few years. Basically, when we talk about training it refers to a systematic approach to learning and development to improve individual, team, and organizational effectiveness. Improvement and changes of an employee is essential in the manufacturing companies where change is constant in all its functions under four phases such as training need analysis, pre-training preparations, the trainer and trainee involvement during the training and the post training program to import the overall training and development objectives. This paper attempts to highlight an original research on evaluating the effectiveness of employee training in a manufacturing company. To survive in the globalised era, organizations need to continuously develop the knowledge, skill and ability of their human resources throughout the year, the organization spend a huge amount of money for the purpose of training and development of the human resources. But the crucial point is effectiveness. The training evaluation is a means by which participants express their feedback regarding the effectiveness of training through a qualitative and quantitative survive questions.

KEYWORDS

Training, learning and development, organizational effectiveness, training need analysis, training evaluation, training effectiveness.

INTRODUCTION

Training, with focus of competency building amongst various organizational units, requires collaboration amongst several players in the organization. Present Scenario of business world is characterized by a growing competitiveness, market globalization and technological advances in organization. The survival of an organization implies the prosecution of sustainable competitive advantages. The knowledge and skills of an organization's employees have become increasingly important to its performance, competitiveness and advancement. Organizing a significant number of training programs for the employees are very vital in order to enhance the capability level and the skill set. The performances of employees in the respective departments are directly proportionate to the number of training programs attended. Improvement and changes of individual employees is essential in the manufacturing companies where change is constant in all its functions. The overall personality of the employees can be seen changing for the betterment of the company over a period of time. Number of training programmes organized by companies for the employees is based on the importance the companies are giving for the development of its employees for effective performance and for committed relationship. Thus the role played by training and development can no longer be overemphasized. However, the need for organizations to embark on managerial development programmes has become obvious. Absence of these programs often manifests tripartite problems of incompetence, inefficiency and ineffectiveness. Hence, the training is felt vital for the manufacturing industry for its overall growth and development of the employees and the organizations.

As organizations strive to compete in the global economy, differentiation on the basis of the skills, knowledge, and motivation of their workforce takes an increasing importance. "Training" refers to a systematic approach to learning and development to improve individual, team, and organizational effectiveness. Training activities will have a positive impact on the performance of individuals and teams by virtue of change in their attitudes, motivation, and empowerment. Accountability and result-oriented are the two major issues in today's turbulent business environment. Organizations adopt various strategies and techniques for this. Human resources are the focal for these issues like any other issue of organization. To survive in this turbulence, Organizations need to continuously develop the knowledge, skill and ability of their human resources. Throughout the year, the organization spends a huge amount of money for the purpose of Training and development of the human resources. But the crucial point is effectiveness. To measure the effectiveness, a number of Training evaluation models and techniques are available. But to what extent it is carried out and their utilities are the major concerns of the HRD expertstill date. As we all know that manufacturing industries are the backbone of Indian economy as provide employment opportunities galore. But over a period of time some of the manufacturing industries are losing viability and becoming sick owing to technical, financial, labor and employment problems. Therefore it is utmost important that the people who manage the manufacturing industries are properly recruited and trained to harness sophisticated technology. Hence, the present paper focuses on training and development of some select manufacturing companies in Pune region.

OBJECTIVES OF THE STUDY

1. To know the various training programmes and to gauge the effectiveness in the organization.
2. To review how effective are the training functions
3. To measure about the adequacy of the training for improving skill and competency of Employees.

REVIEW OF LITERATURE

Company can develop and enhance the quality of the current employees by providing comprehensive training and development. Research indicates that investments in training employees in problem-solving, decision-making, teamwork, and interpersonal relations result in beneficial firm level outcomes (Russell, Terberg, and Powers, 1985; Bartel, 1994; Cianni and Wnuck, 1997; Ettington 1997; Barak, Maymon, and Harel, 1999). Training also has a significant effect on employee performance. Firms can develop and enhance the quality of the current employees by providing comprehensive training and development. Indeed, research indicates that investments in training employees in problem-solving, teamwork and interpersonal relations result in beneficial firm level outcomes (Russell, Terberg, and Powers 1985; Bartel 1994; Cianni and Wnuck 1997; Ettington 1997; Barak, Maymon, and Harel 1999). In a rare organization level study, Russel et al., (1985) found that training was correlated with sales volume per employee and store image in a sample of retail outlet stores.

Effective training programs are systematic and continuous. In other words, training must be viewed as a long term process, not just an infrequent and/or haphazard event (Tannenbaum & Yukl, 1992; Wexley & Latham, 1991). Assessments of employee and organizational needs as well as business strategies should be conducted and then used in selecting training methods and participants (Goldstein, 1991). Training programs that are consistent with employee and organizational goals and needs and fit with the business strategy will meet with greater success than those that are not (Wexley & Latham, 1991). Preferably, employees will be trained based on the results of assessments of their work. Herman Aguinis and Kurt Kraiger (2009) adopted a multidisciplinary, multilevel, and global perspective to demonstrate that training and development activities in work organizations can produce important benefits for each of these stakeholders. Benson et al. (2004) collected data from each of the 9439 permanent, salaried employees of a large high-technology manufacturing firm to assess the effects on employee turnover of the organization's investment in employee development via a tuition reimbursement program.

Colleen Beth Akehurst (2004) in his research examined two specific benefits such as improved quality (i.e. decreased reject rate) and improved equipment performance (i.e. reduced unplanned downtime) and indicated that training benefits a manufacturing process during ramp-up. Littrell et al. (2006) examined 29 prior conceptual reviews and 16 empirical studies and concluded that cross-cultural training is effective at enhancing the expatriate's success on overseas

assignments. They also identified many variables that moderate the effects of training on expatriate performance, including the timing of the training (e.g., predeparture, while on assignment, and post assignment), family issues (e.g., spouse's adjustment), attributes of the job (e.g., job discretion), and cultural differences between the home country and the assignment country. Abdus Sattar Niazi (2011) opined that the business environment has changed with intense pressure on organizations. He carried out an analysis and that the training and development create learning organizations which ensure that employees through value addition can effectively perform their jobs, gain competitive advantage and seek self growth. Haslinda Abdullah (2009) examined challenges to the effective management of training and development activities in manufacturing firms. They observed lack of commitment towards training throughout organizations, sight from top management to shop-floor employees. They found that employees may have embedded pessimistic attitudes towards training and be fundamentally resistant to change.

Debrah, et al (2002) claimed that some firms are not providing the training that their employees need, but instead poach employees from other firms, who have already been trained and developed by their prior employers. However, it may seem that poaching is benefiting employers in terms of financial investment in training.

HYPOTHESES

H01: Training programmes do not help all the educated respondents equally.

H02: Impact of training programmes varies from position to position.

H03: Training programmes do not equally influence all the respondents of varied position

RESEARCH METHODOLOGY

The study is designed to explore the behavior of trainees towards training effectiveness and its impact on self-development for organizational success. This section focuses on the methods adopted to conduct the study and the type of the research used. Descriptive research is used in this study. The research imbibes the employees' opinions towards pre, during and post-training metrics, behavior modification and its impact on the companies. The primary data source was collected through a structured questionnaire the secondary data was collected from different publications, reports, websites, magazines, journals, working papers, books and newspapers.

SAMPLING DESIGN

The sampling is done on multi stage sampling at the first step of sampling, the size of the ample to be taken from each of the 10 departments in the sample companies is calculated at 10 and percent quota sampling technique, while the sample from each department is selected at 10 percent by following stratified random sampling technique where the employees of the company are divided into three strata such as executives, supervisors and workers, such that the total sample from the two companies is 102 i.e., 10 percent of 1019 employees.

TABLE 1: SAMPLE SELECTION

S. No	Number of firms	Total no. of employees	Total sample
1	Firm A	546	55
2	Firm B	473	47
3	Total	1019	102

From the survey we came to know the opinion of the trainees on the level at which they were benefited through the training programmes like 21 degree ,11 diploma , 7intermediate , 9 SSC , 7 PG and 1 B.Tech respondents opined that they were highly benefited through training programmes whereas 7 SSC , 10 diploma , 10 degree , 7 Intermediate ,7 B.Tech and 5 PG respondents opined that they were moderately benefited through training programmes. On the contrary, only one post-graduate opined that they were moderately benefited through training programmes

RESULTS AND DISCUSSION

- The impact of training as a key input for developing the employee ultimately leading to organizational excellence was duly conceived and all efforts were made to measure the effectiveness.
- The study reveals that majority of the respondents on most of the factors detailed in the questionnaire have responded positively by ranking **Strongly Agree** to **Agree** too many of the statements and variables. Hence, it is opined that the overall climate on training are found to the satisfactory.
- The supports made by the top management on training activities are crystal clear which has been observed while reviewing the data.
- As it reflects training is being practiced in certain aspects in a traditional and conventional way which needs to be reviewed.
- Adequate importance in given to both the aspects of the training i.e. functional and development.

MAJOR FINDINGS

- Employees need to be consulted before sponsoring for training programmes. Such contacts help to know the pre training mindset of the employees. Hence may be implemented.
- Timely providing handouts on the training programme are equally important.
- The implementation of strategies on training inputs is considered as a team effort. Hence the trainee and his superior should discuss after the training session and find out the strategies for implementation.

CONCLUSION

Improvement and changes of an employee is essential in the manufacturing companies where change is constant in all its functions and hence training should be a continuous process that demands a range of activities to support the overall training and development objectives.

Organizing a significant number of training programs for the employees are very vital in order to enhance the capability level and the skill set. The performances of employees in the respective departments are directly proportionate to the number of training programs attended.

Evaluating training is not just about whether new skills have been learnt or performance has improved. To get meaningful information, one need to measure what has improved, in what ways, and the precise amount of profit gained.

RECOMMENDATIONS

1. The course contents may be given to the proposed participants, so as to acquire a first hand knowledge on the programme and facilitate them for effective participation during the training.. The organization should develop training of trainers (TOT) after critical analysis of various inputs of the trainers for conducting the training programme in an efficient way
2. There should be close inter-action of the training catalyst and the trainees in a periodical interval so as to make the training inputs more effective. Some new techniques and mechanisms may be developed to review training effectiveness quickly and compliance to the participants of the above score. The organization have to create an environment such that the training will have its circular impact on perceptual skills of employees and in turn on their performance through their prefer perception of training activities.

3. The training programmes should be conducted on a regular basis as only 65 percent of the respondents agreed that the training programmes are highly useful. In order to make all the respondents highly satisfied, the training programmes should cater to the needs of the respondents of varied qualifications as still 38.3 percent of the respondents moderately satisfied.

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MANAGEMENT LESSONS FROM DABBAWALA

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ABSTRACT

Despite the current emphasis on high technology for solving complex business logistics issues, a group of largely illiterate Indian entrepreneurs known as dabbawalas has been coordinating the delivery of home-cooked lunches to thousands of Indian office workers for over a century. Using Six Sigma principles to improve their operations, the dabbawalas have capitalized on the high demand among Indians in Mumbai for food prepared in their home villages. For an up-front investment of roughly 5,000 Rupees, a dabbawala can earn an average of 5,000-6,000 Rupees per month. Each dabbawala donates a portion of his earnings to their member association, which invests the funds in community projects and low-interest loans. Known for its ingenious use of simple symbols to coordinate thousands of daily deliveries, the dabba system represents a classic example of using a base-of-the-pyramid approach to benefit low-income workers and high-income earners alike.

KEYWORDS

Six Sigma, Supply Chain Management, Porter's model, SWOT analysis, Technology.

INTRODUCTION

A dabbawala is a person in Mumbai, India, whose job is carrying and delivering freshly-made food from home in lunch boxes to office workers. They are formally known as MTBSA (Mumbai Tiffin Box Suppliers Association), but most people refer to them as the dabbawalas. The dabbawalas originated when India was under British rule. Since many British people who came to India did not like the local food, a service was set up to bring lunch to their offices straight from their home. The 100-odd dabbas (or lunch boxes) of those days were carried around in horse-drawn trams and delivered in the Fort area, which housed important offices. Today, businessmen in modern Mumbai use this service and have become the main customers of the dabbawalas. In fact, the 5,000-strong workforce (there are a handful of women) is so well-known that Prince Charles paid them a visit during his recent trip to India. Several academic institutions regularly invite the dabbawalas' representatives for discussion, and to complement and enhance their academic content. At times, businesses find it useful to illustrate the application of how such a system uses Six Sigma principles to improve its operations.

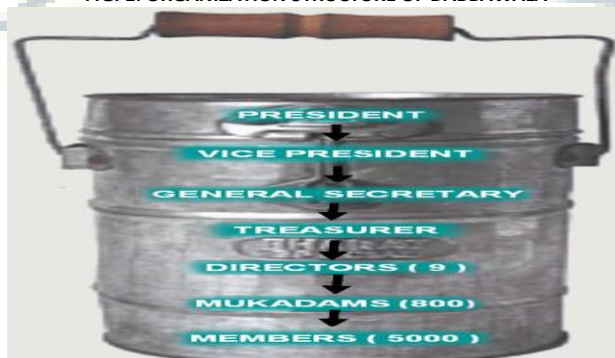
THE ORGANIZATION STRUCTURE AND WORKING STYLE

The Nutan Mumbai Tiffin Box Suppliers' Charity Trust (NMTBSCT) encompasses a very flat structure with three levels, the Governing Council, the Mukadams and the Dabbawalas. They are an association of 5,000 people. An executive committee of thirteen permanent members is at the highest level of the NMTBSCT, and is responsible for defining and fine-tuning the overall dabba transport system in Mumbai. A second tier constitutes about 800 mukadams, who are the group leaders in charge of a team of five or ten dabbawalas. They supervise the tiffin route until the final delivery. The mukadam participates in the recruitment of new dabbawalas, assessing their suitability by taking into consideration both their reputation and their shared origins with other members of the association. They also manage relations with customers, making preliminary agreements for deliveries, and administer monthly subscriptions (at a cost of about 120 rupees per month).

The delivery system is based on a code whose observance is enforced by the mukadam, who also oversees any disputes that may arise among various dabbawala groups as well as having the more difficult task of enhancing network competitiveness to improve earnings.

The rest of the organisation is made up of the dabbawalas themselves, the members of the association (Fig 1). Each of the approximately 120 groups working in Mumbai territory is independent of all the others. Each group is a "Strategic Business Unit" and has to increase its customer base in order to generate the dabbawalas' wages.

FIG. 1: ORGANIZATION STRUCTURE OF DABBAWALA



A dabbawala’s earnings derive in part from the ability of each group to attract more customers into their network but also partly from the role played by an individual dabbawala in that network. Those who have just joined the association and have not purchased a mukadam line have a fixed basic wage that may vary according to the group’s revenue (from 2,500 to about 4,000 rupees a month). A mukadam supervising a group earns on the basis of how many tiffins his men can deliver; if he supervises various groups, who deliver tiffins in various parts of the territory, his earnings may be higher (about 6,000–7,000 rupees a month). To become a mukadam, an ordinary dabbawala has to buy a customer line being auctioned off, which occurs when a mukadam decides to retire and sells off their lines because their children are not interested in taking it over.

THE DELIVERY PROCESS

The dabbawala starts work at about eight-thirty in the morning, when he cycles or walks to pick up dabbas from the door of the “customer-supplier”, usually whoever does the cooking(Fig 2) . Time is of the essence in this process, because if one of the two parties is running late, the subsequent schedule fails. On average, each dabbawala is responsible for collecting thirty to thirty-five dabbas, the number depending on personal ability to memorise customer addresses and the physical strength for carrying the tiffin baskets. One NMTBSCT dabbawala describes his day, and the efforts made to deliver his tiffin on time After this initial collection stage, the containers are taken to the nearest station by bicycle or in wooden baskets. Here a second group of dabbawalas, from the same line, takes the previously collected dabbas and loads them onto the trains. Although there is no formal agreement with the railways, the goods compartment at the head of the train is left for the dabbawalas or people carrying bulky goods. The biggest difficulties are the crowded stations and trains, which always make it problematic to move the heavy baskets among people trying to board the trains. Dabbas have to be loaded very quickly, in the thirty seconds the train stops on the platform. After this second stage, all the precious lunches are ready to move on to their destinations. If the trip is very long and includes a line change, the dabbawala in charge of the final delivery takes his own dabbas to a collection and sorting point. There are several strategic nodes near railway stations that serve as main centres for final sorting. At this stage, the role of the mukadam becomes essential for efficient coordination of the delivery network to ensure that no dabba is lost or routed to a wrong destination. The third stage is the final delivery: from the strategic collection point the cooked lunch is taken to the place of work of the “receiver-customer” for about 12.30 pm. The tension gradually eases and the dabbawalas can rest, eat their lunch and, lastly, prepare to make the journey back, following a circular route that begins and ends in the same way every day of the week except Sunday.

FIG. 2: PROCESS FLOW OF DELIVERY SYSTEM



THE CODING SYSTEM

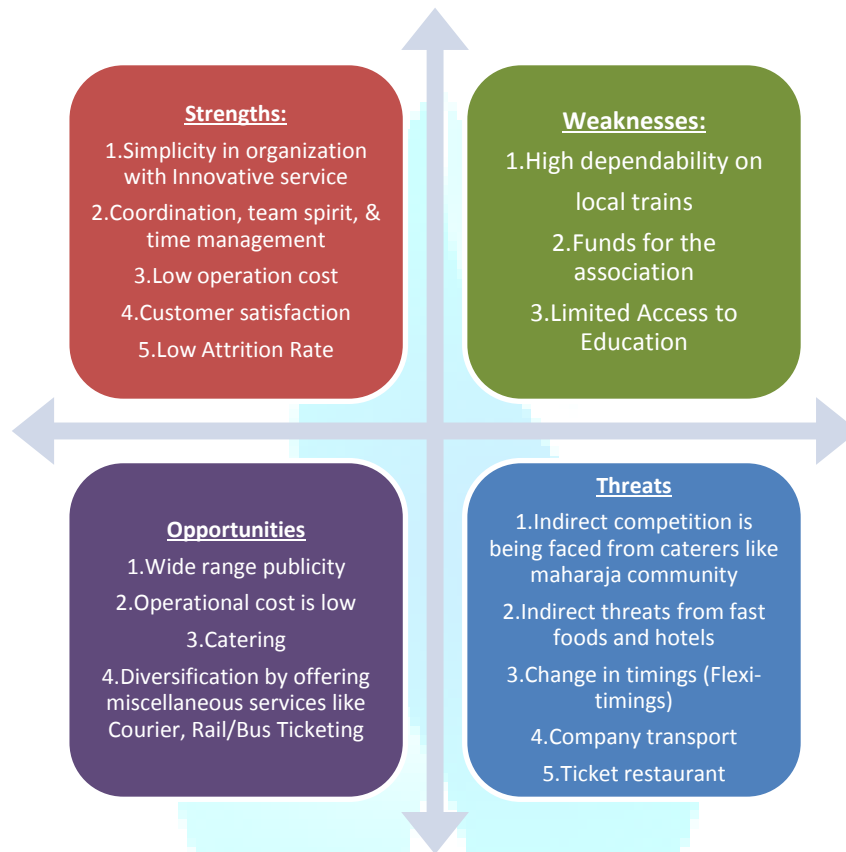
A system like this could not exist without a code for identification of the dabbas. The containers change hands several times during the day, so the group must be able to recognise them or they may be lost along the way. Most dabbawalas are completely illiterate or barely able to read and write, so tiffin delivery relies on the use of identification systems to ensure successful delivery. These systems are an important factor in network development and basically comprise four or

five symbols of different colours painted on the containers(Fig 3). Nevertheless, they do not share the same style due to the dabbawala association's characteristics, which gives each group the freedom to manage its work independently.

SWOT ANALYSIS

SWOT analysis is employed to evaluate the strengths, weaknesses, opportunities, and threats.It involves specifying the objectives of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieving that objective (Fig 3).

FIG. 3: SWOT ANALYSIS



PORTER'S FIVE FORCES MODEL

Porter's theories (Fig 4), which are the basis for classical management principles, define the scope and nature of competition a company faces to attain leadership. Surprisingly, the dabbawalas are following these very principles in spite of their ignorance of the same.

FIG. 4: PORTER'S FIVE FORCES MODEL



I. THREAT OF NEW ENTRANTS

According to Porter, the threat new entrants is dangerous to any organisation as it can take away the market share the organisation enjoys.Started in 1880, the experience curve of the 125-year-old dabbawalla service serves as a huge entry barrier for potential competitors. Besides, it would be difficult to replicate this supply chain network that uses Mumbai's jam-packed local trains as its backbone.

II. CURRENT COMPETITION

Porter's five forces theory states that strategy is determined by a unique combination of activities that deliver a different value proposition than competitors or the same value proposition in a better way.The dabbawallas do face competition from fast food joints as well as office canteens. However, since neither of these serve home food, the dabbawallas' core offering remains unchallenged. They have also tied up with many catering services and hotels to cater to the vast number of office goers.

III. BARGAINING POWER OF BUYERS

The delivery rates of the dabbawallas are so nominal (about Rs 300 per month) that one simply wouldn't bargain any further. Also, their current monopoly negates any scope of bargaining on the part of their customers. Thus, we encounter a perfect win-win combination for the customers as well as the dabbawallas.

IV. BARGAINING POWER OF SELLERS

The dabbawallas use minimum infrastructure and practically no technology, hence they are not dependent on suppliers. Since they are a service-oriented organisation, they are not dependent on sellers to buy their product. Hence, sellers do not assume any prominence as would be the case in a product-oriented company. The strategy map framework in Porter's theory allows companies to identify and link together the critical internal processes and human, information and organisation capital that deliver the value proposition differently or better. Human capital is the greatest driving force in the dabbawalla community; as a result, they are not dependent on suppliers or technology, thus negating the seller's power in the equation.

V. THREAT OF A NEW SUBSTITUTE PRODUCT OR SERVICE

As substitutes to home cooked food are not seen as a viable alternative in the Indian scenario, the threat to the dabbawalla service is not an issue at least in the foreseeable future. This gives them a leeway to probably expand their already existing network into newer cities as demand increases in these places as well.

DABBAWALA FROM MANAGEMENT PERSPECTIVE**SUPPLY CHAIN MANAGEMENT**

The NMTBSCT has the monopoly over the meal delivery service which has become possible by the excellent distribution logistics and the high reputation; it has gained a considerable competitive edge in a specific segment of the Mumbai market. Traditionally, logistics were regarded only as a function that allowed the enterprise to optimise materials, goods and intangible flows, like information. With the emergence of the "supply chain" concept that the dabbawallas appear to use in their management approach, the whole logistics process has been redefined to optimise links and coordination among suppliers, customers and distribution. In this respect, the inventory levels and flow of goods in the supply chain have been optimised, with an increase in the production efficiency of the enterprise and its fulfilment of incoming orders, while improving customer service by keeping prices down. The association therefore appears as an organisation capable of planning, implementing, and monitoring delivery operations, and as an expert in the "art" of moving materials, people and information from one place to another in order to satisfy customers.

What is known today as "supply chain management" has been effectively, internalized by the entrepreneurs of Mumbai's meal delivery sector. The logistics essential to managing the distribution network revolve around the availability of urban infrastructures and the cultural approach that dabbawalla customers have to food. The dabbawallas adapt their distribution logistics and planning process to customer needs, taking into account the flexibility of their own working group. The dabbawalla distribution system can be compared with that of postal delivery and of a Mumbai goods retailer. In the first case, the mail is sent to a single central sorting branch and then delivered to the final recipient via a hub that handles distribution operations. The goods retailer, on the other hand, uses a zone map system similar to that of the dabbawallas, i.e. identifying groups of vendors within coded zones and then supplying each of these through a sub-sorting unit. Although logistical considerations are important in meal delivery organisation, there is a strong likelihood that the dabbawalla system relies mainly on Mumbai's specific culture which, in turn, orients the executive committee's planning. The dabbawallas identified Mumbai as a source of opportunity and their delivery process developed by taking into account the changing metropolis and the evolution of the preferences and well-being of the inhabitants, the urban infrastructure and social characteristics. Indeed, the service is difficult to replicate in other cities precisely because several elements characteristic of Mumbai are absent in other urban contexts, a very extensive transport network and large working class, combined with the cultural unity of the dabbawalla association rooted in the rural areas around the city. Considering these aspects, it can safely be said that Mumbai is the cultural milieu underpinning the dabbawalla distribution rationale, the mental map that underlies their work and from which they draw inspiration.

SIX SIGMA

In 1998, the American magazine Forbes conducted a study of the dabbawalla service and awarded its organisation a 6 Sigma, with a 99.9999% accuracy rate. This means that only one tiffin in every six million deliveries goes astray.

NOVICE AND "REALISTIC MANAGEMENT"

Most dabbawallas are illiterate or have attended only the early years of elementary schooling. Yet this does not seem to pose a problem to their tiffin pick-up and delivery work, because the basic skills required for their job rely on two main resources: possessing the physical strength needed to carry heavy tiffin baskets and being a native of the areas common to all dabbawallas. These two elements complement each other, because they allow workers to ground their communication in a shared language and a shared faith, as well as in a body language they recognise as their own.

SURVIVING THE COMPETITION

The shared aim of each dabbawalla team is to deliver the customer's lunch on time. The group is organised internally so that if one of the dabbawallas is absent, he is replaced by a colleague. Moreover, the system requires a mentality that promotes the sharing of responsibilities with intensified interpersonal cooperation. Dabbawallas therefore manage their business without interfering with that of others, since they know that the fortune of each person is closely connected to the system's overall success. The association's structure and the type of contract applied to the dabbawallas also foster "cooperative competition". This means the groups compete amongst themselves to acquire more customers for their own lines, and cooperate with co-workers in the group to increase profit and, at the same time, membership for the NMTBSCT.

WORK ETHICS

Beyond the code of ethics that underpins the delivery service—no alcohol to be consumed during working hours; wearing a topi cap to be recognised by customers; delivering food as if it were an act of faith; in short, all the rules summarised in the expression "work is worship"—there is also a certain empathy with the customer. Through a non-aggressive attitude, the dabbawalla connects with what is probably the most "sentimental" part of Mumbai, the bond that exists amongst members of the family when they are apart during working hours (a wife to a husband, a mother to her children), and which is expressed in the daily act of feeding.

CULTIVATING EMPATHY WITH THE CUSTOMER

Dabbas' customers are predominantly men, and work six days a week outside the home, spending little time with their families. The wife usually gets up early in the morning to prepare breakfast, and after her children and husband have left for school and work, she begins to cook lunch for her spouse, waiting for a dabbawalla to arrive and pick it up. When the dabba reaches the place of work, the husband opens it up and enjoys home-cooked food. The meal embodies familiar traditions, recipes and flavours. Since it is the wife who usually cleans the tiffin after it is returned, she can judge how much her husband enjoyed his meal when she sees if there are any leftovers.

The long relationship of trust that enables this everyday emotional connection between the city and its "bicycle runners" has its basis in the association's internal rules. In fact, when the mukadam recruits, the aspiring dabbawalla has to be of proven honesty and any violators are stigmatized by the group without having to resort to other type of justice.

BUILDING A CLIENTELE

While finding new customers is one of the mukadam's main tasks, a first contact is more often established through word of mouth among acquaintances and there is no particular strategy. Potential customers recognise a dabbawalla on the street by his clothing, or they meet him at work, because his job involves delivering lunch to their co-workers. It would appear that the most important aspect for a prospective customer is that they trust a neighbour who, in turn, trusts a dabbawalla.

INTERGENERATIONAL TIES

The children of dabbawallas who have grown up in Mumbai often do not want to continue the work of the family. This resistance depends on several factors: often they are better educated and therefore aspire to professional prospects that were unthinkable for their parents. They also may want to withdraw from a job that appears tiring and socially degrading.

BEYOND TECHNOLOGY: THE RAILWAY NETWORK AS A MENTAL MAP

The dabbawalla service draws its strength from a rational philosophy, an architecture of values that sustains a long-lived business based on minimum technology. These characteristics fit into the Mumbai way of life for two reasons: on the one hand, the dabbawallas convert their source values into knowledge of the urban

territory and thus connect with the desires of people at an essential, intimate, and emotional level; on the other, the world of "small things" that they represent finds the widespread transport network, in particular the railways (with their low environmental impact), to be the means for reaching every customer.

EFFECTIVE HIERARCHY

The association has more than four thousand semi-literate members and has survived the industry for more than a hundred years. With efficient collaboration between the different levels of operation like the governing council consisting of president, vice-president, general secretary, treasurer and nine directors; the mukadams and the Dabbawalas the association provides a customer loyal door to door delivery service.

CIPHER METHOD

Dabbawalas collect and deliver Tiffin boxes from every corner of the city serving over a million families. The boxes are coded with a particular set of colors which define the region of reception and delivery. The codes are governed by an experience set of mukadams who have good knowledge about the ciphering technique. It is said that even a minute mistake in the coding or the decoding can put the complete system in a mess.

CO-ORDINATION AND SUPPORT

The service comprises of many small groups which are financially independent but work together with great synchronization. Though there is tough competition among the groups to fetch customers and provide better service, they work towards the same goal.

TIME MANAGEMENT

For the delivery service the most important parameter is the time. Any discrepancy in the timeliness of the service results in service failure. Hence the mission to deliver the Dabbas starts every morning at 9 and by the lunch time that is about 12 in the noon, all the boxes are coded dispatched and delivered. Post lunch, the whole process is reversed and the dabbas are returned back to the respective houses.

REFERRALS

To acquire more customers, the Dabbawalas encourage their clients to make referrals to their relatives friends and acquaintances. Nothing can boost the business more than promotion and references of the services backed by customer satisfaction.

UTMOST DEPENDENCE ON HUMAN CAPITAL

The most vital link in this chain of food delivery is human capital. The procedures could have been laid down over a century ago, but it is the implementation of the procedures that makes the system work. The Mumbai dabbawalas propagate that correct amount of human dependence can yield amazing results.

HONESTY AND INTEGRITY

The threads of integrity and honesty hold the dabbas together. Though it is lunchtime for dabbawalas also, the aroma wafting from the dabbas has never tempted them. Overcoming a basic instinct like hunger is possible only because of strong roots in a culture that encourages truthfulness and integrity.

RECRUITMENT POLICIES AND MANPOWER MANAGEMENT

Over the years, the dabbawalas has become a growing community of busy delivery-men who carry out their work with honesty and commitment. This is because each person in the value chain is selected very carefully and with due recommendation only. The implication of the word 'recommendation' is different from the common parlance - the referrer assumes responsibility for the incumbent's conduct throughout the working life.

CONCLUSION

The belief that technology is indispensable to solve complex problems is shattered with the operating system of dabbawala. FMCGs and other industries can learn a lot from the simple supply chain logistics and efficient reverse logistics i.e. transfer of empty lunch boxes to the source location. The concept of multi-level coding, colour coding on the lunch boxes for identification and reverse logistics can be implemented in industries as diverse as soft drinks ,where logistics becomes an important aspect, transporting the filled bottles to retailers and collecting empty bottles back to the plants, in pharmaceuticals and other FMCG areas. For example, bar coding mechanism (a computerized format) which is prevalent and expensive, can be simplified with just colour/ number coding. In small and medium scale organisations where bar coding systems would require a lot of resources, these systems can prove to be very efficient and cost effective. Moreover, the dependence on technology could be drastically reduced. The learnings for a working executive are enormous too. Managers and executives alike spend a lot of their valuable time learning various concepts in people and time management. Newer mechanisms like Customer Relationship Management, etc, have been developed to assist executives in the same. But, in the midst of implementing technology and IT, basic principles in people management, sustainable relationship development and customer satisfaction have lost their meaning. Dabbawallas are a perfect example of an important principle of both business and management , the thirst to serve customers in a simple yet effective fashion without falling into the technology trap. I think this is an aspect which needs to be re-learned and implemented in any organisation today. The most enduring lesson that we learnt was to put the customer ahead of everything else. It is said that when Prince Charles expressed a desire to meet them during his visit in 2003, the dabbawallas requested him to schedule the meeting such that it did not interfere with their mid-day delivery timings.

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A STUDY ON THE FACTORS AFFECTING RFID ADOPTING INTENTION OF ONLINE SHOPPING LOGISTICS PROCESS: CASE OF TAIWAN ONLINE RETAIL BUSINESS

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ABSTRACT

The purpose of this study is going to investigate how RFID technology is implemented and adopted in Taiwan's online retail stores. Specifically, this study focused on the positive influences of using RFID technology in online retail business, which located on two most popular online shopping malls in Taiwan-Yahoo shopping center and PCHOME online shopping. This study also aimed to determine the factors of concern about adopting an RFID technology into current logistics management systems. An integral part of this research is going to develop and empirically test a model of the adoption of RFID in the context of the logistics process in Taiwan Online retail store on Yahoo shopping center and PCHOME online shopping. Based on the concepts of Rogers innovation diffusion theory, Davis technology acceptance model, and theory of reasoned action, this research used a questionnaire to assess Taiwan online stores' cognition and perspective of the perceived usefulness of, perceived ease of use of, cost, normative belief about, and motivation to comply toward RFID systems, as well as to assess their attitudes toward an RFID system and intentions of using such a system into its shipping and logistics process. Finally, based on the research results, managerial implications and opportunities for future research will be suggested in both academic and practical.

KEYWORDS

Intelligent logistics, RFID System, Online Shopping Logistics, Online Retail Business.

INTRODUCTION

RESEARCH BACKGROUND

An Online retail store is a website based platform that includes four flows of e-commerce: business flow, logistics/goods flow, money flow and information flow (Ho, 2012). Owing to the competitive market of online shopping, the author of this research believes that online stores must have an efficient "logistics flow/process" to stand out online store's competitive advantages and service features. Logistics tasks heavily depend on reliable and accurate shipment and tracking information. For this reason, online store and its logistics process today has evolved into a high-technology task. The popularity of online shopping is a global phenomenon, as well as in Taiwan. According to Taiwan Network Information Center (July 2012), 77.25% of Taiwan citizen above twelve years old had online surfing experiences. Surveys of Internet users have revealed that 59.62% of Internet users in Taiwan reported they had shopped online, just behind the rate of "Social Media service" usage 76.62%.

Changing consumer lifestyles and lack of time may make it more difficult for consumers to shop at physical locations such as stores and shopping malls (Davies 1995, Cheeseman and Breddin 1995). In the increasingly competitive market, the main concern for online sellers has shifted from inducing consumers to adopt their online channels to motivating consumers to make repeat purchases through these channels (Chiu, 2011). From online shoppers points of view, shopping online are convenience and timesaving, as compared to shopping in physical stores.

According to a report of Institute for Information Industry (2008), most of online shoppers care about how fast and how easy they can get their online orders.

A report from Lifestyle Monitor Survey 2011 discovered that online consumer's concerns when shopping online fall into two major categories: logistics and products. Within the context of Online retail logistics, the top concerns related to shipping costs (89%), return policy (80%), shipping time (67%) and product availability (67%). Moreover, from the aspect of the competitive advantage, Insightexplorer Limited (2012) discovered that over 43% of consumers pay much attentions about Fast delivery guarantee then product price (26%), followed by free return and exchange (17%), and finally the free shipping offers (14%). According to those numbers above, fast and convenience are the most critical advantages for online stores. GartnerG2 research director David Schehr mentioned that all of their research shows that consumers are most interested in convenience, not price. According to him, shoppers do still expect bargains online, but fast delivery and a wide selection are more important factors; price comes into the picture along with convenience, but it's no longer the main reason people shop online (Regan 2002).

RESEARCH MOTIVATION

The world largest online retail business, Amazon.com acquired logistics technology firm Kiva systems for \$775 million in March 2012. Amazon.com is a retail company and they must have done a thorough cost benefit analysis to determine that Kiva systems make their order distributions more efficient says Sanjay Sarma, one of the founders of the MIT Auto-ID Center, and recently named chairman of the EPCglobal Board of Governors.

Logistics could be the main reason that online store can really offers a convenient shopping environment to consumers. Those shopping trips around shopping malls, supermarkets and department stores had been substituted by online retail logistics. "Logistics is going to play a major role in this picture. Gone will be the days of the consumers going the so-called "last mile" – taking their purchases home themselves. Online shopping makes retailers responsible for the last mile – and it becomes a huge competitive element (Paludan, 2012)." Retailers who work with the most innovative logistics providers will win the day. Those logistics companies/departments will really have to keep an eye on the future and what people's needs are. Therefore, shipping efficiency and lower shipping charges from the logistics process can be major competitive advantages for online stores.

PURPOSE OF THIS STUDY

Since 2003, mass consuming markets have demonstrated a significant shift toward Radio Frequency Identification (RFID) technology. This has occurred not only because of RFID mandates imposed by Wal-Mart, but also the wide use of RFID by government sectors (Wang, 2011). Journalists and researchers (Sabbaghi, 2007; Vaidyanathan, 2007) have found that a growing number of business use RFID in their supply chain, inventory, and manufacturing processes.

The ability of RFID system offers a great value -added technology that increases significant value to logistic process. Utilizing the RFID read-write technology not only provides faster products distribution from keeping low and safe inventory to smoothing supply chain stream flow, but also increase substantially the accuracy of current location data and equipment availability.

Base on all these Online retail background and online consumers' concerns that discussed above, the researcher of this study tends to understand how the RFID technology can be implied and adopted into the logistics process of Taiwan Online retail business. The purpose of this study is going to determine the concern factors of adopting the RFID system into current logistics works for Taiwan online retailers.

RESEARCH QUESTIONS

Based on the research background and purpose of the study, this investigation attempted to examine various factors of RFID implementation of logistics process of Taiwan online retailers'. This paper seeks to answer the following research questions:

1. What factors influence RFID technology acceptance in the logistics process of Taiwan online retailers?
2. What are the barriers to RFID adoption in the logistics process of Taiwan online retailers?
3. What factor influences the awareness of RFID technology adoption in the logistics process of Taiwan online retailers?
4. What factors affect RFID implementation in the logistics process of Taiwan online retailers?

REVIEW OF LITERATURE

FUNDAMENTAL THEORIES

The general problem that inspired this research was to determine how the Intelligent Logistics could be adopted smoothly and successfully in the logistics process of Taiwan online business. The diffusion of RFID in logistics task of online stores application in Taiwan, the acceptance of using RFID technology among logistics companies in Taiwan and how the theory of reasoned action toward RFID adoption of Taiwan Online retail business are going to be studied. Using three fundamental theories: diffusion of innovation theory (DIT), technology acceptance model (TAM) and the theory of reasoned action (TRA) significant results were explained in the future.

An integral part of this research is going to develop and test a model empirically of the adoption of RFID in the context of online shopping stores in Taiwan. Based on the concepts of Rogers (1983) the theory of technology diffusion, Davis' (1989) the Technology acceptance model (TAM), and Ajzen and Fishbein (1975) the theory of Reasoned Action (TRA), this research is going to use a questionnaire to assess the logistics process of Taiwan online stores about the managers of online stores' cognitions of the compatibility, complexity, relative advantage, and cost of the RFID system adoption, as well as to assess their attitudes toward the RFID system and intentions of using the system.

INNOVATION DIFFUSION THEORY (IDT)

According to Rogers (1983), "diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system". (p.5) In Rogers definition: "innovations that are perceived by individuals as having greater relative advantage, compatibility, trialability, and observability and less complexity will be adopted more rapidly than other innovations" (p.16). Innovations with the cluster of opposite characteristics require a longer diffusion period. There are many studies that indicate that these five qualities are the most important characteristics of innovation in explaining the rate of adoption.

TECHNOLOGY ACCEPTANCE MODEL (TAM)

The technology acceptance model (TAM) was introduced to the academic world by Davis (1989) in his paper "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology" in MIS Quarterly. Some studies have indicated that TAM is the revised version of the main concepts of Theory of Reasoned Action (Ajzen and Fishbein, 1980). The goal of TAM is to predict new technology acceptance and diagnose design problems before users have experience with this particular technology. TAM predicts that user acceptance of any technology is determined by two internal beliefs: perceived usefulness (PU) and perceived ease of use (PEU) (Davis, 1989), which are the outside factors can influence user intention to use a technology. These are two key beliefs determining user Behavioral Intention to use (Davis, 1989; Davis, Bagozzi and Warshaw, 1989). PE and PEU are the independent variables that explain the relationship between users and a new technology system and ascertain the determinants of technology acceptance. The dependent variables are users' attitudes (A), behavioral intentions (BI), and usage behaviors (UB). Davis (1989) formed those variables into the Technology Acceptance Model.

THEORY OF REASONED ACTION (TRA)

The theory of Reasoned Action was developed by Martin Fishbein and Icek Ajzen, which as an improvement over Information Integration theory (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). In Ajzen and Fishbein's (1980) theory, the intention toward a behavior is the best predictor of the actual behavior. According to the theory of reasoned action (TRA), Behavior Intention (BI) is to predict and understand individual behavior in a social context, which included two determinates: the individual's Attitude (A) toward the new concept, and Subjective Norm (SN)-a person's perception of social pressure.

INTELLIGENT LOGISTICS- RADIO FREQUENCY IDENTIFICATION (RFID) TECHNOLOGY

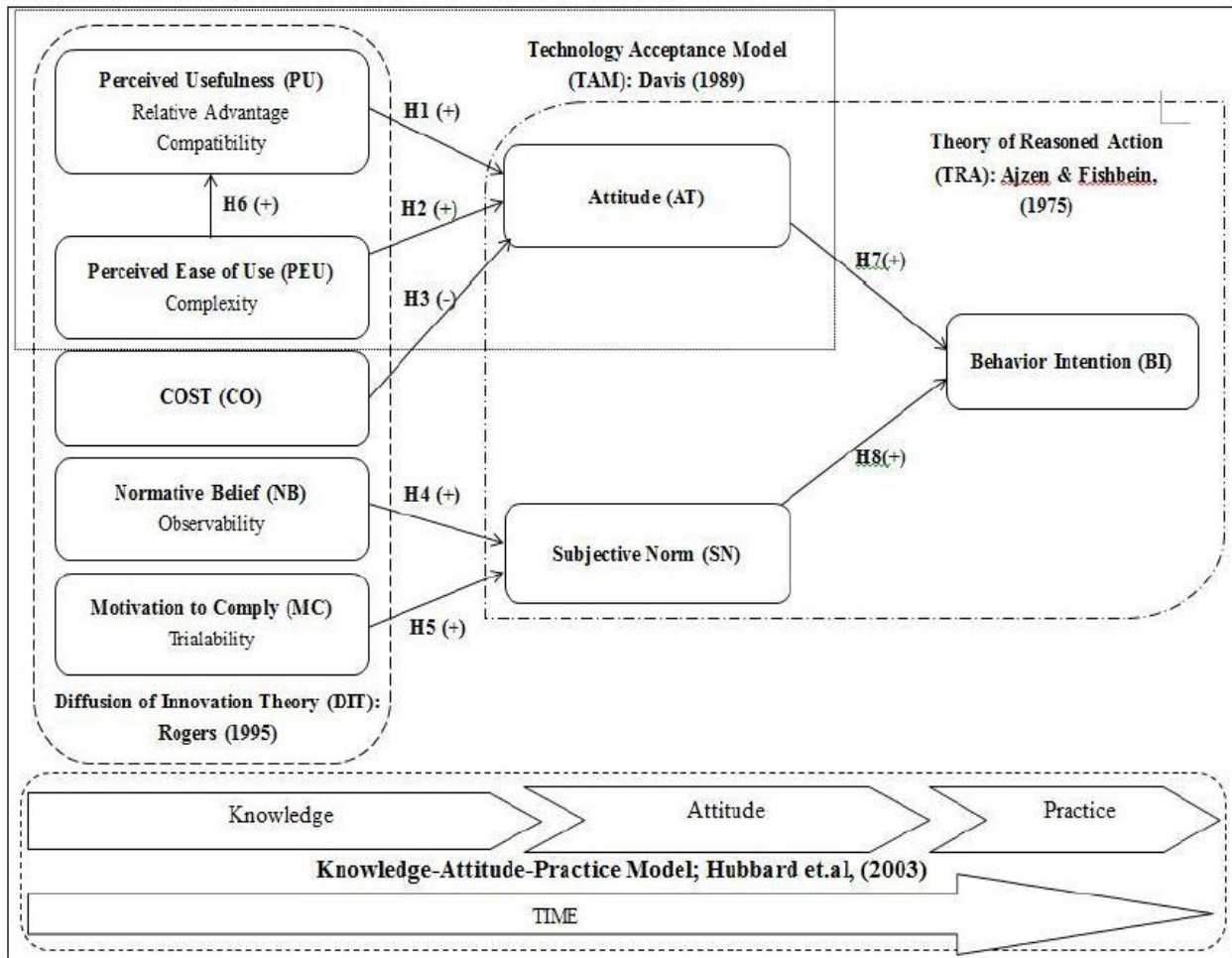
Radio Frequency Identification (RFID) technology is defined as a "wireless data collection technology that uses electronic tags for storing data and recognizing data" (Expert Barcode & RFID, Inc., 2009, ¶ 5), and then uses radio waves to automatically identify any objects that have RFID tags. Sandip Lahiri, an RFID Solution Architect with IBM Global Services, indicated in his RFID Sourcebook (2006) that "RFID is an example of automatic identification (Auto-ID) technology by which a physical object can be identified automatically. Other examples of Auto-ID include barcode, biometric (for example, using fingerprint and retina scan), voice identification, and optical character recognition systems." (p. 1)

The use of Radio Frequency Identification (RFID) in tracking and access applications first appeared during the 1980s. As the technology has been refined, more pervasive and possibly invasive uses for RFID systems have quickly gained the retail industry's attention because of RFID's ability to track moving objects. Like the barcode system, RFID is a technology that can scan for tracking purposes, but the functions of RFID go much further than barcodes.

RESEARCH METHODOLOGY

The major objective of this study is going to investigate how the intelligent logistics-RFID system can be adopted and accepted in the context of Taiwan online stores' logistics process. In accordance with the research framework and hypotheses, the researcher of this study requested permission to use the Technology Acceptance Model (TAM) from its developer, Dr. Fred Davis, and adapted his perceived of usefulness and perceived ease of use measurement scale to organize a questionnaire suitable for this research. The research population is comprised Taiwan online stores who sell products via pchome online shopping mall and yahoo online shopping center, the first and second website that shopper's most love to shop online.

FIGURE 1: RESEARCH FRAMEWORK



SOURCE: Organized by the author of this study, Apr.2014.

RESEARCH HYPOTHESES

The hypotheses for the research questions are listed below:

- H1:** The Perceived Usefulness/Relative Advantage/Compatibility of RFID system positively affects the Attitudes toward RFID adoption in logistics process of Taiwan online retailers.
- H2:** The Perceive Ease of Use/Complexity of RFID system positively affects the Attitude toward RFID adoption in logistics process of Taiwan online retailers.
- H3:** The Cost of adopting RFID system negatively affects the Attitude toward RFID adoption in logistics process of Taiwan online retailers.
- H4:** The Normative Belief/Observability of RFID system positively affects the Subjective Norm of RFID adoption in logistics process of Taiwan online retailers.
- H5:** The Motivation to Comply/Trialability of RFID system positively affects the Subjective Norm of RFID adoption in logistics process of Taiwan online retailers.
- H6:** The Perceive Ease of Use/Complexity of RFID system positively affects the Perceived Usefulness of RFID adoption in the logistics process of Taiwan online retailers.
- H7:** The attitude of using RFID system positively affects the behavioral intention of RFID adoption in logistics process of Taiwan online retailers.
- H8:** The Subjective Norm of RFID system positively affects the behavioral intention of RFID adoption in logistics process of Taiwan online retailers.

RESEARCH POPULATION

The research population is comprised Taiwan online stores who sell products via pchome online shopping mall and yahoo online shopping center. According to EZprice Analysis Report revealed in July 2013, the biggest and second largest online shopping platforms are pchome online shopping and yahoo shopping center. It owns closely over 15,000 online retail stores. For this reason, this study plans to use the purposeful sampling method and a questionnaire survey method will be used to collect primary data from online retail stores, which located on Yahoo shopping center and Pchome online shopping.

DATA COLLECTION AND ANALYSIS

The research population for this study was the online retail companies list under the 2013 power online seller competition held by Business Next Publishing Corp., Taiwan most influential tech-media, and those online retailer lists published in July 2013, a total of 232 companies were the research population. The survey operated in January 2014, after a month survey period, there were 201 valid questionnaires collected, yielding a usable response rate of 86.6 percent.

DATA COLLECTION PROCEDURE

The author of this researcher is going to set one month up as the operation time. Owing to the fact that the sample companies are widely spread across many different cities and counties in Taiwan, an e-mail survey method will be used in this research. According to Rogelberg and Luong (1998) the typical return rate for a mailed questionnaire is 50% or less, and in recent years it has steadily declined. For this reason, a reminder e-mail will followed up after the first week and to enhance the response rate.

RESEARCH FRAMEWORK

To organize fundamental theories tighter, author of this research arranged the diffusion of innovation's five categories: attributes of an innovation, relative advantage, compatibility, observability, complexity, and trialability of the RFID system adoption as survey questions for this research to evaluate the perceived attitude, subjective norms, and the behavioral intention regarding Taiwan online retailers' RFID adoption. Therefore, the technology acceptance model (TAM), theory of reasoned action (TRA), and diffusion of innovation theory (DIT) were the basic foundation of the research framework, as shown in following Figure.

VALIDITY AND RELIABILITY

The instrument of this research was developed with relevant references, key literature reviews and critical theory of Davis' (1989.) as the fundamental knowledge. Questions are abstracted from the most important points of the fundamental knowledge base. Thus, the questionnaire consisted of valid and crucial questions.

The construct reliability is tested using composite reliability measures that assess the extent to which items in the construct measure the latent concept. A commonly acceptable threshold value for composite reliability (CR) is 0.7 or more (Hair et al., 1998). Table below shows that the composite reliability (CR) of the latent variable was higher than 0.7, which indicated that all measures had a good reliability (Bagozzi & Yi, 1998; Hair et al., 1998) Moreover, the completely standardized factor loadings all reached the level of significance. All the latent variables had a CR above 0.70 and an average variance extracted (AVE) above 0.5.

TABLE 1: CONFIRMATORY FACTOR ANALYSIS (CFA) RESULTS FOR THE CONSTRUCTS

		Standardized Regression Weigh	Cranach's α	C.R.	AVE
Perceived Usefulness	B2	0.734	0.758	0.761	0.515
	B5	0.727			
	B8	0.692			
Perceived Ease of Use	B10	0.792	0.917	0.919	0.739
	B11	0.925			
	B12	0.900			
	B13	0.815			
Observability	B22	0.832	0.922	0.927	0.810
	B23	0.953			
	B24	0.910			
Triability	B18	0.861	0.870	0.873	0.697
	B19	0.829			
	B20	0.814			
Cost	B25	0.876	0.834	0.839	0.636
	B26	0.760			
	B27	0.751			
Attitude	B35	0.930	0.900	0.905	0.763
	B36	0.904			
	B37	0.780			
Subjective Norm	B28	0.926	0.941	0.942	0.845
	B29	0.946			
	B30	0.884			
Behavior Intention	B38	0.932	0.892	0.898	0.747
	B39	0.884			
	B40	0.770			

SOURCE: this research

DISCRIMINANT VALIDITY

Discriminant validity measures the extent to which conceptually similar constructs are distinct. Discriminant validity is examined by comparing the correlation between the construct and the square root of AVE. AVE represents the overall amount of variance in the indicators accounted for by the latent construct. The AVE should be greater than the square of correlations between the construct for satisfactory discriminant validity (Bhattacharjee et al. 2004; Wixom et al. 2005). As shown in Table below, diagonal was AVE of constructs and the other were two dimensions of correlation coefficients. All correlation coefficients were less than AVE. Hence, the discrimination validity was adequate.

TABLE 2: DISCRIMINANT VALIDITY

CONSTRUCT	PU	PEU	OB	TA	CO	AT	SN	BI
PU	0.515							
PEU	0.066	0.739						
OB	0.053	0.097	0.810					
TA	0.189	0.166	0.313	0.697				
CO	0.050	0.033	0.005	0.062	0.636			
AT	0.115	0.092	0.114	0.083	0.020	0.763		
SN	0.003	0.042	0.127	0.105	0.012	0.009	0.845	
BI	0.294	0.080	0.109	0.331	0.042	0.106	0.031	0.747

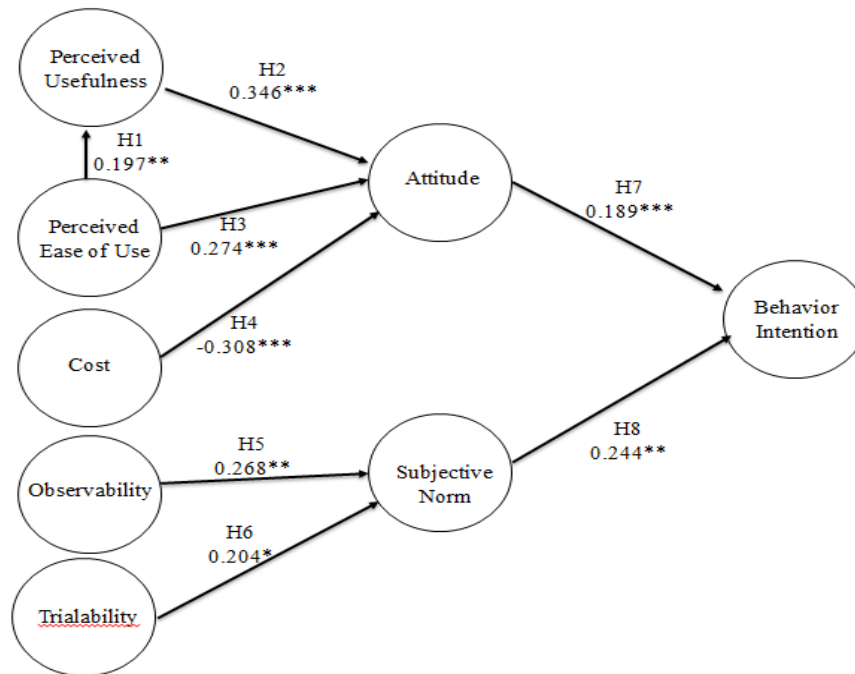
SOURCE: this research

STATISTICAL RESULTS

TABLE 3: RESULTS OF THE HYPOTHESES AND THE PRACTICAL PATH

	Hypothesis	Expected Result	Standard Regression coefficient	t-Value
PU→PEU	H1	+	0.197	2.631**
PU→AT	H2	+	0.346	4.220***
PEU→AT	H3	+	0.274	3.767***
CO→AT	H4	-	0.308	4.158***
OB→SN	H5	+	0.268	2.908**
TR→SN	H6	+	0.204	2.139*
AT→BI	H7	+	0.189	3.987***
SN→BI	H8	+	0.244	2.761**
Fit index	Threshold	Goodness-of-fit	Source	
χ^2/df	<3	2.191	Hair et al.(1992)	
GFI	>0.8	0.828	Seyal et al.(2002)	
AGFI	>0.8	0.874	Scott(1994)	
NFI	>0.8	0.858	Bentler & Bonett(1989)	
CFI	>0.9	0.917	Bentler & Bonett(1989)	
RMSEA	<0.08	0.077	Hair et al.(1992)	

FIGURE 1



SOURCE: this research

CONCLUSION

This quantitative study utilized a questionnaire to identify Taiwanese online retailers' adoption intentions toward intelligent logistics tool- the RFID systems into its shipping/logistics process. Statistical analysis of questionnaire results provided insight into how the behavioral intention toward RFID system acceptance relates to attitudes toward belief and subjective norms— aspects central to Rogers' (1995) diffusion of innovation theory. Information acquires from this study may provide significant information for analyzing and developing future business intelligent concept and RFID adoption within online shopping market in Taiwan. Furthermore, applying this research model toward other industries may prove beneficial for Taiwanese companies in industries other than online retail stores. The results of this study showed, that the most concerned issue of online retailers is the fulfillment speeds of its logistics tasks, for instance, order fulfillment, delivery guaranteed, etc. Moreover, the logistics task always needs real-time technology systems to support its logistics operations, such as point of sale, inventory management, and supply chain management.

This practical result was in accordance with the literature studies discussed in chapter two that showed that RFID application can significantly benefit and assist users. (Kevan, 2004; Murphy, 2005; Gagel 2007; Bianchin, 2007; Dortch, 2009). It showed that the Taiwanese online retail company attaches importance to those functions that an RFID system can improve or provide: storage management, access control security systems, inventory management, transportation management, and logistics and tracking. The research findings showed that those important functions match the key procedures of the online retailers shipping workflow. The Taiwanese Online retail business found that if the company can properly utilize all functions of the RFID system, it can not only help to improve the company's competitive ability, but it can also optimize the company's resource relocation. Furthermore, this research suggests that online retailers can start the RFID system adoption process from the inventory management, access control security system, and logistics and tracking functions, and from there assist the original workflow to supersede these tasks in the long term.

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TRAINING AND DEVELOPING EMPLOYEES: METHODS AND EFFECTS

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ABSTRACT

Training is a tool that can assist organizations in building a more committed and productive workforce. By helping to establish employee investment, reciprocity, identification, and by limiting alternative employment options, an effective training program can lead to greater commitment and less employee turnover. The result is an organization that is more productive. Employee competencies change through effective training programs. It therefore not only improves the overall performance of the employees to effectively perform their current jobs but also enhances the knowledge, skills an attitude of the workers necessary for the future job, thus contributing to superior organizational performance. It is an undeniable fact that in recent times many organizations have come to the realization of the importance of the role of training and development programs as it increases the organization's staff efficiency, skills and productivity.

KEYWORDS

Training, Development, Employee Performance.

INTRODUCTION

There is no doubt that organizations worldwide are striving for success and out-competing those in the same industry. In order to do so, organizations have to obtain and utilize her human resources effectively. Organizations need to be aware of face more realistically towards keeping their human resources up-to-date. In so doing, managers need to pay special attention to all the core functions of human resource management as this plays an important role in different organizational, social and economically related areas among others that are influential to the attainment of the organizational goals and thus organizations successful continuation in the market.

Organizations are facing increased competition due to globalization, changes in technology, political and economic environments and therefore prompting these organizations to train their employees as one of the ways to prepare them to adjust to the increases above and thus enhance their performance. It is important to not ignore the prevailing evidence on growth of knowledge in the business corporate world in the last decade. This growth has not only been brought about by improvements in technology nor a combination of factors of production but increased efforts towards development of organizational human resources. It is, therefore, in every organizations responsibility to enhance the job performance of the employees and certainly implementation of training and development is one of the major steps that most companies need to achieve this. As is evident that employees are a crucial resource, it is important to optimize the contribution of employees to the company aims and goals as a means of sustaining effective performance. This therefore calls for managers to ensure an adequate supply of staff that is technically and socially competent and capable of career development into specialist departments or management positions.

DEFINITIONS

Training is a type of activity which is planned, systematic and it results in enhanced level of skill, knowledge and competency that are necessary to perform work effectively.

Development is a broad ongoing multi-faceted set of activities (training activities among them) aimed at bringing someone or an organization up to another threshold of performance, often to perform some job or a new role in the future.

Employee performance is defined as the outcome or contribution of employees to make them attain goals while performance may be used to define what an organization has accomplished with respect to the process, results, relevance and success. Researchers define performance as the achievement of specific tasks measured against predetermined or identified standards of accuracy, completeness, cost and speed. Employee performance can be manifested in improvement in production, easiness in using the new technology, highly motivated workers.

HR TRAINING NEEDS

Training and development needs may occur at three organizational levels namely; (1) strategic level where needs are determined by top management while considering organizations goals, mission, strategy and problems, which need to be resolved or fixed (2) tactical level where needs are determined with middle management while considering developments needs to the coordination and cooperation between organization units and (3) operational level where needs are determined with lower executive management and other employees while considering problems related to operations such as performance problems of individual workers and departments in subject. In order to enable an organization formulate human resource training and development goals that will enable both formal and informal human resource training and development methods and programmes create a workforce that enables effectiveness and competitiveness, it is worth giving consideration to, providing proper coordination as well as proper incorporation of the needs within the three levels

The first issue is to identify the needs relevant to the organizations objectives. There are three categories of identifying training and development needs. These include: resolving problems, this focuses on workers' performance, improving certain working practices, this focuses on improvement regardless of the performance problems and changing or renewing the organization situation, which may arise because of innovations or changes in strategy. It is worth putting in mind that during the identification of training needs, there is need to create, develop, maintain and improve any systems relevant in contributing to the availability of people with required skills. Moreover, training programmes should be designed to cater for the different needs. Further still, the training programme, content and the trainees' chosen depend on the objectives of the training programme.

A number of approaches have been highlighted in previous literature for identifying needs. These are the problem-centred (performance gap) and profile comparison (changes and skills) approaches. Similarly, a number of approaches for analyzing training needs depending on either new or current employees have been pointed out by earlier studies. The two most traditional approaches being the problem centered approach and the profile comparison approach. The problem centred approach focuses on any performance difficulties and the corporation analyses if the problems are due to insufficient skills, which then need to be developed if the problem is to be solved. Profile comparison approach on the other hand focuses on matching the competencies with the job filled, whether new position or existing position. Some changes in strategy and technology may also bring the need for new or additional skills.

TABLE 1: THE TRAINING AND DEVELOPMENT NEEDS' TYPES

NEEDS' CATEGORIES, APPROACHES AND LEVELS	RESEARCHERS		
	Wognum et al. (Categories)	Wognum (Levels)	Torrington et al. (Approaches)
	<ul style="list-style-type: none"> Resolve problems (workers' performance) Improve practices Change or renew (company situation) 	<ul style="list-style-type: none"> Strategic level (top management) Tactical level (middle management) Operational level (lower executive management & other employees) 	<ul style="list-style-type: none"> Problem centred (performance) Profile comparison (changes & skills)

TRAINING AND DEVELOPMENT METHODS

Human resource development activities are meant to either improve performance on the present job of the individual, train new skills for new job or new position in the future and general growth for both individuals and organization so as to be able to meet organization's current and future objectives. There are broadly two different methods that organizations may choose from for training and developing skills of its employees. These are on-the-job training given to organizational employees while conducting their regular work at the same working venues and off-the-job training involves taking employees away from their usual work environments and therefore all concentration is left out to the training. Examples of the on-the-job training include but are not limited to job rotations and transfers, coaching and/or mentoring. On the other hand, off-the-job training examples include conferences, role playing, and many more as explained below in detail. Researchers argue that on-the-job training may consist of teaching or coaching by more experienced people or trainers at the desk or at the bench. Different organizations are motivated to take on different training methods for a number of reasons for example; (1) depending on the organization's strategy, goals and resources available, (2) depending on the needs identified at the time, and (2) the target group to be trained which may include among others individual workers, groups, teams, department or the entire organization.

- **JOB ROTATION AND TRANSFERS:** Job rotation and transfers as a way of developing employee skills within organization involves movements of employees from one official responsibility to another for example taking on higher rank position within the organization, and one branch of the organization to another. For transfers for example, it could involve movement of employees from one country to another. These rotations and transfers facilitate employees acquire knowledge of the different operations within the organization together with the differences existing in different countries where the organization operates. The knowledge acquired by the selected employees for this method is beneficial to the organization as it may increase the competitive advantage of the organization.
- **COACHING AND/OR MENTORING:** This involves having the more experienced employees coach the less experienced employees. It is argued that mentoring offers a wide range of advantages for development of the responsibility and relationship building. The practice is often applied to newly recruited graduates in the organization by being attached to mentor who might be their immediate managers or another senior manager. This however does not imply that older employees are excluded from this training and development method but it is mainly emphasized for the newly employed persons within the organization.
- **ORIENTATION:** This is yet another training and development method. This involves getting new employees familiarized and trained on the new job within an organization. During this process, they are exposed to different undertakings for example the nature of their new work, how to take on their identified tasks and responsibilities and what is generally expected of the employees by the organization. They are further given a general overview of the organizational working environment including for example working systems, technology, and office layout, briefed about the existing organizational culture, health and safety issues, working conditions, processes and procedures.
- **CONFERENCES:** As a training and development method involves presentations by more than one person to a wide audience. It is more cost effective as a group of employees are trained on a particular topic all at the same time in large audiences. This method is however disadvantageous because it is not easy to ensure that all individual trainees understand the topic at hand as a whole; not all trainees follow at the same pace during the training sessions; focus may go to particular trainees who may seem to understand faster than others and thus leading to under training other individuals.
- **ROLE PLAYING:** Involves training and development techniques that attempt to capture and bring forth decision making situations to the employee being trained. In other words, the method allows employees to act out work scenarios. It involves the presentation of problems and solutions for example in an organization setting for discussion. Trainees are provided with some information related to the description of the roles, concerns, objectives, responsibilities, emotions, and many more. Following is provision of a general description of the situation and the problem they face. The trainees are there after required to act out their roles. This method is more effective when carried out under stress-free or alternatively minimal-stress environments so as to facilitate easier learning. It is a very effective training method for a wide range of employees for example those in sales or customer service area, management and support employees.
- **FORMAL TRAINING COURSES AND DEVELOPMENT PROGRAMMES:** These are a number of methods which may be used to develop the skills required within an organization. These course and programmes are usually a set of defined and known programmes where the contents, durations and all the details about the training are clear to both the organization and the personnel to be trained. Unlike informal trainings and programmes, formal training and programmes can be planned earlier and also plan for their evaluation. Employees may undertake these courses and programmes while completely off work for a certain duration of time or alternatively be present for work on a part-time basis. These programmes can be held within the organization (in-house) or off the job. Off the job is argued to be more effective since employees are away from work place and their concentration is fully at training. Depending on the knowledge needed, organization's structure and policies, the trainers too may be coming within the corporation or outside the organization.

EFFECT OF TRAINING ON PERFORMANCE

In the real world, organizational growth and development is affected by a number of factors. During the development of organizations, employee training plays a vital role in improving performance as well as increasing productivity. This in turn leads to placing organizations in the better positions to face competition and stay at the top. This therefore implies an existence of a significant difference between the organizations that train their employees and organizations that do not. The employee performance is a function of organizational performance since employee performance influences general organizational performance. In relation to the above, research note that employee competencies change through effective training programs. It therefore not only improves the overall performance of the employees to effectively perform their current jobs but also enhances the knowledge, skills an attitude of the workers necessary for the future job, thus contributing to superior organizational performance. Training has been proved to generate performance improvement related benefits for the employee as well as for the organization by positively influencing employee performance through the development of employee knowledge, skills, ability, competencies and behavior.

BENEFITS OF TRAINING

The main purpose of training is to acquire and improve knowledge, skills and attitudes towards work related tasks. It is one of the most important potential motivators which can lead to both short-term and long-term benefits for individuals and organizations. There are so many benefits associated with training. These benefits are as below:

- High morale – employees who receive training have increased confidence and motivations;
- Lower cost of production – training eliminates risks because trained personnel are able to make better and economic use of material and equipment thereby reducing and avoiding waste;
- Lower turnover – training brings a sense of security at the workplace which in turn reduces labor turnover and absenteeism is avoided;
- Change management – training helps to manage change by increasing the understanding and involvement of employees in the change process and also provides the skills and abilities needed to adjust to new situations;
- Provide recognition, enhanced responsibility and the possibility of increased pay and promotion;
- Help to improve the availability and quality of staff.

CONCLUSION

Training is a tool that can assist organizations in building a more committed and productive workforce. By helping to establish employee investment, reciprocity, identification, and by limiting alternative employment options, an effective training program can lead to greater commitment and less employee turnover. The result is an organization that is more productive and professional. Although training can play a major role in this process, organizations need to look at additional work force strategies and practices that can enhance commitment. Employee is a valuable resource (asset) of the organization. The success or failure of the organization depends on employee performance. It is an undeniable fact that in recent times many organizations have come to the realization of the importance of the role of training and development programs as it increases the organization's staff efficiency, skills and productivity.

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EURO ZONE CRISIS: ITS GENESIS AND IMPLICATIONS ON INDIAN ECONOMY

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ABSTRACT

The Eurozone crisis which emanated in the background of global financial crisis gripped the whole Europe into its fold. The crisis made it difficult or impossible for some countries in the Eurozone to repay or refinance their government debt without the assistance of third parties and thus hinted at vulnerability of modern day capitalist system. The problem started with the fall of Greece and exhibited a chain of failure across the southern Europe. The countries like Italy, Ireland, Portugal and Spain were soon turned into the economic quagmire for the one decade old Eurozone. Not only the Europe but the impact was also seen at far off places like India and other emerging markets which traditionally enjoyed strong economic ties with European markets. The present study examines the genesis and spread of Eurozone crisis through case studies of GIIPS nations. The impact of crisis on Indian economy has also been analyzed through changes in various macroeconomic parameters.

KEYWORDS

GIIPS, European central Bank, Sovereign debt, Optimum Currency Area.

1. INTRODUCTION

The eurozone (a currency union of 17 European countries) has been going through a major crisis which started with Greece but spread rapidly to Ireland, Portugal, Spain, Italy and very recently to Cyprus. While it got sparked off by fear over the sovereign debt crisis in Greece, it went on to impact the peripheral economies as well, especially those with over-leveraged financial institutions.¹ The crisis has its genesis in a series of policies followed by countries in response to the economic challenges. These policies can be traced to the period 2000-08 when access to the easy credit paved the way for high risk lending and the borrowings. Subsequently, the period 2007-12 saw the emergence of global financial crisis, starting with 2007 sub-prime crisis in the US and soon turning into the global recession and now has become the sovereign debt crisis in Europe. This crisis has not just challenged the European vision of economic unification but it has also serious implications for its other global dreams and ambitions.²

2. OBJECTIVES AND METHODOLOGY

The present paper aims to understand the roots of Euro zone crisis and study the subsequent impact of crisis on Indian economy. An attempt has been made to trace the genesis of Eurozone crisis along with the historical background of Eurozone. The organization of the paper is in the form of case studies of five nations viz. Greece, Italy, Ireland, Portugal and Spain (GIIPS) nations which were worst affected due to euro zone crisis. The implications of Euro zone crisis on Indian economy has been gauged through changes in the different macroeconomic parameters viz. trade/ current account deficits, foreign direct investment, fluctuations in currency and foreign exchange reserves.

3. GENESIS OF EUROZONE CRISIS

The Eurozone is an economic and monetary union (EMU) of 17 European Union (EU) member states that have adopted the euro (€) as their common currency and sole legal tender. It was founded on January 1, 1999 when eleven European countries decided to denominate their currencies into a single currency. It currently consists of Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain. Other EU states are obliged to join once they meet the criteria to do so. Though the call for some type of monetary union has been made since the last nineteenth century, various authors have attributed various reasons for the economic unification of Europe.

Thirwall (2012) has cited the formation of Euro as a culmination of a long-standing quest of European countries for currency stability. However the beginning was made by signing treaty of Rome and establishment of European Economic Community (EEC) on 1 January 1958. The stable exchange rate was supposed to be a stronger case for growing intra-European trade and at policy level steps were taken to control exchange rate swings by adopting 'snake in a tunnel policy' in 1972 which was further replaced by European Monetary System (EMS) in 1978 and European Exchange Rate Mechanism (ERM) in 1979. Mundell (1961) in his famous 'Theory of optimum currency area' also vouched for economic integration of nations and adoption of common currency.

Further, a single currency was perceived as a symbol of political and social integration in the post WW II Europe and a catalyst for further integration in other spheres. At the micro level, the use of a common currency was expected to increase cross-border competition, integration and efficiency in the markets for goods, services and capital. At the macroeconomic level, a single monetary policy in the euro area was expected to be geared to price stability. The Euro system's commitment to price stability was expected to contribute to the long-term stability and credibility of the euro and promote its attractiveness as a trading and investment currency. In the long run, the development and integration of the euro area financial markets was expected to enhance the attractiveness of the euro. The Euro was also expected to become an important currency in the foreign exchange markets.³

The European monetary union (EMU) was conceived later in 1988-89 by a committee consisting mainly of central bankers which led to the Maastricht Treaty in 1991. The Maastricht set the completion of European Monetary Union (EMU) as a final objective. It also established the need for a degree of economic and policy convergence in European economies as a precondition for a successful union, setting out a series of convergence criteria for prospective members:⁴ The key components of convergence criteria were:

- Inflation would have to be no more than 1.5 percentage points higher than the average of that prevailing in the three best-performing member states;
- Long-term interest rates could be no more than two percentage points above the average rate of the three best-performing member states;
- The budget deficit had to be less than 3% of GDP;
- Public debt had to be less than 60% of GDP
- Ensuring interest rates to be within limits for at least 2 yrs to gain admittance to EMU.

In January 1999, parities between the 11 countries then participating in the euro and meeting the Maastricht criteria were fixed, and a new European Central Bank (ECB) took over responsibility for monetary policy. Then, in January 2002, euro notes and coins were introduced. The creation of Eurozone altered the economic as well as financial landscape of the region and led to the convergence of prices, interest rates and yield in bond markets in the initial years. By the year 2005, the general growth momentum was in place, perhaps waiting for a trigger.

3.1 IMPRUDENT FISCAL POLICIES

Increased competition, the establishment of common benchmarks and lower transaction costs led to narrowing of yield and spreads and market liquidity across borders. These changes were facilitated by the TARGET-2⁵ system that linked large-value national payments in the EU. Thus similar instruments traded in the different national markets came to be perceived as close substitutes. The convergence in interest rates meant a fall in nominal rates in the peripheral economies of GIIPS countries (Greece⁶, Ireland, Italy, Portugal, and Spain) towards the lower German levels and Europe's northern members (EUN)—Austria, Belgium,

France and the Netherland. Credibility of the monetary policy on price stability and the accompanying economic growth were seen as a positive outcome of a single market and a seemingly stable common currency.

Low interest rates and improved confidence fueled a domestic demand surge partly financed by foreign lending. The growth in credit was concentrated in the housing sector. The GIIPS' economies realigned away from manufacturing and industrial sectors and toward services and housing construction: 4 percentage points of GDP shifted from industry to financial services, real estate, and business from 1997 to 2007, compared to a shift of 2 percentage points in the EUN.⁷ Construction and financial services grew rapidly thereby increasing macroeconomic vulnerability. The boom in the property prices⁸ and resultant credit growth got translated into a buildup in debt. Faster growth hid the weakness in the fiscal system that got revealed with the worsening in the fiscal deficit and public debt. Growth was also accompanied by a rise in demand for imports and, in turn, a larger current account deficit from 2003. The rise in the twin deficits were financed largely through debt, especially, in the case of Greece. Over the same period, per capita employee compensation rose by an average annual rate of 5.9 percent in the GIIPS, considerably faster than the EUN's average of 3.2 percent. These increases were not matched by improvements in productivity and as a result unit labor costs rose by 32 percent in the GIIPS from 1997 to 2007, compared to a 12 percent increase in the EUN.⁹ So long as growth was strong, it was hard to make out whether there had been an improvement in the fundamentals, or it was a bubble.

In all of the GIIPS, lower borrowing costs and the expansion of domestic demand boosted tax revenues and tempted governments to expand spending as well. Rather than recognize that the revenue increases from the boom were windfall gains that should be saved, the GIIPS accelerated government spending. From 1997 to 2007, public spending per person rose by an average of 76 percent and government's contribution to GDP rose by 3.5 percentage points. In the EUN, average per capita spending increased by 34 percent and the government's contribution to GDP stayed constant. The credit boom from 2003 lasting till early 2007 was supported by falling interest rates. But from 2006, interest rates across euro zone started to diverge, marking out the weak from the strong economies. Excessive lending had left banks with bad debts and governments with large fiscal deficit and public debt in the peripheral economies.¹⁰ From late 2009, fears of a sovereign debt crisis developed among investors as a result of the rising private and government debt levels around the world together with a wave of downgrading of government debt in some European states. Causes of the crisis varied by country.

3.2 MONETARY UNION WITHOUT A FISCAL UNION

The structure of the Eurozone as a monetary union without fiscal union contributed to the crisis and harmed the ability of European leaders to respond. The creation of the Euro zone had an inherent contradiction of being a monetary union but not a fiscal union. The introduction of the euro in 1999 explicitly prevented the European central bank (ECB) or any national central bank from financing government deficits.¹¹ As a consequence the central bank has no power to monetize deficits. The spending authorities remained national and subject to their own political compulsions. So long as growth across the region was strong, the fiscal capacity was not a source of worry. Given the differences in the structure and competitiveness of the peripheral economies, it is not surprising that their compliance to the stability and growth pact (SGP)¹² was often in breach. The countries like France and Germany ran budget deficits more than 3% of GDP without paying any fines and without making any commitment to return to smaller deficits in the subsequent years. And this weakness got further exposed in the aftermath of the global crisis due to the operation of fiscal stabilizers, a rise in the unemployment compensation and a fall in tax revenues. The member states had no option to improve the competitiveness of the economy through exchange rate depreciation as enunciated by SGP.

Had there been a fiscal union, with a system horizontal transfer and controls, the deficit and debt ratio of the peripheral economies may have been contained. But in the present case, a fiscal crisis in the periphery automatically translated into zonal monetary and financial crisis with the central monetary authority not empowered to act as the lender of last resort. This brings home an important lesson that setting up pacts and codes of conduct by themselves are not enough, unless, the underlying incentives to adhere to them are also reasonably well aligned. It has also been argued that the fiscal criteria proved difficult to enforce but generated a false assurance that as long as there was a criteria, all was well. They failed to see that other structural problems were far more dangerous to economic stability of the euro zone that included the lack of control and regulation over national financial institutions.¹³

3.3 UNEQUAL SIZE OF THE MEMBERS

One prerequisite for the successful monetary union is equal size of the member nations. Within the euro zone, there is substantial variation in terms of productivity. The peripheral economies of GIIPS have lower labor productivity compared to Germany which clearly stands out in terms of unit labour costs. Only France and Ireland are comparable to Germany on this count. The Global competitiveness index for the Euro zone countries also shows vast differences in terms of the ranking and score. On account of differences in the labor market conditions the unemployment rates are also vast divergent. As compared to the peripheral economies, Germany has the lowest rate of unemployment rate due to its short-time working scheme and flexible time arrangements in the manufacturing sector.¹⁴ The fact that there has been persistence different in the unemployment levels show that labour mobility remained far more limited as compared capital mobility despite there being a monetary union. The above differences in a currency union could get sharply exaggerated, as they did, when countries are subject to asymmetric shocks¹⁵.

3.4 EXTERNAL EXPOSURE

The large share of public debt held across borders with European banks (German, French, British and others) made these countries vulnerable to external factors. Data from the Bank of International settlements gives an indication of the magnitude of exposure for major economies in the euro zone. Germany, France and non euro economies like UK and US have substantial exposure to bank debt of the peripheral economies. In respect of the US, the indirect exposure is several times larger than the direct exposure.

TABLE 1: PERCENTAGE OF BONDS HELD ABROAD

Country	Percentage of debt held abroad
Greece	58
Ireland	54.2
Portugal	66
Spain	38.7

Source: Economist January 15, 2011, p. 72.

3.5 OPTIMUM CURRENCY AREA DEBATE: EURO ZONE Vs. USA

The benefits from joining a currency union comprise the gain in monetary efficiency arising from avoiding all of the uncertainty and transaction costs created by exchange rate volatility. These gains are likely to be greater, the greater is the degree of economic integration between the joining currency and the rest of the membership. This is because closer integration implies (1) a larger share of a country's trade will benefit from exchange rate stability within the currency area; and (2) if labour and capital mobility across the currency union is high, the resultant increase in predictability in investment returns and wage rates will be quantitatively more important. The plan to move to a European Monetary Union via the adoption of the euro saw many economists turn to the OCA literature as a way of assessing the workability of the scheme.

Since this literature did not provide any absolute guide as to what constituted an OCA, the most common approach was to benchmark Europe against an already functioning continental currency area in the form of the United States. Thus economists compared the two across the various criteria outlined above – their relative degree of exposure to asymmetric shocks, relative degree of factor mobility, and the scope for fiscal federalism. On all three counts, they tended to find that the putative Eurozone did not measure up to the United States.¹⁶

- European economies seemed to be more exposed to asymmetric shocks than were US states;
- European economies demonstrated a much lower degree of labour mobility than did US states; and
- US fiscal federalism was far more extensive than that of Eurozone.

4. CASE STUDY OF GIIPS NATIONS

4.1 GREECE

In the early mid-2000s, Greece's economy was one of the fastest growing in the eurozone and was associated with a large structural deficit. After averaging annual GDP growth of 1.1 percent from 1980 through 1997—the slowest in eventual Euro area countries—Greece's economy expanded at an average rate of 4.1 percent over the next ten years, the fourth fastest rate in the Euro area. As tax revenues rose, the government rapidly expanded spending, especially in social transfers and public sector wages. From 1997 to 2008, Greece increased government spending per capita by 140 percent, compared to 40 percent in the Euro area.¹⁷

As the world economy was hit by the global financial crisis in the late 2000s, Greece was hit especially hard because its main industries – shipping and tourism – were especially sensitive to changes in the business cycle. The government spent heavily to keep the economy functioning and the country's debt increased accordingly. With debt ballooning from 96 percent of GDP in 2007 to 115 percent in 2009 far more than the euro zone limit of 60 % and the IMF projecting it to reach nearly 150 percent by 2012 even under the assumption of draconian fiscal measures—Greece's borrowing costs skyrocketed. In late 2009, Greece admitted that its fiscal deficit was understated (12.7 % of GDP, as against 3.7 % stated earlier). Ratings agencies downgraded Greek bank and government debt. A few days later Standard & Poor's slashed Greece's sovereign debt rating to BB+ or "junk" status amid fears of default, in which case investors were liable to lose 30–50% of their money. Stock markets worldwide and the euro currency declined in response to the downgrade. On 1 May 2010, the Greek government announced a series of austerity measures to secure a three-year €110 billion loan. This was met with great anger by the Greek public, leading to massive protests, riots and social unrest throughout Greece. The Troika (EC, ECB and IMF), offered Greece a second bailout loan worth €130 billion in October 2011, but with the activation being conditional on implementation of further austerity measures and a debt restructure agreement.

TABLE 2: GDP, GOVERNMENT DEFICIT/SURPLUS AND DEBT IN GREECE

	2008	2009	2010	2011	2012
GDP mp (in million euro)	232920	231 642	227318	215 088	212139
GDP Growth rate	-0.2	-3.1	-4.9	-7.1	-7.0
Government deficit (-) / surplus (+) as a % of GDP	-9.8	-15.6	-10.3	-9.1	-9.0
Government debt as a % of GDP	113.0	129.4	145.0	165.3	156.9

Source: Eurostat news release euro indicators, accessed from europa.eu/rapid/press-release_STAT-12-62_en.doc.

All the implemented austerity measures, have helped Greece bring down its primary deficit - i.e. fiscal deficit before interest payments - from €24.7bn (10.6% of GDP) in 2009 to just €5.2bn (2.4% of GDP) in 2011, but as a side-effect they also contributed to a worsening of the Greek recession, which began in October 2008 and only became worse in 2010 and 2011. The Greek GDP had its worst decline in 2011 with -6.9%, a year where the seasonal adjusted industrial output ended 28.4% lower than in 2005, and with 111,000 Greek companies going bankrupt (27% higher than in 2010).

4.2 IRELAND

From 1995 to 2000, growth in Ireland accelerated to an average of 9.6 percent per year, and interest rates fell below German levels by 2005. Irish wages grew nearly five times faster than the Euro area average from 1997 to 2007, resulting in the real effective exchange rate (REER) increasing by 36 percent from 1999 to 2008, compared to an average increase of 13 percent in the other GIIPS. This rapid growth and a European monetary policy that was far too loose for Ireland fueled the enormous overleveraging of the financial sector. As property prices showed a downward movement from 2007 Irish banks stood exposed and came under severe pressure.

TABLE 3: GDP, GOVERNMENT DEFICIT/SURPLUS AND DEBT IN IRELAND

	2008	2009	2010	2011	2012
GDP mp (in million euro)	179 990	160 596	155 992	156 438	158865
GDP Growth rate	-2.2	-6.4	-1.1	-2.2	-0.2
Government deficit (-) / surplus (+) as a % of GDP	-7.3	-14.0	-31.2	-13.1	-8.2
Government debt as a % of GDP	44.2	65.1	92.5	108.2	117.4

Source: Eurostat news release euro indicators, accessed from europa.eu/rapid/press-release_STAT-12-62_en.doc.

The property price crash by the first half of 2009 broadly coincided with the tightening of credit control. By mid-April 09, there was a marked increase in Irish bond yields and the government had to nationalize banks and take on the liabilities. In September 2010, government support for six banks had risen markedly to 32 per cent of GDP. In November 2010, the government decided to seek a €85 billion "bailout" from the ECB and the IMF. Thus the problems of Ireland stemmed from an excessive build up of bank lending rather than public debt as in the case of Greece. But, the banking crisis turned into a fiscal problem. In terms of unemployment, Ireland with an unemployment rate of 13.7 percent is among the worst-affected, after Spain which also witnessed a collapse in the property sector.

4.3 SPAIN

Spain like Ireland was considered a dynamic economy and till 2005 and attracted significant foreign investment. The economy witnessed a real estate boom with construction representing close to 16 per cent of GDP. This changed with the global crisis. In cumulative terms, housing prices fell significantly from 2007. As the real estate boom collapsed there was a rise in the levels of personal debt. On the public finances front, tax revenues collapsed, deficits soared and the budget position moved to a deficit of over 11 per cent in 2009. Interest rates on lending to companies and other categories showed an upward turn and financing continued to decline indicating weakness of the economy.

TABLE 4: GDP, GOVERNMENT DEFICIT/SURPLUS AND DEBT IN SPAIN

	2008	2009	2010	2011	2012
GDP mp (in million euro)	1 087 749	1 047 831	1 051 342	1 073 383	1094290
GDP Growth rate	0.9	-3.8	-0.2	-0.1	-1.6
Government deficit (-) / surplus (+) as a % of GDP	-4.5	-11.2	-9.3	-8.5	-10.6
Government debt as a % of GDP	40.2	53.9	61.2	68.5	86.0

Source: Eurostat news release euro indicators, accessed from europa.eu/rapid/press-release_STAT-12-62_en.doc.

The one difference that marks out Spain is that its public debt at about 60 per cent of GDP (in 2010) is low by euro zone standards. But the problem is on account of foreign exposure to its private debt. The Spanish banks have relied heavily on whole sale finance from abroad. Spain also has a very high rate of unemployment in comparison to the rest of the euro zone. Unemployment among youth is particularly high in Spain and remains a potential source of unrest.

4.4 PORTUGAL

While the Financial Crisis affected the Portuguese economy on account of which its fiscal deficit and public debt deteriorated from -3.1 per cent and 68 per cent of GDP (in 2007) to -10 per cent and 83 percent in 2009, the down turn in GDP growth for Portugal was one of the mildest (only -2.5 %) compared to a sharper decline in the rest of the euro zone. Public debt and deficit is also lower than Greece. In that respect, the situation of Portugal is unlike the other peripheral economies that witnessed a boom-bust situation. Portugal, however, has a significantly large external current account deficit and external debt fuelled largely by private sector borrowing. In terms of other social indicators that are critical for productivity, Portugal ranks low. For instance, as per the OECD surveys, Portugal has one of the lowest percentage of population

TABLE 5: GDP, GOVERNMENT DEFICIT/SURPLUS AND DEBT IN PORTUGAL

	2008	2009	2010	2011	2012
GDP mp	171 983	168 504	172 670	171 015	168286
GDP Growth rate	0.0	-2.9	1.9	-1.3	-3.2
Government deficit (-) / surplus (+)	-3.6	-10.2	-9.8	-4.2	-6.4
Government debt	71.6	83.1	93.3	107.8	124.1

Source: Eurostat news release euro indicators, accessed from europa.eu/rapid/press-release_STAT-12-62_en.doc.

With at least upper secondary education in the age group of 25 to 64 as compared to the EU average. Alongside, Portugal has also shown an increase in the structural rate of unemployment right from 2000. In other words, Portugal faces a somewhat different problem from some of the other peripheral economies, that is - of chronic low rate of growth.

4.5 ITALY

Italy is the eighth-largest economy in the world and the fourth-largest in Europe in terms of nominal GDP (in 2010). It has been a slow growth economy with GDP growth averaging just about 1 per cent per annum over 2000-07 as compared to close to 2 per cent for the euro zone.

TABLE 6: GDP, GOVERNMENT DEFICIT/SURPLUS AND DEBT IN ITALY

	2008	2009	2010	2011	2012
GDP mp	1 575 144	1 519 695	1 553 166	1 580 220	1617155
GDP Growth rate	-1.2	-5.5	1.7	0.4	-2.4
Government deficit (-) / surplus (+)	-2.7	-5.4	-4.6	-3.9	-3.0
Government debt	105.7	116.0	118.6	120.1	132.9

Source: Eurostat news release euro indicators, accessed from europa.eu/rapid/press-release_STAT-13-62_en.doc.

While its fiscal deficit at -4.6 per cent of GDP in 2010 is lower than the - 6 per cent for the euro zone, Italy's public debt and external debt ratios at 119 and 108 are rather large. Even though much of the public debt is held by its residents, it has large private tradable debt which makes it very difficult to rescue. While its unemployment rate at 8.4 per cent is lower than the average for the euro zone, Italy has always been characterized by north- south divide with the southern parts witnessing chronically high unemployment rates.

5. IMPLICATIONS OF EUROZONE CRISIS ON INDIAN ECONOMY

The unfolding of euro zone crisis, the austerity measures in advanced economies, recession in many euro zone countries, risk on/ risk off behaviour of investors and the uncertainty surrounding the future of euro zone have adversely affected the globaleconomy. The euro zone and EU account for about 19 and 25 per cent respectively of global GDP. The EU is a major trade partner for India accounting for about 20 per cent of India's exports and is an important source of foreign direct investment (FDI). A slowdown in the euro zone can eventually impact the EU and the world economy as well as India.

5.1 THE RISING TRADE DEFICIT AND CURRENT ACCOUNT DEFICIT

The global financial crisis, turned debt crisis, has seen a steep rise in commodity prices, especially gold. The increase in prices of the yellow metal is mostly driven by the meteorically increasing demand for safe havens to park the world's savings. This observation, in line with global trends, is easily explained by the declining real returns on the gamut of financial instruments available to the investor and soaring ones on gold (23.7 per cent annual average return between April 07 and March 2012 versus 7.3 per cent return on Nifty and 8.2 per cent on savings deposits.¹⁸ This has contributed to the high import bill and widening of the trade deficit. The trade deficit, as a result, increased to US\$ 189.8 billion in 2011-12, which was 10.2 per cent of the GDP. With invisible surplus of US\$ 111.6 billion (6.0 per cent of GDP), the current account deficit widened to record 4.2 per cent of GDP and further to 6.7% in the last three months of 2012.. This is unlike the situation during the 2008 crisis, when the high trade deficit of 9.8 per cent of GDP in 2008-09, was partly offset by an invisible surplus of 7.5 per cent, lowering CAD to 2.3 per cent of GDP.¹⁹ However, the situation has turned better in 2012-13 and 2013-14 (See table 7).

TABLE 7: TRENDS IN TRADE DEFICITS AND CURRENT ACCOUNT DEFICIT AS A % OF GDP

Year	Trade deficit	Current account deficit
2007-08	-7.4	-1.3
2008-09	-9.8	-2.3
2009-10	-8.7	-2.8
2010-11	-7.4	-2.8
2011-12	-10.2	-4.2
2012-13	-	4.7
2013-14	-	1.8

Source: Economic Survey, 2012-13, The Guardian 28 march, 2013, Livemint 28th March, 2013.

India's total external debt stood at \$376.3 billion at the end of December compared with \$345 billion six months earlier. Higher debt means higher interest payments, which deepen the current account deficit.²⁰ Further the uncertainty in euro markets and other parts of the world has led to deceleration in exports and a slowdown in GDP growth. Import demand however has remained resilient because of the continued high international oil prices that did not decline, unlike what happened after the Lehman meltdown of September, 2008. The country has negative trade balance with as many as 110 countries including China, Singapore, Germany, Indonesia, Australia and the UK.²¹ The high CAD has had implications for rupee volatility and business confidence in the economy. The finance minister in his budget speech 2013-14 has hinted at focusing on FDI, FII and ECBs to finance current account deficits. This however may make capital account vulnerable to a 'reversal' and 'sudden stop' of capital, especially in times of stress. And that fall in the growth rate of imports is greater than that of export is evident from the declining trade deficit in 2012-13 and 2013-14 which have been instrumental in lowering down of current deficit.

TABLE 8: INDIA -EU TRADE

Year	Exports (US \$ Million)	Percentage Change	Imports (US \$ Million)	Percentage change
2006-07	26831	15.51	29856	14.84
2007-08	34535	28.71	38450	28.72
2008-09	39351	13.95	42733	11.14
2009-10	36028	-8.45	38433	-10.06
2010-11	46819	29.95	44540	15.89
2011-12	52570	14.1	57295	28.6
2012-13	50320.3	-4.28	53067.5	-7.37

Source: Economic Survey of various years

TABLE 9: INDIA'S MAJOR DESTINATIONS OF EXPORTS (% OF TOTAL)

Country	2009-10	2010-11	2011-12
EU Countries	20	18.6	17.3
Africa	5.8	6.5	8.1
North America	11.6	10.7	11.9
ASEAN	10.1	10.9	12.0
EUROZONE 17 COUNTRIES			
Netherland	3.58	3.09	3.0
Germany	3.03	2.69	2.6
Belgium	2.10	2.51	2.4
France	2.17	2.02	1.5
Italy	1.90	1.81	1.6
Spain	1.14	1.02	1.0
Austria	0.14	0.43	0.1
Malta	0.40	0.30	0.3
Portugal	0.21	0.21	0.2
Greece	0.25	0.14	0.3
Ireland	0.15	0.11	0.1
Finland	0.12	0.10	0.1
Slovenia	0.11	0.07	0.1
Slovak Republic	0.02	0.02	0.02
Estonia	0.02	0.02	0.02
Cyprus	0.03	0.02	0.01
Luxemburg	0.12	0.11	0.1

Source: Economic Survey of various years

5.2 THE WEAKENING OF INDIAN CURRENCY

A sharp fall in rupee value may be explained by the supply-demand imbalance in the domestic foreign exchange market on account of slowdown in FDI inflows, strengthening of the US dollar in the international market due to the safe haven status of the US treasury, and heightened risk aversion and deleveraging due to the euro area crisis that impacted financial markets across emerging market economies (EMEs).²²

The rupee has been under pressure since August 2011, when US sovereign rating was downgraded and the euro zone crisis escalated. The currency went steadily downhill till the end of July, 2012, except for intermitted respite and appreciation in January-February 2012, mainly due to European Central Banks Long Term Refinancing Operation (LTRO) that injected more than euro 1 trillion in three-year loans to banks and created a risk-on environment. The rupee fell due to decline in exports on account of euro-zone crisis and widening of trade deficit, as imports remained resilient due to high oil prices and gold imports. The widening of trade deficit to 10.2 per cent of GDP in 2011-12 had upset the supply-demand balance in the domestic foreign exchange market, placing downward pressure on the currency.²³

TABLE 10: AVERAGE EXCHANGE RATE- RUPEE PER FOREIGN CURRENCY

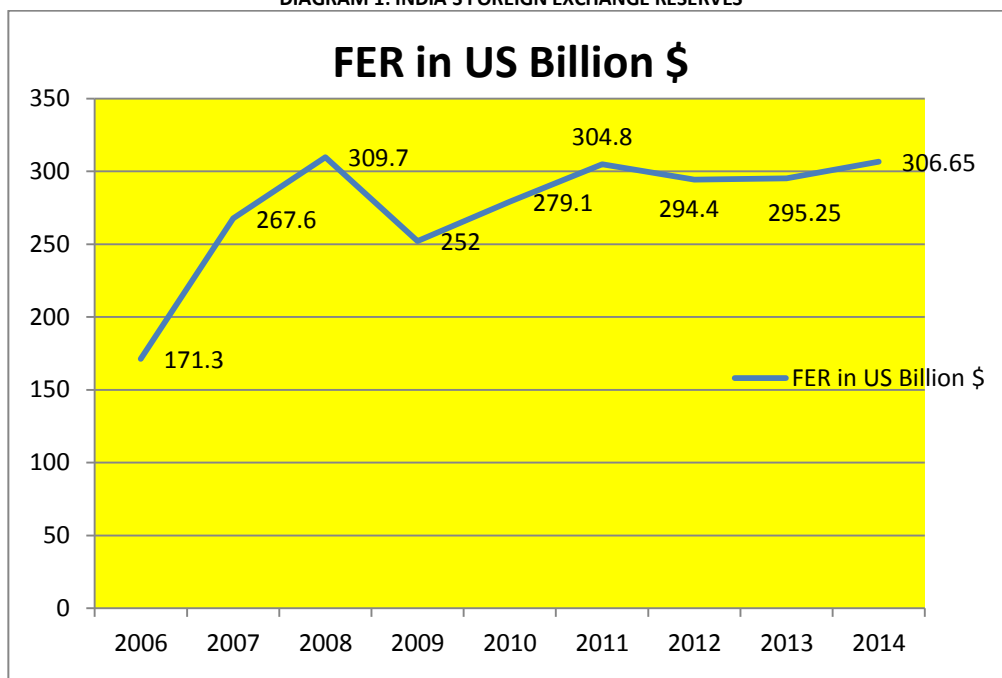
Year/Month	US \$	Euro	Year/Month	US \$	Euro
2010-11 (Average)	45.56	60.21	Dec -12	54.65	71.67
Apr -11	44.37	64.25	June-13	60.76	80.95
Sept. -11	47.63	65.47	Oct- 2013	61.53	84.86
Dec -11	52.68	69.29	Dec-2013	61.8194	85.37
April -12	51.81	68.19	Mar-2014	61.95	82.56
June -12	56.03	70.31	April 18	60.31	83.58

Source: Economic Survey: 2010-11, 2011-12, <http://www.ecb.europa.eu/>, <http://fx-rate.net/USD/INR/>

5.3 THE STAGNATION IN FERS

Foreign currency assets are maintained in major currencies like the US dollar, euro, pound sterling, Canadian dollar, Australian dollar and Japanese yen etc. Both the US dollar and the euro are intervention currencies, though the reserves are denominated and expressed in the US dollar only, which is the international numeraire for the purpose. The twin objectives of safety and liquidity have been the guiding principles of foreign exchange reserves management in India with return optimization being embedded strategy within this framework. Following the BOP crisis of 1990-91 that was essentially due to depletion of foreign exchange reserves, there was a conscious effort by the RBI to build up FER. This was done through buying foreign currency in the market during periods of surge in capital flows. As a result, FER levels increased from US\$ 5.8 billion in 1990-91 to US\$ 314.6 billion at end May 2008. The sharp decline in rupee in 2011-12 however led the RBI to inject foreign exchange to the extent of US\$ 20.1 billion to stem the rupee slide. The pressure on currency has continued in the financial year 2012-13 because of the ongoing euro-zone crisis. The import cover of FER, as a result, has declined from 14.4 months of imports in 2007-08 to 7.1 months in 2011-12. There are costs to intervention. The main cost is the release of corresponding rupee liquidity, when RBI intervenes in the market to buy foreign exchange. This may stoke inflation, which may not appeal in the current inflationary situation.²⁴

DIAGRAM 1: INDIA'S FOREIGN EXCHANGE RESERVES



Source: RBI report on currency and finance, 2012, The Economic Times, April 8, 2014.

Further there were concerns that ongoing crisis in eurozone would have dampening effects on FDI inflows in India. However the present study shows that the four nations of euro zone viz. Netherland, Cyprus, Germany and France constitute a major share (14%) of total FDI inflows in the country. Therefore it can be expected that euro zone slowdown would not have a significant impact on the inflow of FDI into India. The share of other euro zone countries has been marginal. Indeed the bleak economic scenario of euro zone and better growth prospects in India may however tilt the wave of FDI flows in India's favor and of course much depends upon how fast India pushes its reform process.

TABLE 11: FDI FLOWS FROM EUROZONE (In Rs crore)

Country	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
UK	-	3840	3094	12235	36428	5797
Netherland	2780	3922	4283	5501	6698	10054
Cyprus	3385	5983	7728	4171	7722	2658
Germany	2075	2750	2980	908	7452	4684
France	583	2098	1437	3349	3110	3487

Source: Department of Industrial Policy and Promotion website accessed on 31 March, 2013 and 17 April, 2014.

6. CONCLUDING REMARKS AND SUGGESTIONS

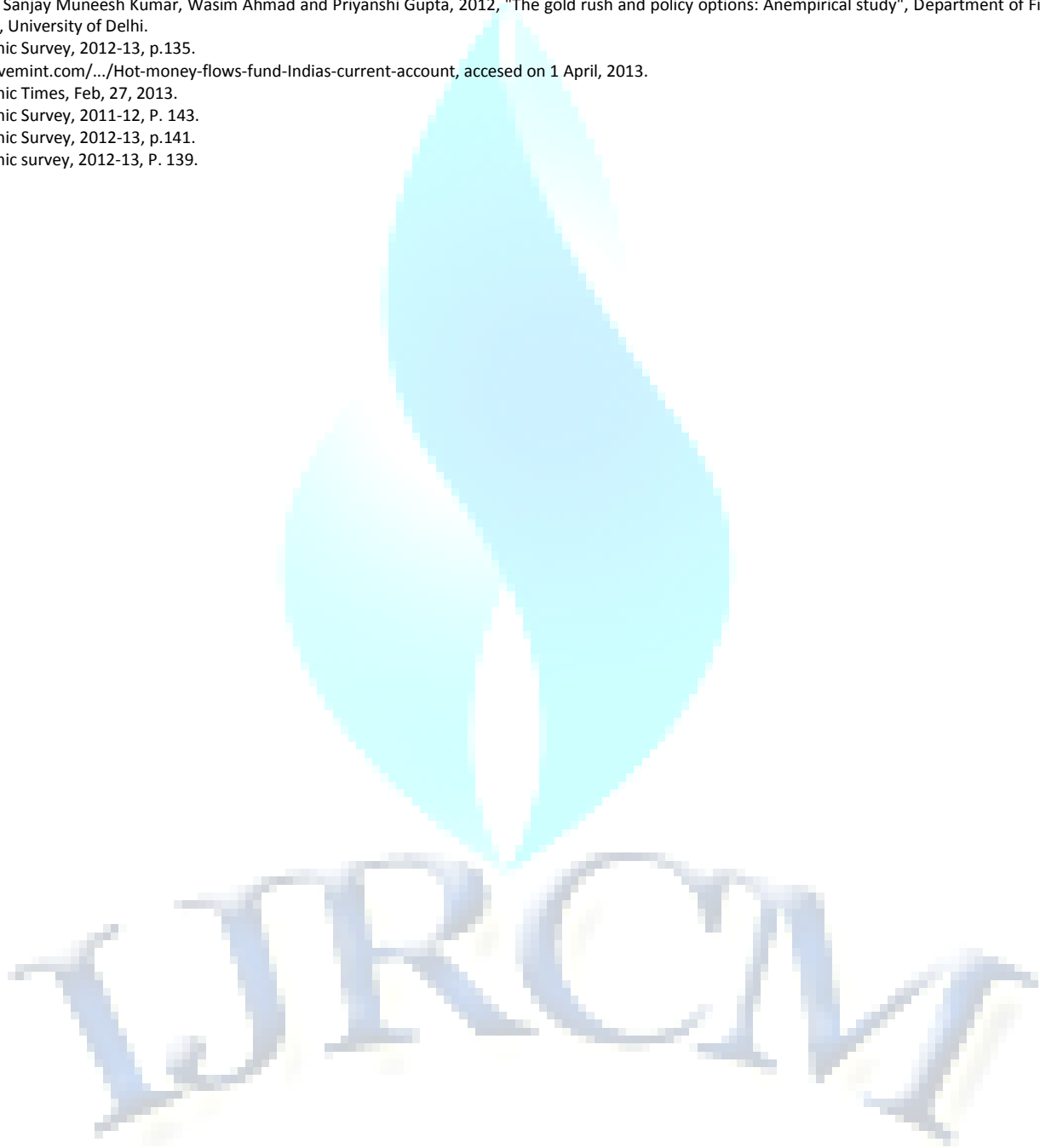
The global financial crisis demonstrated that the globalised banking system played a crucial role in transmitting the crisis from the advanced economies to various parts of the world, including the emerging markets. The eurozone crisis further exhibited how far sovereign debt and fiscal imprudence can lead to economic disasters. The manner in which the current crisis is dealt is important for the Euro zone, Europe and rest of the world. For dealing with the Eurozone crisis, three possible alternatives are being suggested.

1. The first is the route of fiscal prudence. Austerity will have some social and political costs but the house should be set in order first. While fiscal consolidation is desirable, the question is whether, at all, this choice will lead to sustained growth in the near future, since the compression at this juncture would be extreme. Real growth is stagnating and prospects of exports leading growth appear dim. The peripheral economies are subject to a large mismatch between revenues and expenditure at the level of the government and at the household level leading to unsustainable governments and private debt. The possibility that these economies will grow themselves out of the problem seems remote. In any case, this choice does not address the structural problems faced in the peripheral economies. Therefore, the current strategy of announcing short term palliatives such as further bail outs along with sharp fiscal consolidation may only prolong the agony but not deal with the uncertainty prevailing in the euro zone.
2. The Eurozone budget is just 1% of European Union GDP. The second choice would be to go in for a closer fiscal union and a substantially enlarged European budget with a limited system of fiscal transfers from rich countries to the poor countries, a common form of protection for employment on the German lines with more flexibility, greater cross border investment even if this implies takeover of sick and ailing public sector units by companies from the richer Euro zone states. The role of ECB needs to be redefined so that it could act as a pure central bank. It is necessary to build an institutional framework that permits a multi speed Europe on the lines of US which confirms to the tenets of OCA.
3. In the short term, it may still be possible to come up with a set of policy measures that can put the eurozone on track like a more generous ECB, more action on debt and bank resolutions including more debt write-downs, and some steps towards greater risk-sharing via a move towards a banking union.

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6. Greece failed to qualify the convergence criteria but was later admitted on 1 January 2001.
7. Uri Dadush, "Paradigm Lost-The Euro in crisis", Carnegie Endowment for international peace, 2010, p.9.
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EFFECT OF DIVIDEND ON SHARE'S VOLUME, SHARE'S TURNOVER AND SHARE'S TRADING WITH SPECIAL REFERENCE TO BANKING AND AUTO INDUSTRY: AN INDIAN PERSPECTIVE

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ABSTRACT

This study explores the impact of dividends on share's volume, share's turnover and share's trading in the context of Banking and Auto Industry in India. The main objective of our present study is to measure the effect of dividend decision on share's volume, share's turnover and share's trading and to visualize the relevant changes before and after declaring dividends are similar in both industries or not. In this study, we have used two types of industries. We have considered mainly two sectors, which are service sector i.e. Banking Industry and manufacturing sector i.e. Auto Industry. This empirical research is based on 20 companies, which have been equally selected from 2 different sectors. The share's volume, the share's turnover and the share's trading of selected 20 companies were collected as well as tabulated from www.capitaline.com and dividend declaring dates from www.bseindia.com, constituted the main sources of data for the present study. The secondary data have been analyzed in order to determine the impact of dividend decision on share's volume, share's turnover and share's trading with the help of significant statistical test in our study followed by findings and conclusion.

KEYWORDS

Dividend, share's volume, share's turnover, share's trading, service sector, manufacturing sector, relevant changes, India.

PRELUDE

It is presumed that dividends play an important role in attracting investments in shares. Dividends also act as barometers of financial soundness and solvency, managerial efficiency and overall growth of an organization. Investors' expectations are mostly affected by the management's policy regarding the declaration and disbursement of dividends. The dividend policy of firm determines what proportion of earnings is paid to shareholders in the form of dividends and what proportion is ploughed back in the firm for reinvestment purpose. Both growth and dividends are desirable, but there must be a proper tradeoff between the two variables. A higher dividend means less provision of funds for growth and expansion and higher retained earning means low dividends. Dividend payment should be preferred if it leads to maximization of shareholders' wealth. On the contrary, retention is the suitable alternative for the overall growth of companies. Dividend and value of firm should be taken as the overall consideration for affecting an optimal dividend policy. However, there are certain schools of thoughts who give conflicting opinions to this aspect. According to the dividend discount model of Gordon (1959), it is feasible to derive that the dividend payment augmentation should be accompanied by the value increase in a firm. Miller and Modigliani (1961), however, point out that the value of a firm is not influenced by current and future dividend decisions, which was well recognized as the dividend irrelevance theory.

REVIEW OF EXISTING LITERATURE

In the book "Security Analysis: Principles and Techniques" (1951), by Graham and Dodd, it is stated that, the stock market places considerably more weight on dividends than on retained earnings.

John F. Muth, "Rational Expectations and the Theory of Price Movements" 1961. In a world of rational expectations, unexpected dividend announcements would transmit messages about changes in earnings potential, which were not incorporated in the market price earlier. The re-appraisal that occurs as a result of these signals leads to price movements, which took like responses to the dividends themselves, though they are actually caused by an underlying revision of the estimate of earnings potential.

M. H. Miller and F. Modigliani, "Dividend Policy, Growth and the Valuation of Shares," Journal of Business, vol. 34, October 1961. Miller and Modigliani have advanced the view that the value of firm depends solely on its earnings power and is not influenced by the manner in which its earnings are split between dividends and retained earnings. The view is referred to as the 'dividend irrelevance theorem'.

Myron J. Gordon, "The Investment, Financing and Valuation of the Corporation, Homewood, Ill, Richard Irwin, 1962. Gordon leads to conclusions, which are similar to that of the Walter's. Moreover, Gordon's model contends that dividend policy of the firm is relevant and the investors put a positive premium on current incomes/dividends. He argues that dividend policy affects the value of shares even in a situation in which the return on investment of a firm is equal to the required rate ($r = k_e$).

James Walter, "Dividend Policy: It's Influence on the Value of the Firm," Journal of Finance, May 1963. According to Walter, dividend payout ratio do affect the share prices - (1) when the rate of return on investments exceeds the cost of capital, the price per share increases as the dividend payout ratio decreases, (2) when the rate of return on investment is equal to the cost of capital, the price per share does not change in dividend payout ratio, (3) when the rate of return on investments is less than the cost of capital, the price per share increases as the dividend payout ratio increases.

Dr. Debasish Sur, in a case study "Dividend payout trends in the postliberalization era: A Case Study of Colgate Palmolive (I) Ltd." Management Accountant, March 2005, made a deliberate attempt to assess the dividend policy of the company with particular reference to its vital measures – dividend per share and dividend payout ratio and three factors influencing dividend policy earning per share, capital employed and quick ratio.

OBJECTIVES OF OUR STUDY

The objectives of our study are stated as follows:-

1. To ascertain the impact of changes of share volume after declaring dividends in both the sectors.
2. To estimate the impact of changes of share turnover after declaring dividends in both the sectors.
3. To predict the impact of changes of share trading after declaring dividends in both the sectors.

METHODOLOGY

At first, we have selected two industries i.e. Banking Industry and Auto Industry. The first one represents the service sector and the other one represents the manufacturing sector which are operating in India. After that we have selected 10 companies randomly with the help of random number table from each industry. The share's volume, the share's turnover and the share's trading of selected 20 companies were collected as well as tabulated from www.capitaline.com and dividend declaring dates from www.bseindia.com, constituted the main sources of data for the present study. The secondary data have been analyzed in order to determine the impact of dividend decision on share's volume, share's turnover and share's trading with the help of significant statistical test in our study followed by findings and conclusion.

HYPOTHESIS OF THE STUDY

We have formulated the following hypothesis in order to achieve the above mentioned objectives of our present study.
H0: There is no significant difference between the Share's Volume of selected companies one month before and after declaring dividend.
H1: There is significant difference between the Share's Volume of selected companies one month before and after declaring dividend.
H0: There is no significant difference between the Share's Turnover Prices of selected companies one month before and after declaring dividend.
H1: There is significant difference between the Share's Turnover of selected companies one month before and after declaring dividend.
H0: There is no significant difference between the Share's Trading of selected companies one month before and after declaring dividend.
H1: There is significant difference between the Share's Trading of selected companies one month before and after declaring dividend.

ANALYSIS, FINDINGS AND INTERPRETATION

We have considered three variables which are Share's Volume, Share's Turnover and Share's Trading for the purpose of analysis. As we are interested to know the before and after effect of Share's Volume, Share's Turnover and Share's Trading in the context of declaration of dividend, so we have considered paired "t-test" in our study. The test statistic is as follows:

$$t = \frac{\bar{D} - 0}{(S.D.)/\sqrt{n}}$$

Where,
 \bar{D} = Mean of Difference
 S. D. = Standard Deviation of differences
 n = Number of matched pairs

ANALYSIS OF SHARE'S VOLUME BEFORE AND AFTER DECLARING DIVIDEND

We have calculated the monthly share's Volume before and after declaring dividends and applied t-test and the results are as under:

TABLE NO. -1.1: EVALUATION OF SHARE'S VOLUME BEFORE AND AFTER DECLARING DIVIDEND

AUTO INDUSTRY - VOLUME

Company Name	Before	After	D	D ²
Tata Motors Ltd	1136323	16350279	-15213956	231,464,457,169,936
Bajaj Auto Ltd	21546	640920	-619374	383,624,151,876
Maruti Suzuki Ltd.	97364	2128334	-2030970	4,124,839,140,900
Ashok Leyland	748300	6179208	-5430908	29,494,761,704,464
Hero Motocorp	16980	1019242	-1002262	1,004,529,116,644
Eicher Motors Ltd.	485	29069	-28584	817,045,056
Mahindra & Mahindra Ltd	150184	1806126	-1655942	2,742,143,907,364
VST Till Tract	1790	34798	-33008	1,089,528,064
TVS Motors Ltd	93178	15105185	-15012007	225,360,354,168,049
Hindusthan	86931	2129215	-2042284	4,170,923,936,656
Σ D			-43069295	498747539869009
Σ D/n = \bar{D}			-4306929.5	

Source: www.capitaline.com

FINDINGS

We have got the following result by applying t-test.

\bar{D}	n	S.D.	t _c	t _T
-4306929.5	10	5899633.912	-2.31	±2.262

INTERPRETATION

Since the value of 't' in the table at 5% level of significance with n-1 = 9 degree of freedom, is less than the calculated value in case of share's volume of the selected auto companies declaring dividends, hence the H1 is significant and accepted. From the above findings, it is clear that dividends affect the share's volume, i.e. there is significant change in the volume of share after declaring dividend in Auto Industry.

TABLE NO. - 1.2: EVALUATION OF SHARE'S VOLUME BEFORE AND AFTER DECLARING DIVIDEND

BANKING INDUSTRY - VOLUME

Company Name	Before	After	D	D ²
State Bank of India	922340	6149833	-5227493	27,326,683,065,049
Canara Bank	72801	1719382	-1646581	2,711,228,989,561
Punjab National Bank	150798	1551351	-1400553	1,961,548,705,809
ICICI Bank	436667	6590399	-6153732	37,868,417,527,824
Bank of Baroda	172733	2336681	-2163948	4,682,670,946,704
karur Vysya Bank	8343	437159	-428816	183,883,161,856
Corporation Bank	11959	187811	-175852	30,923,925,904
State Bank of Mysore	1809	18689	-16880	284,934,400
Jammu Kashmir Bank	7186	120477	-113291	12,834,850,681
S B T	2264	26659	-24395	595,116,025
Σ D			-17351541	74779071223813
Σ D/n = \bar{D}			-1735154.1	

Source: www.capitaline.com

FINDINGS

We have got the following result by applying t-test.

\bar{D}	N	S.D.	t_c	t_T
-1735154.1	10	2227890.72	-6.11	± 2.262

INTERPRETATION

Since the value of 't' in the table at 5% level of significance with n-1 = 9 degree of freedom, is less than the calculated value in case of share's volume of the selected banking companies declaring dividends, hence the H1 is significant and accepted. From the above findings, it is clear that dividends affect the share's volume, i.e. there is significant change in the volume of share after declaring dividend in Banking Industry.

ANALYSIS OF SHARE'S TURNOVER BEFORE AND AFTER DECLARING DIVIDEND

We have calculated the monthly share's turnover before and after declaring dividends and applied t-test and the results are as under:

TABLE NO. – 2.1: EVALUATION OF SHARE'S TURNOVER BEFORE AND AFTER DECLARING DIVIDEND

AUTO INDUSTRY - TURNOVER

Company Name	Before	After	D	D ²
Tata Motors Ltd	325755.30	4435384.32	-4109629	16,889,050,682,026
Bajaj Auto Ltd	42542.86	1124686.59	-1082144	1,171,035,052,378
Maruti Suzuki Ltd	133656.66	3233660.42	-3100004	9,610,023,312,014
Ashok Leyland	16995.67	115360.80	-98365.13	9,675,698,800
Hero Moto corp.	28435.00	1548576.64	-1520142	2,310,830,605,662
Eicher Motors Ltd.	1344.65	80631.81	-79287.16	6,286,453,741
Mahindra & Mahindra Ltd	132640.15	1575519.74	-1442880	2,081,901,511,239
VST Till Tract	626.62	12085.47	-11458.85	131,305,243
TVS Motors Ltd	3630.10	563137.98	-559507.9	313,049,067,782
Hindusthan	793.70	19190.17	-18396.47	338,430,108
ΣD			-1202181.3	32392322118994
$\Sigma D/n = \bar{D}$			-1202181.3	

Source: www.capitaline.com

FINDINGS

We have got the following result by applying t-test.

\bar{D}	N	S.D.	t_c	t_T
-1202181.3	10	1411851.556	-2.69	± 2.262

INTERPRETATION

Since the value of 't' in the table at 5% level of significance with n-1 = 9 degree of freedom, is less than the calculated value in case of share's turnover of the selected auto companies declaring dividends, hence the H1 is significant and accepted. From the above findings, it is clear that dividends affect the share's turnover, i.e. there is significant change in the turnover of share after declaring dividend in Auto Industry.

TABLE NO. – 2.2: EVALUATION OF SHARE'S TURNOVER BEFORE AND AFTER DECLARING DIVIDEND

BANKING INDUSTRY - TURNOVER

Company Name	Before	After	D	D ²
State Bank of India	1977147.52	13256394.75	-11279247	127,221,418,075,463
Canara Bank	30980.32	701454.98	-670474.7	449,536,269,702
Punjab National Bank	121833.98	1145766.14	-1023932	1,048,437,068,282
ICICI Bank	460032.54	7147973.63	-6687941	44,728,556,023,310
Bank of Baroda	123705.84	1575434.50	-1451729	2,107,516,102,265
karur Vysya Bank	3965.11	199516.53	-195551.4	38,240,357,864
Corporation Bank	4822.57	71841.95	-67019.38	4,491,597,296
State Bank of Mysore	1056.61	10714.74	-9658.13	93,279,475
Jammu Kashmir Bank	9164.81	147021.54	-137856.7	19,004,478,006
S B T	1233.04	14371.96	-13138.92	172,631,219
ΣD			-21536548	175617465882883
$\Sigma D/n = \bar{D}$			-2153654.8	

Source: www.capitaline.com

FINDINGS

We have got the following result by applying t-test.

\bar{D}	n	S.D.	t_c	t_T
-2153654.8	10	3789388.34	-1.80	± 2.262

INTERPRETATION

Since the value of 't' in the table at 5% level of significance with n-1 = 9 degree of freedom, is more than the calculated value in case of share's turnover of the selected banking companies declaring dividends, hence the H0 is significant and accepted. From the above findings, it is clear that dividends do not affect the share's turnover, i.e. there is no significant change in the turnover of share after declaring dividend in Banking Industry.

ANALYSIS OF SHARE'S TRADING BEFORE & AFTER DECLARING DIVIDEND

We have calculated the monthly share's trading before and after declaring dividends and applied t-test and the results are as under:

TABLE NO. – 3.1: EVALUATION OF SHARE'S TRADING BEFORE AND AFTER DECLARING DIVIDEND

AUTO INDUSTRY – No. of TRADE

Company Name	Before	After	D	D ²
Tata Motors Ltd	13830	202307	-188477	35,523,579,529
Bajaj Auto Ltd	1211	39459	-38248	1,462,909,504
Maruti Suzuki Ltd.	4007	103632	-99625	9,925,140,625
Ashok Leyland	1761	15124	-13363	178,569,769
Hero Motocorp	1048	48490	-47442	2,250,743,364
Eicher Motors Ltd.	193	6478	-6285	39,501,225
Mahindra & Mahindra Ltd	4917	53504	-48587	2,360,696,569
VST Till Tract	123	1358	-1235	1,525,225
TVS Motors Ltd	604	74191	-73587	5,415,046,569
Hindusthan	228	3344	-3116	9,709,456
Σ D			-519965	57167421835
Σ D/n = \bar{D}			-51996.5	

Source: www.capitaline.com

FINDINGS

We have got the following result by applying t-test.

\bar{D}	n	S.D.	t_c	t_r
-51996.5	10	57861.00	-2.84	±2.262

INTERPRETATION

Since the value of 't' in the table at 5% level of significance with n-1 = 9 degree of freedom, is less than the calculated value in case of share's trading of the selected auto companies declaring dividends, hence the H1 is significant and accepted. From the above findings, it is clear that dividends affect the share's trading, i.e. there is significant change in the trade of share after declaring dividend in Auto Industry.

TABLE NO. – 3.2: EVALUATION OF SHARE'S TRADING BEFORE AND AFTER DECLARING DIVIDEND

BANKING INDUSTRY – No. of TRADE

Company Name	Before High	After High	D	D ²
State Bank of India	48159	335481	-287322	82,553,931,684
Canara Bank	1777	50069	-48292	2,332,117,264
Punjab National Bank	5860	57118	-51258	2,627,382,564
ICICI Bank	11241	213405	-202164	40,870,282,896
Bank of Baroda	5003	59064	-54061	2,922,591,721
karur Vysya Bank	445	5569	-5124	26,255,376
Corporation Bank	734	7542	-6808	46,348,864
State Bank of Mysore	192	1925	-1733	3,003,289
Jammu Kashmir Bank	696	14400	-13704	187,799,616
S B T	421	2794	-2373	5,631,129
Σ D			-672839	131575344403
Σ D/n = \bar{D}			-67283.9	

Source: www.capitaline.com

FINDINGS

We have got the following result by applying t-test.

\bar{D}	N	S.D.	t_c	t_r
-67283.9	10	97925.21	-2.17	±2.262

INTERPRETATION

Since the value of 't' in the table at 5% level of significance and with degree of freedom n-1 = 9, is more than the calculated value in case of share's trading of the selected banks declaring dividends, hence the H0 is significant and accepted. From the above calculations, it is clear that the dividends do not affect the share's trading, i.e. there is no significant change in the trading of share after declaring dividend in Banking Sector.

CONCLUSION

From the analysis and findings of our study it may be concluded that dividends affect the share's volume, i.e. there is significant change in the volume of share after declaring dividend in Auto Industry as well as Banking Industry. It may be further concluded that dividends affect the share's turnover, i.e. there is significant change in the turnover of share after declaring dividend in Auto Industry but we have got the contradictory result in the case of Banking Industry i.e. there is no significant change in the turnover of share after declaring dividend in Banking Industry. Lastly, it may be stated that that dividends affect the share's trading, i.e. there is significant change in the trade of share after declaring dividend in Auto Industry but there is no significant change in the trading of share after declaring dividend in Banking Sector.

Finally, we can say that share's volume, turnover, and trade of share are always affected by the dividend in case of Auto Industry but only dividend affects the share's volume in case of Banking Industry.

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WOMEN ENTREPRENEURSHIP: PROBLEMS & PROSPECTS

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ABSTRACT

Entrepreneurship is presently the most discussed and encouraged concept all over the world to overcome economic challenges. Women being the vital gender of the overall population have great capacity and potential to be the contributor in the overall economic development of any nation. Therefore, programs and policies need to be customized to not just encourage entrepreneurship as well as implement strategies which can help support entrepreneurial culture among youth and women. But among women, there is need for training the already existing women entrepreneurs, in the various aspects of management. Women entrepreneurs faced so many problems in aspects of financial, marketing, health, family, and problems. Some guidelines should be given by the govt. and the financial institution to the women entrepreneur at time to time. What women need for enterprises little training, some financial support and motivation at all levels-home, the society and the government. The Government must make greater efforts to publicize the various schemes announced from time to time to attract women entrepreneurs.

KEYWORDS

Entrepreneurship, women entrepreneurs.

INTRODUCTION

Entrepreneurship is necessary to initiate the process of economic development of both developed and developing countries. It is also instrumental in sustaining the process of economic development. Every country tries to achieve economic development for prosperity and better life to people. So, contribution of both men and women is essential in economic activities for healthy nation building. But in India, women have to face many constraints in carrying out economic activities or undertaking any entrepreneurial work. Women have to face various socio-economic and other problems as entrepreneurs as they are not treated at par with men due to social and cultural traditions. In recent years, it is observed that there has been increasing trend in number of women enterprises in India as the result of changing scenario of the present world.

In this period of globalization of world trade, an increasing role is being assigned to the private sector in many developing countries. In parallel to, and as part of this shift, there has been the emergence of the micro and small-scale enterprise (MSE) sector as a significant component in economic development and employment. In many countries this sector – with both its informal and formal components – has increasingly been seen as a means of generating meaningful and sustainable employment opportunities, particularly for those at the margins of the economy – women, the poor and people with disabilities.

While women are active in MSEs, they face particular problems and challenges in developing their businesses. In addition to those problems faced by all small-scale entrepreneurs, it is commonly asserted that women frequently face gender bias in the socio-economic environment in which they operate. They face additional or at least different social, cultural, educational and technological challenges than men when it comes to establishing and developing their own enterprises, and accessing economic resources. Furthermore, it is recognized that women in most societies carry the added burden of family and domestic responsibilities, and this has a detrimental or limiting impact upon their ability to generate income outside of the home.

DEFINITION OF WOMEN ENTREPRENEUR ENTERPRISE

“A unit of organization relating to service or business enterprise managed by one or more women entrepreneurs having individually or jointly a share capital of not less than 51% as shareholders of the private company, limited company or members of Co-Operative society”.

MOTIVATIONAL FACTORS FOR WOMAN ENTREPRENEURS

Contemporary trends in business world have increased the fertility rate for entrepreneurship development globally. Large organizations lead to challenging situations in all spheres therefore small & medium scale enterprises are encouraged to open up new business avenues with new and diversified products and services to satisfy the consumer needs by cutting costs at the same time. Motivational factors influencing woman to join the leading group of entrepreneurs are of two types. One is entrepreneurship by choice, and the other is entrepreneurship by necessity.

Women become entrepreneurs by choice due to the following factors:

- To materialize their idea into a capital
- For their empowerment and freedom
- To prove their worth among their male family members
- To establish their own rules for their work
- To overcome the deficiencies they faced during their job experience
- A long term standing desire to own their own company
- Working for someone else did not appeal to them

By necessity they are motivated to be entrepreneurs are:

- To improve the quality of life of their children
- To share the family economic burden
- To adjust and manage household and business life successfully on their own terms
- Due to the death or sickness of their husband

Other than these motivational factors some secondary motivations also exist among women entrepreneurs.

- Women want fair treatment and improved compensation
- Prior industry & work experience as a very important factor in determining their startups success.
- Women believe more than man that prior experience is crucial
- Many women believe that a track record is particularly valuable under these conditions because it demonstrates their confidence.

Certain social factors also prevail as far as the women opting for entrepreneurship.

- Socio-economic factors
- Money is not the sole objective
- Building their own self-confidence
- Want to contribute something positive to the community

- Bring out their creativity and turn it into an innovation
- Materialize their ideas
- Economic independence
- Establishing their own creative idea
- Establishing their own identity
- Achievement of excellence
- Building self confidence
- Developing risk taking ability
- Motivation
- Equal status in society
- Greater freedom & mobility

CHALLENGES FACED BY WOMEN ENTREPRENEURS

The literature review emphasizes on the following critical problems faced by women entrepreneurs.

- **Access to Finance:** It is considered as a key issue to women. Accessing credit, particularly for starting an enterprise, is one of the major constraints faced by women entrepreneurs. Women often have fewer opportunities than men to gain access to credit for various reasons, including lack of collateral, unwillingness to accept household assets as collateral and negative perceptions of female entrepreneurs by loan officers. Sometimes, credit may be available for women through several schemes but there are bottlenecks and gaps, and the multiplicity of schemes is often not adequately listed nor is there networking among agencies. As a result, clients approaching one institution are sometimes not made aware of the best option for their requirements. A study shows that more than 50 per cent of the women used their own funds or funds borrowed from their spouse or family to set up their business. Most of the entrepreneurs rely on family finance or at the maximum on partners and friends. Lack of access to capital has been a primary obstacle for women entrepreneurs. Research suggests that the primary source of finding for women has been through family loans, personal savings, credit cards and home equity loans.
- **Problem of Labor:** Study observed that the women entrepreneurs in the selected group face various labor problems in their units.
- **Lack of Relevant Education and Experience:** Women tend to have an educational background which is less relevant in preparing them for business ownership. More women have training in 'non-practical', traditional 'female' subjects such as arts and they lack more directly professional qualification. They also lack relevant managerial and entrepreneurial experience. Women also tend to be less likely to have had education and experience relevant to starting and managing a business and thus less potential for success. Gaining relevant skills and knowledge can also be more difficult for women since they frequently have double work burden and childcare responsibilities, thus making them less able than men to attend formal and informal trainings. The analysis of the research done on women entrepreneurs in India with reference to education-wise information reveals that 58% women entrepreneurs possessing metric level of education face this problem to a great extent, one-fourth women entrepreneurs possessing graduate level of education and 36% post graduate level face the problem of getting information up to a great extent. Low-level education provides low-level self-confidence and self-reliance to the women folk to engage in business, which is continuous risk taking and strategic decision making profession.
- **Conflicts between Work and Domestic Commitments:** Women's family obligations also bar them from becoming successful entrepreneurs in both developed and developing nations. "Having primary responsibility for children, home and older dependent family members, few women can devote all their time and energies to their business". It has been suggested that many women enter self-employment to gain more control over their time and to achieve greater personal autonomy. For all small business owners, running a business involves long hours, but because domestic duties and child-care are frequently seen as women's responsibility, many business women face conflicts in their roles as wife, mother, and business owner. It is common to find the female business owners, particularly those who are mothers, displaying the feeling of guilt because they do not fulfill the traditional female role. Domestic responsibility may mean that the female entrepreneurs face problems allocating sufficient time to the business. The demands associated with running the business and home may therefore restrict the growth and potential success of many women-owned businesses. Lack of family support worsens the problem.
- **Access to Training:** Women have limited access to vocational and technical training in South Asia. Report suggests that women are often unaware of the training opportunities.

WAYS TO DEVELOP WOMEN ENTREPRENEURS

- Consider women as specific target group for all developmental programmers.
- Better educational facilities and schemes should be extended to women folk from government part.
- Adequate training program on management skills to be provided to women community.
- Encourage women's participation in decision-making.
- Vocational training to be extended to women community that enables them to understand the production process and production management.

GOVERNMENT MEASURES IN SUPPORT OF WOMEN ENTREPRENEURSHIP

A network of organizations is there in the state, which provides loan facilities as well as training, consultancy, and marketing services to the women entrepreneurs. Following are the most prominent institutions and the important services rendered by them.

- **FINANCIAL ASSISTANCES:** The following institutions are functioning in the state for providing financial assistance to women entrepreneurs.
 - Small Industries Development bank of India (SIDBI)
 - The National Small Industries Corporation Ltd. (NSIC)
 - Khadi & Village Industries Commission (KVIC)
 - National Bank For Agricultural And Rural Development (NABARD)
 - Coconut Development Board
 - Bank Of India
 - State Bank Of India
- **CONSULTANCY SERVICES:** Lack of access to information is a major barrier of the Small scale sector especially of the women entrepreneurs. In the initial stage of formation of a unit the most important problems are identification of a feasible and viable project, selection of the suitable technology etc. The following institutions are engaged with guidance and consultancy services to the Small sector in the State.
 - Coconut Development Board
 - The Rubber Board
- **ENTREPRENEURSHIP DEVELOPMENT AND TRAINING:** The State enjoys the credit for high rate of female literacy and female development index in the country. Even though the development index of women in the state is comparable to that of developed countries their participation in the entrepreneurial scenario is very low. With the objective of promoting women entrepreneurship a number of institutions are functioning in the State to impart awareness on opportunities and to provide skill based training to women.
 - District Industries Centers (DICs)

- Centre For Management Development (CMD)
- Khadi And Village industries commission (KVIC)
- Rubber Board
- Science And Technical Entrepreneurship Development Programme (STED)
- Small Entrepreneurs Promotion and Training Institute.
- Small Industries Development Organisation (SIDO)
- Small Industries Service Institute (SISI)
- **ASSISTANCE FOR MARKETING:** Success of any manufacturing enterprise will depend on its ability to market its products. One of the major barriers in the operation of women enterprises is marketing outlet. Marketing is considered as the most important entrepreneurial function based on which the entire success of the enterprise will be determined. A brief sketch of the organizational support for marketing the products of women enterprises is given in the following paragraphs.
 - National Bank For Agriculture And Rural Development (NABARD)
 - Marketing CDS products.

SIDCO has several schemes for the marketing of products produced in the SS1 sector. It has launched a special scheme for the marketing of products produced in the Community Development Societies with special preference for products produced by women enterprises. SIDCO collect quality products from CDS units and marketing them to the end consumers. SIDCO on behalf of the Small Scale Industrial units in the state will participate in tenders floated by Central and State government departments and organizations.

- **INFRASTRUCTURE:** State provides special care for the development of infrastructure for the development of women enterprises. The efforts of the state in this direction are supplemented by the Central scheme called "Integrated infrastructure development" (IID). National Programme for Rural industrialization (NPRID) is another Central Govt. Scheme to set up Industrial clusters in Rural and backward areas.
 - **Small Scale industries Development Corporation (SIDCO):** It is the nodal agency for the development of small scale industries in the state. It is in charge implementing the scheme of one industrial park in each. It is entrusted with the responsibility for the allotment of industrial sheds and spaces for setting up of units in mini industrial Estates, Industrial Estates.
 - **Women Entrepreneurs Development Cells (WEDC):** District Industries Centres, Department of industries and Commerce, Rural Banks, and Small Industries Service Institute have separate Women Entrepreneurship Development Cell. The chief objectives of the cell is the motivation of women entrepreneurs by extending all kinds of support and assistance, information and advice, technology and finance, supply of raw materials and marketing of finished goods etc.

RECOMMENDATIONS

- Increase the ability of women to participate in the labour force by ensuring the availability of affordable child care and equal treatment in the work place. More generally, improving the position of women in society and promoting entrepreneurship generally will have benefits in terms of women's entrepreneurship.
- Listen to the voice of women entrepreneurs. The creation of government offices of women's business ownership is one way to facilitate this. Such offices could have programme responsibilities such as providing women's business centres, organising information seminars and meetings and/or providing web-based information to those wanting to start and grow a business.
- Incorporate a women's entrepreneurial dimension in the formation of all SME-related policies. This can be done by ensuring that the impact on women's entrepreneurship is taken into account at the design stage.
- Promote the development of women entrepreneur networks. These are major sources of knowledge about women's entrepreneurship and valuable tools for its development and promotion. Co-operation and partnerships between national and international networks can facilitate entrepreneurial endeavours by women in a global economy.
- Periodically evaluate the impact of any SME-related policies on the success of women-owned businesses and the extent to which such businesses take advantage of them. The objective should be to identify ways to improve the effectiveness of those that should be retained. Good practices that are identified in this way should be disseminated and shared internationally.
- Improve the factual and analytical underpinnings of our understanding of the role of women entrepreneurs in the economy. This requires strengthening the statistical basis for carrying out gender-related cross-country comparative analyses and longitudinal studies of the impact of important developments and policies, especially over time.

CONCLUSION

Women entrepreneurs faced so many problems in aspects of financial, marketing, health, family, and problems. Some guidelines should be given by the gov. and the financial institution to the women entrepreneur at time to time. What women need for enterprises little training, some financial support and motivation at all levels-home, the society and the government.

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REVERSE INNOVATION AS A PERSUASIVE MARKETING TOOL

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ABSTRACT

Innovation is a key phenomenon in business world which is believed to be the righteous of western countries because of their ability to undertake rigorous and intensive research and development work. Usually the sophisticated technological innovations and inventions originated in developed countries and later on flowed to emerging countries as per their affordability and requirements. But, in present era, innovations are progressively taking place in emerging countries and then launched in the developed countries as per their demands, which is termed as reverse innovation. The main drivers of this reverse flow of innovations from developing countries to western markets are rising level of income and growth in emerging countries, fast pace of internationalization in the global economy and slowing down of rich countries. The paper examines different case studies of companies which help to explain the benefits reaped by them in terms of their increased profits, revenues and positioning across the world.

KEYWORDS

Emerging countries, Innovation, Reverse innovation.

INTRODUCTION

A reverse innovation is any innovation likely to be adopted first in the emerging country with an intention to launch it later in the western or developed nations, i.e. Companies develop products in countries such as China and India, and then distribute them globally. This term was coined by leading business strategists Vijay Govindarajan and Chris Trimble which is also popularly known as Trickle-up Innovation. Taking the Indian scenario, the most popular example is Tata Motors – Tata Nano: While companies like Ford set up its international automobile platform in India and have catered to the niche segments in India, Tata introduced the Tata Nano car for the price conscious consumer in India in 2009. Tata now plans to launch Tata Nano in the U.S and Europe subsequently.

Developing countries like India, with their increasing disposable incomes, and the very potent and lucrative target market for many global companies to endeavour into and to establish a stronger grasp. Though the middle ever surging middle class with higher than before spending capacities, is now a class segment in India today can afford to spend extra money for their additional necessities and interests, they still find the products and commodities developed in the western nations out of reach, high priced or unaffordable. Clearly, the products which are developed in the western economies for their average income families would find a very less percentage of consumers in countries like India even though having the world's largest middle class population, because Indian Consumers' price to features requirements of products does not match with that of the products created in developed markets for their average income families. Simply de-featuring the products and goods and introducing them with the less featuristically full product model in the emerging markets would not attract them any more either; they demand and require the products to be produced keeping in mind the specific requirements in terms of product performance and its price. Hence it would not be a feasible strategy for the multi nationals to sell the de-featured or demoted version of the product developed for the western consumers in the emerging economies. They have to take into concern the Indian consumers' buying behaviour, their price sensitivity and affordability, their expectations from the product, and thereby ultimately develop the product in the local markets engineered to match their needs and requirements with a cost effective approach. With this approach, the companies can develop products that match the local taste while making it affordable for the local customers.

When a multinational corporation learns to create successful innovations in emerging markets and then exports that knowledge and such innovations to the developed economies, new business possibilities suddenly burst forth and the limits forced by its traditional operations become surmountable, and the company can reorganize all its products and capture new markets in search of growth and expansion. But only few companies experience such kind of renaissance, because reverse innovation is developing ideas in an emerging market and then coaxing them to flow uphill to western countries which pose immense challenges. It inevitably requires a company to overcome at least few aspects of the institutionalized philosophy that guides its actions. Typically that involves major changes which could be throwing out traditional organizational structures to create new ones from scratch, reorienting the sales force and revamping product development and manufacturing methods.

REVIEW OF LITERATURE

Vijay Govindarajan examined reverse innovation in the developing world through the following examples, all of which offer universal access to world-class quality at an ultra-low cost: a \$30 artificial leg of recycled plastic yogurt containers by a doctor in Thailand; a \$500 electrocardiogram machine developed by General Electric and sold in some 225 countries; and \$2,000 heart surgery at the Narayana Hrudayalaya Hospital in Bangalore, a health clinic which has been called the Henry Ford of heart surgery. He explored that multinationals today, in their attempt to sustain, survive and succeed over the competition are fast adopting frugal innovation as their approach to make a mark on the world market as this facilitates them to open the new avenues of growth through creation of an entire new demography through tapping the new emerging markets. Furthermore, these markets also serve as a litmus test for them to evaluate the market response and consumer's perception to the product which they later intend to initiate in the western markets with added applications and features congruent to their needs and requirements and also are consistent with their expectations. The multinationals evidently stand to benefit from the economies of scale or volume sales from the emerging markets, and higher top-line and bottom-line profit margins gained through low cost production in the poor countries and higher priced product sale in the western market enthused also by Currency rate arbitration.

Vijay Govindarajan (2011) emphasised that although examples of reverse innovation are still rare, it raises interesting theoretical questions, such as what type of innovation emerging countries are likely to spawn, why such innovations might diffuse to developed countries, and what kind of competitive advantages both local and foreign firms enjoy in this process of reverse innovation, and how it affects the global strategy and organization of established MNEs. Research on reverse innovation can enrich and extend mainstream theories of innovation, MNE management, internationalization, and FDI spill over.

OBJECTIVES OF THE STUDY

The objectives of this study are as follows:

- To highlight the concept and meaning of reverse innovation.
- To examine different case studies in the execution of reverse innovation.
- To analyze the drivers of reverse innovation.
- To open a new vista for further researchers.

DATA AND METHODOLOGY

This study is an observatory study based on secondary data. The data has been collected from various published sources, books and websites.

REVERSE INNOVATION ADOPTED BY EMERGING COUNTRIES

- In 2009, Tata Motors launched the Tata Nano, priced about Rs one lakh (\$ 2,000) common man's car and now relaunching the same car as Tata Pixel for the western and European markets. Through this car, Tata Motors has tried to unlock new markets in India and have catered to the needs of the middle class population. The Nano is targeted at the consumers outside the automobile segment in India, mainly the two-wheeler users. The two-wheelers are typically priced in India at \$ 1,200 to \$ 1,500, by introducing an automobile for \$ 2,000, Tata Motors plans to migrate the two-wheeler population into four-wheeler segment. Tata is now attempting to create new consumption by extending to newer markets with modified version of their product. Tata Motors plans to introduce Tata Nano not only in other emerging markets such as Africa but also plans to bring the car into western countries like Europe and the U.S., repackaged for matured markets.
- GE – GE MAC 800 (General Electronics): GE's innovation on the GE MAC 400 to build a portable low-cost ECG machine to cater to the needs of rural population who cannot afford expensive health care was launched as an improved version later in the year 2009, in U.S. named MAC 800.
- Procter and Gamble (P&G) – Vicks Honey Cough – Honey-based cold remedy: P&G's (Vicks Honey Cough) honey-based cold remedy developed in Mexico found success in European and the United States market.
- Nestle – Low-cost, low-fat dried noodles: Nestle's Maggi brand – Low-cost, low-fat dried noodles which was initially developed for rural India and Pakistan found a market in Australia and New Zealand as a healthy and budget-friendly alternative.
- Xerox – Innovation Managers: Xerox has employed two researchers who will look for inventions and products from Indian start-ups that Xerox can use for North America. The company calls them as 'innovation managers'
- Microsoft – Starter Edition: Microsoft is using its Starter edition's (targeted at not so technically savvy customers in poor countries and with low-end personal computers) simplified help menu and videos into U.S. editions for future of its Windows operating system.
- Nokia – New business models: Nokia's classified ads in Kenya are being tested as new business models. It also incorporated additional features in its devices meant for U.S. customers after viewing phone sharing in Ghana.
- Hewlett-Packard (HP) – Research Labs in India: HP intends to use its research lab to adapt Web-interface applications for mobile phones in Asia and Africa to other developed markets.
- Godrej – Chotukool Refrigerator: In the year 2010, Godrej Group's appliances division, the company Godrej & Boyce Manufacturing test-marketed a low-cost (dubbed the world's lowest-priced model at Rs 3,250) refrigerator targeted primarily for rural areas and poor customers in India. This product runs without a compressor on a battery and on cooling chips. The company wants to make use of a community-led distribution model (as an alternative channel of distribution) to push for product growth and its expansion.
- Tata – Swacch – World's cheapest water purifier: Swacch means clean in Hindi. Tata launched the water purifier – Tata Swacch targeting the rural market in India with the cheapest water purifier in the market. This product does not require running water, boiling or power and make use of paddy husk ash as a filter with the silver nanotechnology. It can provide purified water enough to provide a family of five drinking water for almost a year, also the company feels it can open a whole new market.
- Pepsico – Kurkure and Aliva: Pepsi is planning to give developed markets (particularly West Asia) a taste of its salted snack kurkure. The product enjoys a massive success in India and has become a Rs 700 crore brand within a decade of its launch. The success is given to product innovation and a good marketing strategy. For instance: Made from corn, gram flour and rice, zero per cent Trans fats and no cholesterol, and the other marketing strategy adopted to push the sales is Rs-3 small packs of the product to increase the margin of sales in the lower-tier towns.
- Bharat Forge – Maintenance Management Practice: The best practices group at Bharat Forge, an exporter of automobile components and a large Indian manufacturer implemented a maintenance management practice which was developed in India (developed over 15 to 18 years) in its units it acquired in countries (known for sophisticated engineering) in Sweden, Germany and the U.S. The maintenance management process concentrated on minimizing downtime during machine maintenance and has an advanced information system that forecast problems before they happen. Subsequently, Bharat Forge plants globally are very proficient and have an average down time of less than 10 per cent.
- KFC – Taco Bell – Yum! Restaurants: KFC test-marketed Krushers, a variety of chilled drinks in the cold beverages segment in India and Australia and now plans to introduce it to other western economies. The launch in India was very successful as 'Krushers' accounts for 8 per cent of KFC's beverage sales in India. Yum! Restaurant's Tex-Mex chain Taco Bell has one Indian-designed dessert (tortilla filled with melted dark chocolate) on Taco Bell's US menus.
- Husk Power Systems: In India, Husk Power Systems brings light to rural population (over 50,000) by using locally grown rice husks to produce electricity (a unique and cost-effective biomass gasification technology). The company has received seed capital from Shell foundation in 2009 to scale up their operations.
- LG – Low-cost Air Conditioners (AC): South Korea based LG Electronics (LG) planned to design a low-cost air conditioners focusing the middle and lower-middle class population in India. Their aim was to manufacture air conditioners at the price of air coolers which were very common.
- Renault – Logan: Renault developed a low-cost model of its brand Logan for Eastern European markets and also sold the product in the Western European markets later on after its success.
- Better Place – Smart Grid of Battery charging/Swap terminals: In Israel, Better Place, a electric vehicle (EV) services provider (creates infrastructure and systems that support the use of electric cars), developed an intelligent grid of battery-swap stations and battery-charging terminals. The company is now present in many countries like Japan, China, Australia, the U.S., Canada, Denmark and France has marked huge success.
- GE India – Steam Turbines: In 2010, GE's Indian arm joined up with Triveni Engineering and Industries Ltd to manufacture steam turbines in the 30-100MW range. The company plans to take advantage of lower input costs incurred in manufacturing and export these products to markets in West Asia, Indonesia, Latin America and Latin America.
- Coca-Cola – eKOCool: Coca-Cola's Indian arm Hindustan Coca-Cola Beverages introduced eKOCool, a chest cooler working on solar energy with a capacity to stock up about 4 dozen 300 ml glass bottles. The innovation also charges mobile and solar lanterns. Coca-Cola has plans to lead the innovation in different cities of India and may be it will introduce it in other developed economies as well.
- Vodafone – Zoozoos: Vodafone, which operates in more than 30 countries has plans to make its adorable characters – Zoozoos go international. Zoozoos which are black-and-white animated creatures in fact are actual human beings and are quite a rage in India where they were launched in marketing ads and appear like aliens and verbalize in an alien language. But the brand message is very clear to nation across all age groups. Vodafone has licensed the characters and accessories for retail merchandise across India.
- Coca-Cola – Minute Maid's Pulp: Minute Maid's Pulp was extremely popular in China, which was an orange juice with pulp. Coca-Cola after its success in China introduced it in other countries as well.

- Levi's – dENiZEN brand imported to the U.S.: In 2010, Levi Strauss & Co. launched its dENiZEN brand jeans in China. It was the company's first brand which was launched outside of the United States. With its huge success, the brand rapidly spread to India, Singapore, South Korea and Pakistan markets.

DRIVERS OF REVERSE INNOVATION

Multinational companies need to change the very way they conduct business. For decades the MNCs have focused innovation efforts based on the needs of developed countries and then exported products around the world. Following are prime reasons leading to reverse innovation:

- Income gap between emerging markets and developed markets. Because the per-capita income is low in the developing countries, conditions are ripened for innovations which offer quality products and services at a very low price e.g. a 50% solution at a 5% price. Initially the 50% solution is unattractive in the matured markets, but finally, performance rises to the level that it becomes attractive at an acceptable price.
- Infrastructure gap - Most of the infrastructure (energy, transportation, telecom, etc.) in the developing countries are still being built. As a result, demand for new infrastructure technologies is much higher in the developing countries than it is in the developed countries where demand for infrastructure is created primarily by the need to replace existing infrastructure.
- Sustainability gap - Many developing nations are confronted with environmental constraints far sooner in their path of economic prosperity than developed nations were e.g. desalination technologies are more likely to be adopted first in Africa and in the Mexican deserts.
- Preferences Gap: The world's great diversity of preferences, rituals, tastes and habits adds spice to international travel. It also sometimes makes it almost impossible to get full potential in the emerging economies through an easy strategy of exporting existing offerings. PepsiCo, for instance, is developing a new snack food, starting with a new base ingredient; Corn is not nearly so ubiquitous in India as lentils, therefore Pepsi is commercializing lentil-based chips.

Because of these enormous needs gaps, the common place strategy of trying to win in the emerging markets by making light adjustments and adaptations of successful rich world offerings is not adequate. Reverse innovation is considered as a clean-slate innovation which starts with reassessing customer needs from the scratch.

CONCLUSION

Reverse innovation is not an isolated phenomenon but an order of the day. Probably it is that period to revise the phrase 'reverse innovation' to 'lean innovation'. It gives tremendous opportunity to India to grip experiments and innovations in traditional sectors like auto, banking, etc. as well in sunrise industries like insurance and telecom. The diversified nature of the huge domestic market in India offers sufficient scope of creating advanced products and services appropriate for the export markets. The representation of emerging market innovation that most people have in mind is a multinational corporation that establishes a novel product or service in their sophisticated home market, drops some expensive features and reduces the price, and then exports the stripped-down innovation into developing markets. Companies must continue to develop a product that appeals to the emerging market consumers who combine discerning tastes with low disposable income and then managers swiftly recognise that these products would appeal to some segments within mature markets as well. However, for sustainable growth it would become indispensable for Indian companies to develop easily adaptable, but robust cost methods to propel 'lean products and services'. It is the steam forward for our Indian companies to make noteworthy inroads into the much awaited global markets. This brings us to a conclusion that Reverse Innovation is the "Oxygen" for the future for all multinationals but the fine line of reverse innovation should be noticed and adhered to diligently and dynamically. Reverse innovation is like creating on the edge of present market, goods and intellectual capital of the company leading to innovation which address unmet customer requirements, develop unexpected solutions. It redefines the core competency of the company and is important to cope up with unexpected shift of business setting with breathtaking speed. Reverse Innovation is the way to deal with future competition, however wrong assessment and lack of futuristic approach can result in such innovation into standard trap of cannibalization and brand equity loss. If designed successfully and executed optimally with a flexible outlook Reverse Innovation will not only maximize the profits and revenue or increase the new market share but will redefine altogether the new core of the business landscape providing first mover gain to company involved.

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**CONTRIBUTION OF MICRO AND SMALL SCALE INDUSTRIES IN RURAL DEVELOPMENT: A CASE STUDY OF
AJMER DIVISION
(AJMER, BHILWARA, TONK AND NAGOUR DISTRICTS)**

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ABSTRACT

India is the second largest populated country of the world. And most of the population of India resides at the rural areas. To achieve better economic, political or military status first of all a major problem in the front of policy makers is to provide a better living standard to the civilians of India. Major problem is to achieve these goals are drastically increasing population, food scarcity and unemployment. Central and State governments were trying hard, to overcome these problems by making strategies and policies time to time. To provide employment to every hand is a difficult task because each is not having required technical or educational skills. So to provide a job opportunity according to a person with his own skills is a very difficult task, this problem is become more severe in case of rural areas. In such types of conditions in developing countries like India, the Micro, Small and Medium level industries plays a crucial role to provide job opportunities to every needy hand and to achieve one of the most important goal the over all "Rural Development" of Country. The present study is a comparative status based on secondary data, of Ajmer Division (Ajmer, Bhilwara, Tonk and Nagaur Districts) and role of micro, small and medium industries to achieve the goal of "Rural Development".

KEYWORDS

Small scale industries, rural development.

INTRODUCTION

Rural Development has been emerged as most exciting and important force that governs the economic growth of the country. This issue is always placed at the top of agenda in various international and national policies for the developing countries of Asia, Africa and Latin America. Developed countries have also recognized the importance of rural development and their need to be directed their efforts towards meeting the basic needs of the poorest people in developing countries. Rural development encompasses a wide spectrum. Variety of views and concepts exists regarding the rural development alongwith the various economic aspects. Rural development is one of the most vital issues to prepare the strategies for the development of the economic and financial policies. Various schemes were launched time to time by various regulatory bodies to promote rural development but the concept of rural development is still vague (Mathur, 1996).

According to Suri, (1988) and Mathur, (1996) Rural Development is defined in three aspects as:

As a Concept: Rural development stands for overall development or rural areas with a view to betterment of the lifestyle of rural people. In other words, rural development or live development in general is multi dimensional approach of development. In sense of purely economic aspects it covers development of the agricultural, associated activities, allied activities and social facilities, besides development of human resources in the rural areas.

As a Phenomenon: Rural Development as a phenomenon is a result of interaction between various physical, environmental, technological, economic, socio-cultural and institutional factors in the rural areas of a nation.

As a Strategy: Rural development is the approach as operational design to bring about the desired positive changes in the socio-economic and cultural life of the rural people.

Rural Development strategy is primarily an outline of the process that enhances the capacity of the rural people to improve their lives and environment, accomplished by wider distribution of benefits resulting from such improvement or in overall a holistic development of rural people. Thus, rural development considers both agricultural and non agricultural aspects of rural life.

The expression "Rural Development" may be used to refer to process of change and improvement in rural socialites, not all of which involves action by government and policy making bodies. The term "rural development" has another meaning used more often in development literature refers to a distinct approach to intervention by the state in the economies of underdeveloped countries and one which is at once broader and more specific than agriculture development. World Bank mentioned the "Rural development", focuses on poverty and inequality and thus involves a strategy designed to improve the economic and social life of specific group of people, the rural poor.

Rural development is a multi-dimensional view but it is restricted economic aspects of rural poor, not for the overall development of rural areas with a view to improving the quality of life of rural poor. It is also a comprehensive and multidimensional concept and encompasses the development of agriculture and allied activities, village and cottage industries and crafts, socioeconomic infrastructure, community services and facilities and above all the human resources in the rural areas.

The main theme of rural development may be summarized as follows:

1. To achieve enhanced production and productivity in rural areas.
2. To bring about a greater socioeconomic equity.

3. To bring about a special balance in social and economic development.
4. To bring about improvement in the ecological environment so that it may be conducive to growth and happiness and
5. To develop broad based community participation in the process of development.

United Nations has indicated that the objectives of rural development are:

- a) To draw the entire rural labor force on the rural people.
- b) To realize the creative energies of the rural people.
- c) To bring down into the countryside and check the drift of the rural population of cities.
- d) To enhance the participation of towns, men and youth in the development process.
- e) To improve the living conditions of the rural majority and the quality of their life, particularly through the integration of development with environment.
- f) To ensure the all round development of the population its economic and social productivity and work satisfaction (Mathur, 1996).

Micro and small scale industries are found to be most appropriate option to achieve the goal of better rural development opportunities. The small scale sector, as commonly understood in India, includes a wide range of manufacturing units which vary in the size of employment, capital investment and value of out put as well as in the level of organization, technology, source of power, type and quality of products, and so on.

The sector is very heterogeneous as it covers manually operated tiny household units widely dispersed all over the country as well as urban based relatively large establishments using modern technology. The small units, thus, belong to following three sub-sectors:

1. Traditional village industries including handicrafts.
2. Small unregistered household and non household units not covered by the factories act of 1948.
3. Registered factories.

Key feature of the micro and small industries are:

1. Small scale industries, including traditional village industries, small workshop and modern small enterprises, have been given an important place in the framework of Indian economic planning for ideological and economic reasons. The small industries sector has been imbued with a multiplicity of objectives, important among these beings.
2. The generation of immediate employment opportunities with relatively low investment.
3. The promotion of more equitable distribution on national income.
4. Effective mobilization of untapped capital and human skills.
5. Dispersal of manufacturing activities all over the country, leading to growth of villages, small towns and economically lagging regions.

In recent scenario, when the globalization is taking place in all the sector and competition becoming difficult day by day. The small flexible production units or small scale industries are currently more competitive or effective in term of investment and production both; than the rigid capital-intensive mass production installations or units i.e. the large entrepreneurships. Large scale industries or larger enterprises emphasis usually on the large batch orders at low unit price, that's why the profit share is become large. While, the Small or Medium scale industries production is enough to maintain the quantity and quality, both the standards. Small and Medium entrepreneurships usually defined in terms of their man power. On the other hand larger enterprises were usually measured in terms of their throughput or market capitalization (Sharma and Sharma, 2013).

Small and Medium scale industries are having important role in economic development of developing countries like India. And constitutes a significant part of the economy alongwith making the valuable contributions to its growth by introducing innovation, excellence and competition. In term of employment opportunities and livelihood generations certain small scale industries provides a source of income to millions of people, at their own home place that not only prevents migration towards big cities but also prevents the eliminating regional imbalances of men power to the large units or cities (Sharma and Sharma, 2013).

PROFILE OF STUDY AREA

State of Rajasthan lies between 23°30' - 30°11' North latitude and 69°29' -78°17' East longitude, occupying 3,42,239 km2 which accounts 10.41% of geographic land area of our country. It is the largest state of India where highest proportion of land is occupied by the great Indian Thar desert (Figure 1).

The state is divided into seven administrative divisions formed by 33 districts. These are:

- Ajmer Division:** Ajmer, Bhilwara, Nagaur and Tonk.
- Bharatpur Division:** Bharatpur, Dholpur, Karauli and Sawai Madhopur.
- Bikaner Division:** Bikaner, Churu, Ganganagar and Hanumangarh.
- Jaipur Division:** Jaipur, Alwar, Jhunjhunu, Sikar and Dausa.
- Jodhpur Division:** Barmer, Jaisalmer, Jalore, Jodhpur, Pali and Sirahi.
- Kota Division:** Baran, Bundi, Jhalawar and Kota.
- Udaipur Division:** Banswara, Chittorgarh, Pratapgarh, Dungarpur, Udaipur and Rajsamand.

FIGURE 1: MAP OF INDIA AND RAJASTHAN HIGHLIGHTED WITH STUDY AREA AJMER ZONE: (AJMER, BHILWARA, TONK AND NAGOUR DISTRICTS)



AJMER DISTRICT

Ajmer was founded by Raja Ajpal Chauhan in the 7th century A.D. It remained a strong hold of the Chauhans till 1193 A.D. Ajmer District is situated in the centre of Rajasthan State lying between 25°38" and 26°58" North Latitudes and 73°54" and 75°22" East Longitudes. The total geographical area of Ajmer district is 8.50 lac hectares, for land utilization purpose, the area was reported 8.42 lacs hectares. Ajmer district stands at 16th place among the existing 33 districts of the State so far its total area is concerned. Ajmer district divided in six sub-divisions namely Ajmer, Beawar, Nasirabad, Masuda, Kekri and Kishangarh. These sub-divisions have further divided into 9 Tehasils namely Ajmer, Beawar, Nasirabad, Kekri, Kishangarh, Masuda, Bhinai, Pisangan and Sarwar and eight Panchayat Samities namely Shrinagar, Pisagan, Jawaja, Masuda, Bhinai, Kekri, Silora and Arain.

BHILWARA DISTRICT

Bhilwara was formed as a separate district in 1949 on merge of the princely State of Mewar and the Shahpura Thikana in the erstwhile United Rajasthan. Bhilwara is the industrial town. It is famous country wide for the textiles industry. It is well connected with roads, rail. Bhilwara district lies on the southeastern part of Rajasthan. It extends from 25°1 to 25°58 North latitude and from 74°1 to 75°28 East longitude. The total length of the district from West to East is 144 Km. While the breadth from North to South is 104 Km approximately. The total Geographical area of the district is 1047441 Hectares and covers approx. 3.05% area of the State.

TONK DISTRICT

Tonk is located between longitudes 75°07 to 76°19 and latitude 25°41 to 26°34. The total geographical area of Tonk district is 7.16 lac hectares, but for land utilization purpose the area is reported to be 7.19 lacs hectares. Tonk district occupies 20th position among the existing 33 districts of the state; so far its area is concerned. The total area of the District is 7194 sq kms.

NAGAUR DISTRICT

Nagaur district is located between latitude 26°25' and 27°40' North and longitude 73°10' and 75°15' East. The district has a geographical area of 17.718 Sq. kms, representing 5.18 percent of the total area of Rajasthan and ranks sixth among the districts of the State.

METHODOLOGY

Present Study is mainly based on secondary data sources (Published as well as personal communications) of information from various research publications, published newspapers, journals-online & printed, magazines, websites and books. The information is collected from libraries and websites. The literature is cross checked and validated to gives the latest information from the Annual Reports and Project reports of Ministry of Micro, Small and Medium Enterprises, Government of India. Simultaneously e-contents were also explored for the validation of data sources. The data collected has been tabulated, classified and analyzed accordingly to retrieve the goals of present study. Graphical presentation of data also present for making the present study effective.

OBSERVATION AND RESULTS

Industrialization status of the country indicates the level of utilization of available resources such as minerals, agriculture, live stock and other resources of the country. Country's economic growth is mainly depends on the increasing industrial production, creating additional employment opportunities, eliminating regional imbalances, entrepreneurship and augmenting the financial resources.

During the present study the year wise trend of growth in registered small scale industries and employed labor along with overall investment in the successive years at the all selected study sites (Ajmer, Bhilwara, Tonk and Nagaur) were enlisted in Table 1 and their comparative analysis showed in the figures 2 to 4.

TABLE 1: YEAR WISE TREND OF SMALL AND MEDIUM SCALE UNITS REGISTERED AT AJMER, BHILWARA, TONK AND NAGAUR DISTRICTS

S. No.	Year	Ajmer			Bhilwara			Tonk			Nagaur		
		Unit	Employment	Investment	Unit	Employment	Investment	Unit	Employment	Investment	Unit	Employment	Investment
1	1988-89	7891	34913	3362.22	-	-	-	-	-	-	-	-	-
2	1989-90	8155	35754	3665.89	-	-	-	-	-	-	-	-	-
3	1990-91	8359	36633	4037.72	-	-	-	5356	22274	1255.00	-	-	-
4	1991-92	8632	43831	4761.72	-	-	-	5496	22672	1378.48	-	-	-
5	1992-93	8926	45655	5438.60	-	-	-	5608	23175	1543.48	-	-	-
6	1993-94	9192	47011	6651.80	9298	34561	6653.00	5722	23620	1454.78	-	-	-
7	1994-95	9472	48769	8165.67	9604	36469	8111.00	5830	24055	1925.24	-	-	-
8	1995-96	9796	50540	11105.08	10006	39310	9446.38	5957	24526	2157.89	-	-	-
9	1996-97	10182	52483	13507.29	10551	41590	10373.50	6163	25303	2552.15	-	-	-
10	1997-98	10560	54203	17186.69	11052	43251	12420.52	3670	25945	2817.09	-	-	-
11	1998-99	10993	55643	19075.01	11447	45321	13441.17	6545	26723	3085.49	-	-	-
12	1999-00	11417	56906	20353.34	11859	47733	14974.00	6761	2757	3546.84	-	-	-
13	2000-01	11864	58260	21560.84	12303	49852	15739.00	7001	28330	3662.62	-	-	-
14	2001-02	12320	59874	22704.19	12739	51623	16200.43	7235	29135	3756.02	-	-	-
15	2002-03	12764	61471	23289.21	13179	53303	16909.21	7468	29958	3841.49	-	-	-
16	2003-04	13225	63529	26726.18	13655	55080	17521.85	7725	30802	3954.10	-	-	-
17	2004-05	13775	65614	31634.90	14175	57153	19006.21	6499	21425	4168.67	-	-	-
18	2005-06	14337	68070	35264.90	14741	7703	22565.85	6814	22438	4299.30	-	-	-
19	2006-07	15236	73311	47057.62	15042	67008	42765.31	7147	24018	4741.03	232	1477	1922.07
20	2007-08	15683	76441	55925.44	711	35230	11528.47	7507	25444	6141.03	818	3183	6135.89
21	2008-09	16343	80142	68406.39	680	4134	9476.00	7867	26842	7252.03	757	2546	3648.92
22	2009-10	17003	83815	81404.16	672	5903	14431.70	8227	28389	8938.03	833	2711	3403.08
23	2010-11	17663	87420	92797.54	672	3738	10485.29	8483	29392	10630.37	676	2720	2482.12
24	2011-12	-	-	-	671	3827	6935.29	8778	30656	14373.07	-	-	-

Source: DIC Ajmer, Bhilwara, Tonk, Nagaur and MSME Jaipur

FIGURE 2: YEAR WISE TREND OF SMALL AND MEDIUM UNITS REGISTERED AT AJMER, BHILWARA, TONK AND NAGOUR

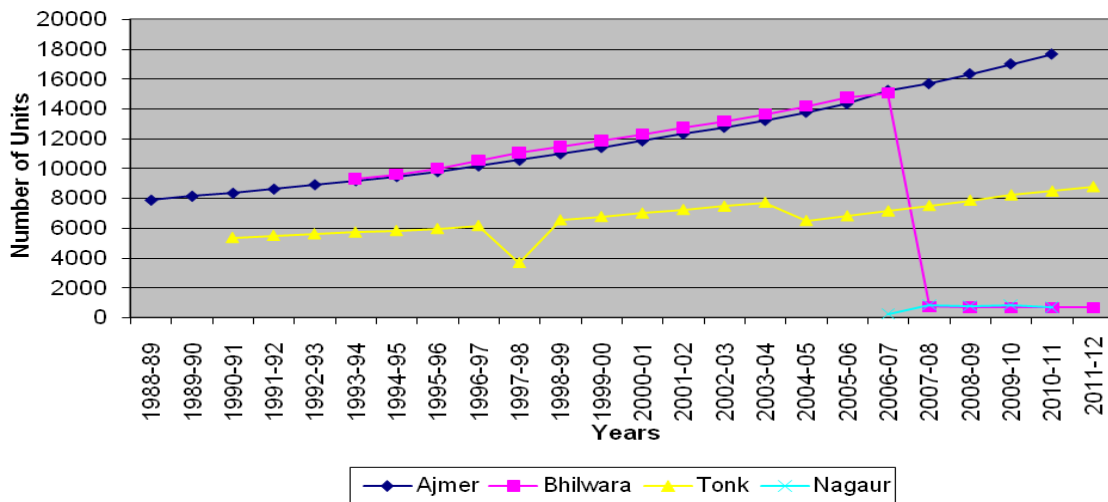


FIGURE 3: YEAR WISE TREND OF EMPLOYED PERSONS IN SMALL AND MEDIUM UNITS REGISTERED AT AJMER, BHILWARA, TONK AND NAGOUR

Yearwise Trend of Employed Persons in Registered Units at Selected Study Sites

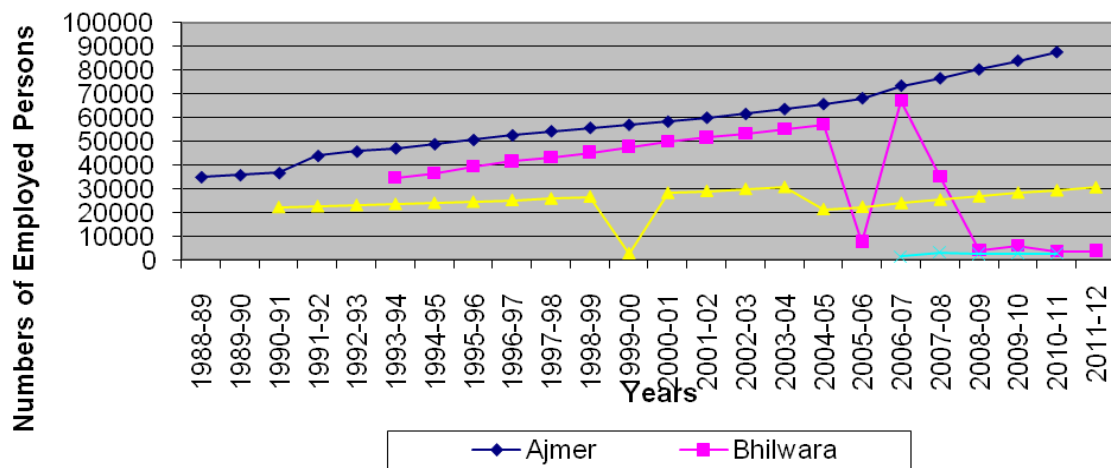
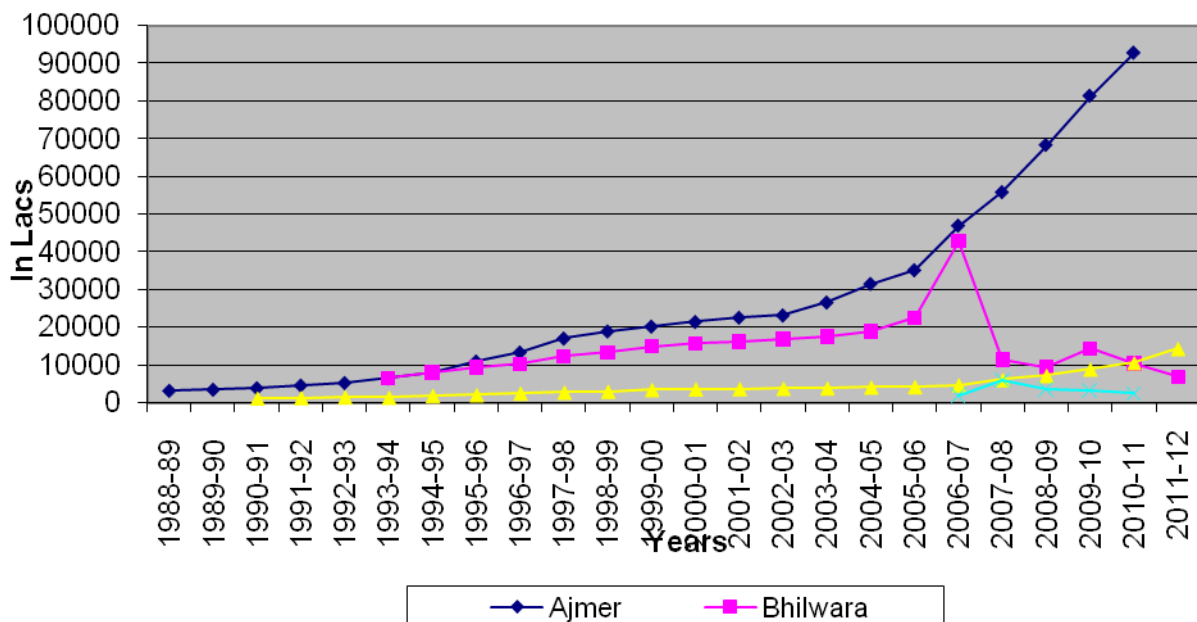


FIGURE 4: YEAR WISE TREND OF INVESTMENTS (IN LACS) AT SMALL AND MEDIUM UNITS REGISTERED AT AJMER, BHILWARA, TONK AND NAGOUR

Yearwise Investment in Registered Unites



Ajmer district is having maximum 30 defined industrial areas while the Tonk district of Ajmer division is having least 6 defined industrial areas. In terms of total micro and small industrial units Nagaur district is leading with the 20,067 units followed by the Ajmer district with 19221 units. While in the vice versa case Tonk district is having minimum units.

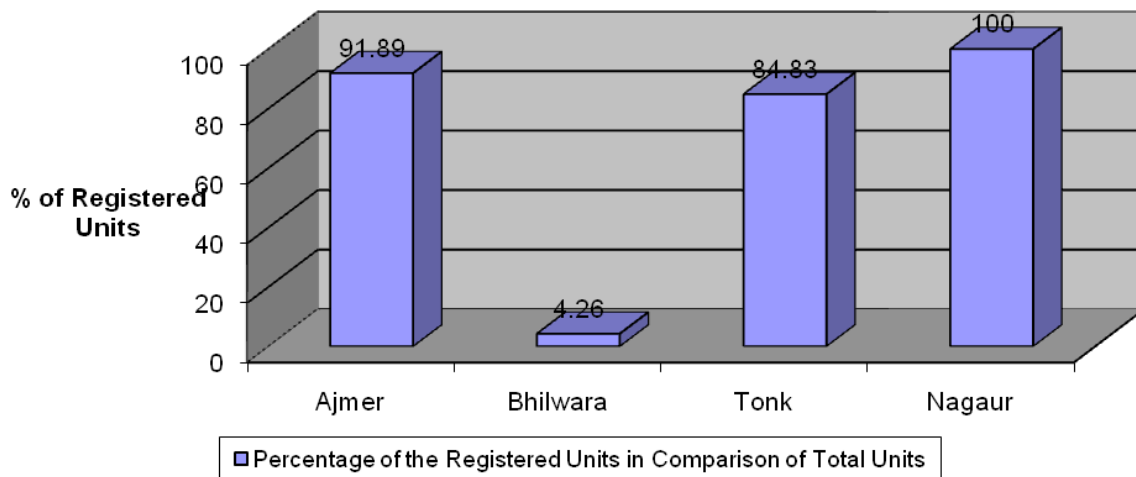
The scenario has been changed drastically in term of registered micro and small industrial units. Nagaur district is leading with 20,067 units while, Bhilwara is having least registered industrial units (671). The analysis of data of total micro and small industrial units compared with the registered micro and small industrial units showed that the Nagaur district having 100% registered Units followed by the Ajmer district (91.89%) and Tonk district (84.83%), while the Bhilwara is having least registered micro and small industrial units with the overall percentage of 4.26% (Table 2 and Figure 5).

TABLE 2: INDUSTRIAL SCENARIO AT AJMER, BHILWARA, TONK AND NAGOUR DISTRICTS

Sr. No.	Head	Ajmer		Bhilwara		Tonk		Nagaur	
		Unit	Particulars	Unit	Particulars	Unit	Particulars	Unit	Particulars
1	REGISTERED INDUSTRIAL UNIT	NO.	17663	NO.	671	NO.	8483	NO.	20,067
2	TOTAL INDUSTRIAL UNIT	NO.	19221	NO.	15734	NO.	10,000	NO.	20,067
3	REGISTERED MEDIUM & LARGE UNIT	NO.	8	NO.	75	NO.	6	NO.	3
4	ESTIMATED AVG. NO. OF DAILY WORKER EMPLOYED IN SMALL SCALE INDUSTRIES	NO.	87420	NO.	59383	NO.	29392	NO.	75053
5	EMPLOYMENT IN LARGE AND MEDIUM INDUSTRIES	NO.	3529	NO.	34945	NO.	1630	NO.	581
6	NO. OF INDUSTRIAL AREA	NO.	30	NO.	10	NO.	6	NO.	9
7	TURNOVER OF SMALL SCALE IND.	IN LACS	212450	IN LACS	51562.58	IN LACS	14373.04	IN LACS	31149.36

Source: DIC Ajmer, Bhilwara, Tonk, Nagaur and MSME Jaipur

FIGURE 5: PERCENTAGE OF THE REGISTERED UNITS IN COMPARISON OF TOTAL UNITS



AVAILABILITY OF MINERALS

Ajmer is represented by a key feature in terms of geology is the Aravalli mountain ranges. It is characterized by mainly quartzite section which forms highest peaks above the general level of range at Taragarh near Ajmer. The major minerals are granites, felspathics chists, calceneisses marble and quartzites, limestone, mica chists, asbestos, vemiculite, soap stone, masonry stone and brickclay. Bhilwara district occupies an important place in the mineral map of Rajasthan. The main minerals are lead Zinc, Soap Stone, China Clay, Feldspar, Quartz, Mica, Asbestos, Beryl and Garnet. Aravalli system and the Deoli system are main geological formation in the Tonk district. Tonk district endowed with a number of non metallic minerals like garnet, Silica sand, quartz and soap are found in abundance. Besides these minerals, felspar, mica and corundum are also found but in small quantities. In addition to these major minerals, the minor minerals viz. bricks clay masonry stone, patti-Katla etc. are also mined in Tonk district. Nagaur district is abounding with variety of mineral resources like gypsum, wolframite tungsten, Limestone and Marble. Nagaur district is also an important salt producing area.

EXISTING STATUS OF INDUSTRIAL AREAS

Ajmer is having 27 defined industrial areas followed by the Bhilwara with the 10 defined industrial areas and Nagaur with the 9 defined industrial areas. On the other hand Tonk district is only having six industrial areas. Other details regarding these industrial areas viz. Land Acquired (In hect); Land Developed (In hect); Prevailing Rate per sqm (In Rs); Plots Planned; Plots Allotted; Plots Vacant; Plots Under Construction; Plots Under Dispute and Number of Units in Production was enlisted in the Table 3.

TABLE 3: EXISTING STATUS OF INDUSTRIAL AREAS AT AJMER, BHILWARA, TONK AND NAGOUR DISTRICTS

S. No.	Name of the Town and Industrial Area	Land Acquired (In hect)	Land Developed (In hect)	Prevailing Rate per Sqm (In Rs)	Plots Planned	Plots Allotted	Plots Vacant	Plots Under construction	Plots under dispute	No. of Units in Production
Ajmer										
1	Parbatpura	57.60	57.60	900	107	107	0	----	----	95
2	Parbatpura , M Pura (Extn.)	91.00	91.00	900	184	184	0	----	----	150
3	M.T.C- 1 & 2	17.22	17.22	900	39	36	03	----	----	22
4	M.T.C 3 & 4	9.66	----	900	37	2	35	----	----	0
5	Kekri- 1 & 2	9.66	----	900	111	107	4	----	----	33
6	Kekri-3	37.80	37.80	250	72	60	12	----	----	18
7	Gegal	69.20	69.20	400	161	161	0	----	----	142
8	Sarwar	85.12	85.12	250	246	199	47	----	----	18
9	Bewanja	63.60	63.60	300	116	111	5	----	----	70
10	Ajaymeru, Palra	335.26	----	900	305	260	45	----	----	----
11	Shri Nagar	81.27	----	1500	29	0	29	----	----	0
12	Sawar (Kekri)	34.57	----	900	26	0	26	----	----	0
13	Makhapura Industrial Area	16.32	16.32	900	60	60	0	----	----	35
14	Kishangarh-1 & 2	62.88	62.88	1600	160	160	0	----	----	129
15	Kishangarh-3	224.00	224.00	1600	318	298	20	----	----	245
16	Kishangarh-4	442.0	442.0	1600	815	799	16	----	----	698
17	Kishangarh-5	138.89	138.89	1600	98	75	23	----	----	24
18	Silora-I	247.00	175.27	700	374	367	7	----	----	126
19	Silora-II	102.88	----	700	36	22	14	----	----	----
20	Roopangarh	36.40	----	1000	52	0	52	----	----	0
21	Industrial Area, Beawar-1	136.60	136.60	675	202	198	4	----	----	181
22	Industrial Area, Beawar-2	29.60	29.60	675	63	63	0	----	----	50
23	Rampura Mewatiyan	45.36	45.36	675	70	65	5	----	----	62
24	Bijay Kumar	66.43	66.43	400	101	98	3	----	----	74
25	Gohana	24	24	200	24	24	0	----	----	17
26	Saradhana-I, II	153.64	75	170	187	101	86	----	----	57
27	Narbadkheda (Under process)	24.80	0	0	0	0	0	----	----	0
Bhilwara										
1	Bhilwara Phase I,II & III	259.15	259.15	450.00	303	303	----	----	----	223
2	Bhilwara EXtn.	50.74	50.74	400.00	86	86	----	----	----	67
3	Bigod	35.72	35.72	80.60	99	91	08	----	----	15
4	Jahajpur	30.50	25.63	80.00	46	40	06	----	----	16
5	Raila	46.24	31.42	200.00	63	33	30	----	----	09
6	Mandpiya (Undev.)	34.40	----	50.00	08	08	----	----	----	06
7	I/E Bilwara (T.A)	20.50	20.50	400.00	91	91	----	----	----	63
8	Kanya Kheri (SD)	54.71	54.71	75.00	17	06	11	----	----	02
9	Bhilwara Ph-IV	117.56	93.85	400.00	201	197	04	----	----	67
10	Growth Center Hamirgarh	725.08	680.46	400.00	522	470	52	----	----	52
Tonk										
1	Tonk	100.00	----	----	146	136	0	4	10	132
2	Newai	62.50	----	----	92	92	0	2	0	90
3	Malpura	101.91	----	----	168	148	17	3	3	124
4	Deoli	59.29	----	----	132	118	07	2	7	116
5	Newai (IID)	155.44	----	----	250	248	01	22	1	225
6	Newai Phase -II	121.63	----	----	29	09	12	3	8	04
Nagaur										
1	RIICO I.A. NAGOUR	41.58	----	----	101	101	----	----	----	----
2	RIICO I.A. MERTA CITY	33.40	----	----	83	83	----	----	----	----
3	RIICO I.A., MAKHRANA	286.72	----	----	367	357	10	----	----	----
4	I.I.D. RIICO I.A. NAGOUR	80.00	----	----	265	265	----	----	----	----
5	DIC I.A. GOTAN	50 Biga	----	----	24	24	----	----	----	----
6	DIC I.A. BADU(Parbatsar)	25 Biga	----	----	64	64	----	----	----	----
7	DIDWANA RIICO I-A	77.56	----	----	124	94	30	----	----	----
8	PARBATSAR RIICO I.A.	87.10	----	----	124	82	42	----	----	----
9	DIC I.A. LADNUN	101.5 Biga	----	----	104	98	6	----	----	----

Source: DIC Ajmer, Bhilwara, Tonk, Nagaur and MSME Jaipur; RIICO, Ajmer and Bhilwara; Rajasthan State Industrial Development and Investment Corp. Ltd.

DETAILS OF EXISTING MICRO AND SMALL ENTERPRISES AND ARTISAN UNITS IN THE DISTRICTS

Bhilwara is having 18 various types of micro and small enterprise followed by the Ajmer district with the 14 various types of micro and small enterprise (Table 4 and Figures 6 to 8).

TABLE 4: DETAILS OF EXISTING MICRO AND SMALL ENTERPRISES AND ARTISAN UNITS AT AJMER AND BHILWARA DISTRICTS

S. No.	Type of Industry	Ajmer			Bhilwara		
		Unit	Employment	Investment	Unit	Employment	Investment
1	Food products	846	4082	4387.99	1338	5119	927.32
2	Beverages, Tobacco & Tobacco products	78	2601	23.01	19	154	119.72
3	Cotton textiles	2648	17647	9586.82	1109	7887	1799.91
4	Wool, Silk & Synthetic Fiber textile	411	2320	2152.58	550	16824	46112.04
5	Jute, Hump & Masta textiles	117	377	8437	123	243	7.86
6	Textile product (Including wearing apparel other then footwear)	1002	3806	494.40	648	1587	147.14
7	Wood and wood products furniture & fixture	994	2960	1172.43	1914	6012	387.23
8	Paper & paper products & Printing	521	3779	1127.15	194	1405	579.47
9	Leather & fur. Products (except repair)	2663	4718	1029.99	2924	6157	195.64
10	Rubber, Plastic, Petroleum & Coal products	337	1615	1467.80	192	1203	630.38
11	Chemical & Chemical products	336	1702	1231.08	260	2099	1370.82
12	Minerals base units	2743	18037	55091.38	1443	7699	2292.74
13	Basic metal & Alloys industries	144	1762	2252.47	157	978	344.58
14	Metal products & Parts except Machinery & transport equipment	814	3301	1588.72	517	2283	407.44
15	Machinery, Machine tools, Pipes and Engineering units	-	-	-	340	1219	266.71
16	Electrical machinery and transport equipment	-	-	-	63	297	650.98
17	Repairing & servicing	-	-	-	2321	4239	487.47
18	Other Industries	-	-	-	1946	2281	729.24

Source DIC Ajmer, Bhilwara and MSME Jaipur

FIGURE 6: DETAILS OF EXISTING MICRO AND SMALL ENTERPRISES AND ARTISAN UNITS AT AJMER AND BHILWARA DISTRICTS

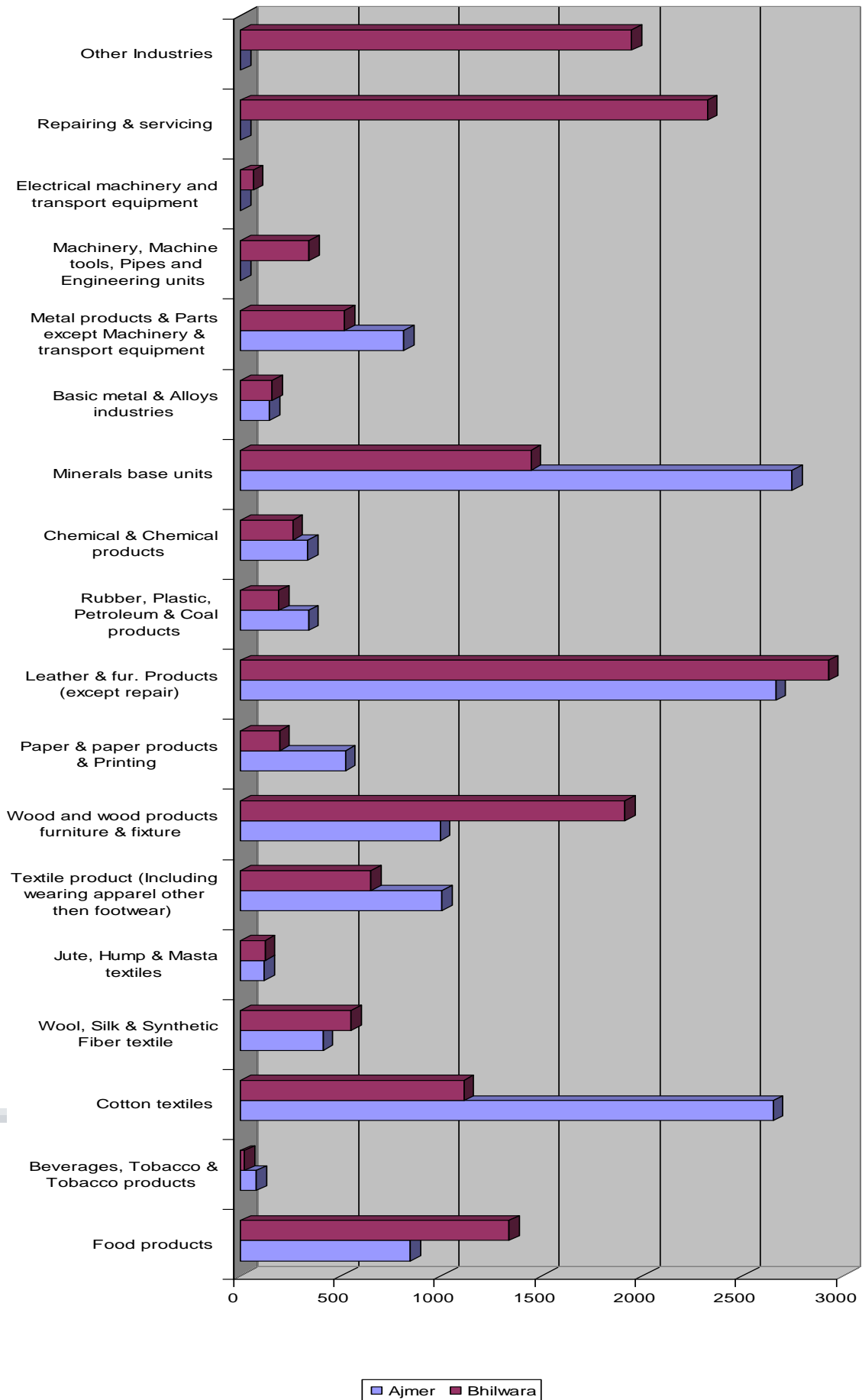


FIGURE 7: DETAILS OF EMPLOYED PERSONS IN EXISTING MICRO AND SMALL ENTERPRISES AND ARTISAN UNITS AT AJMER AND BHILWARA DISTRICTS

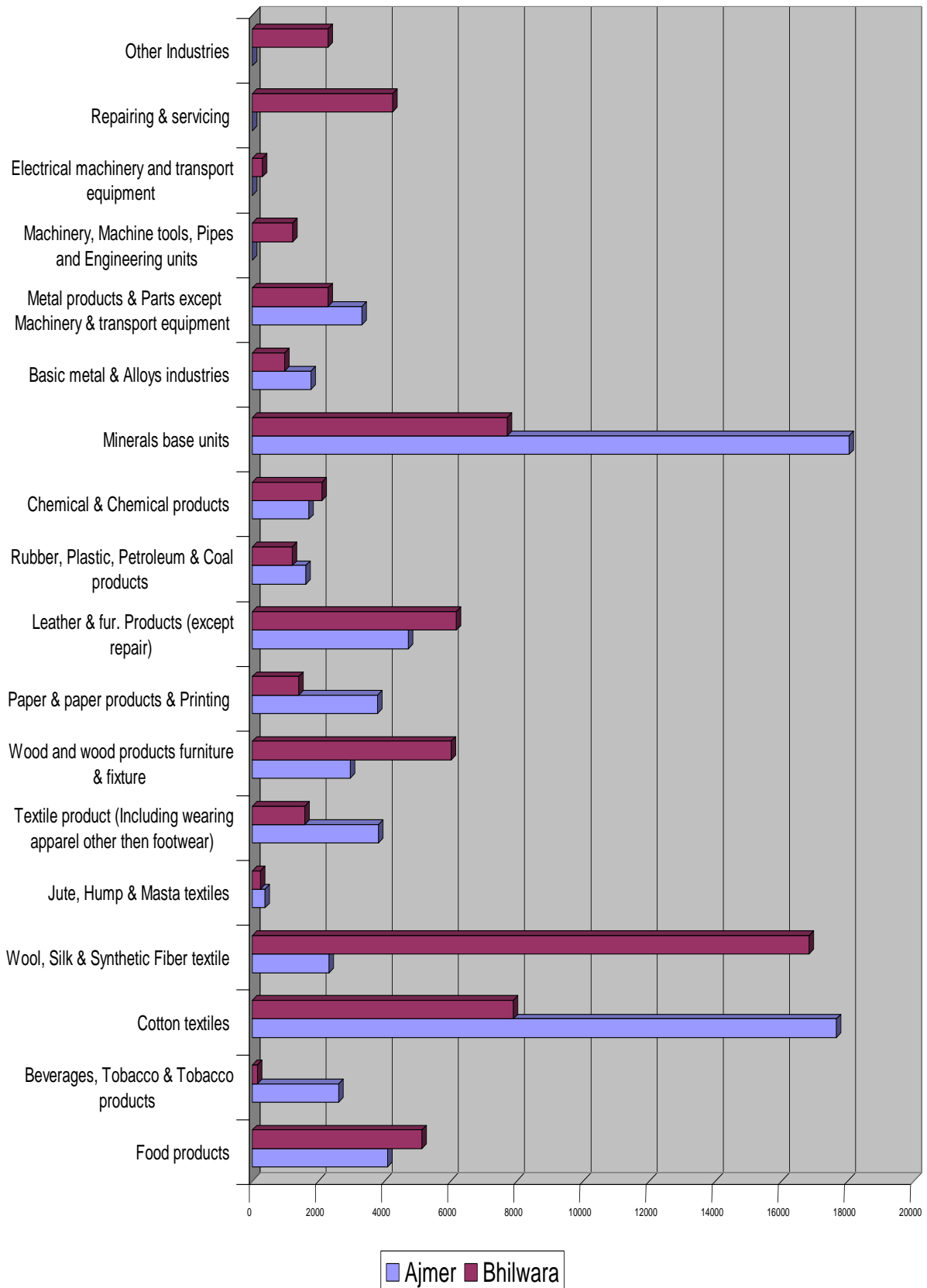
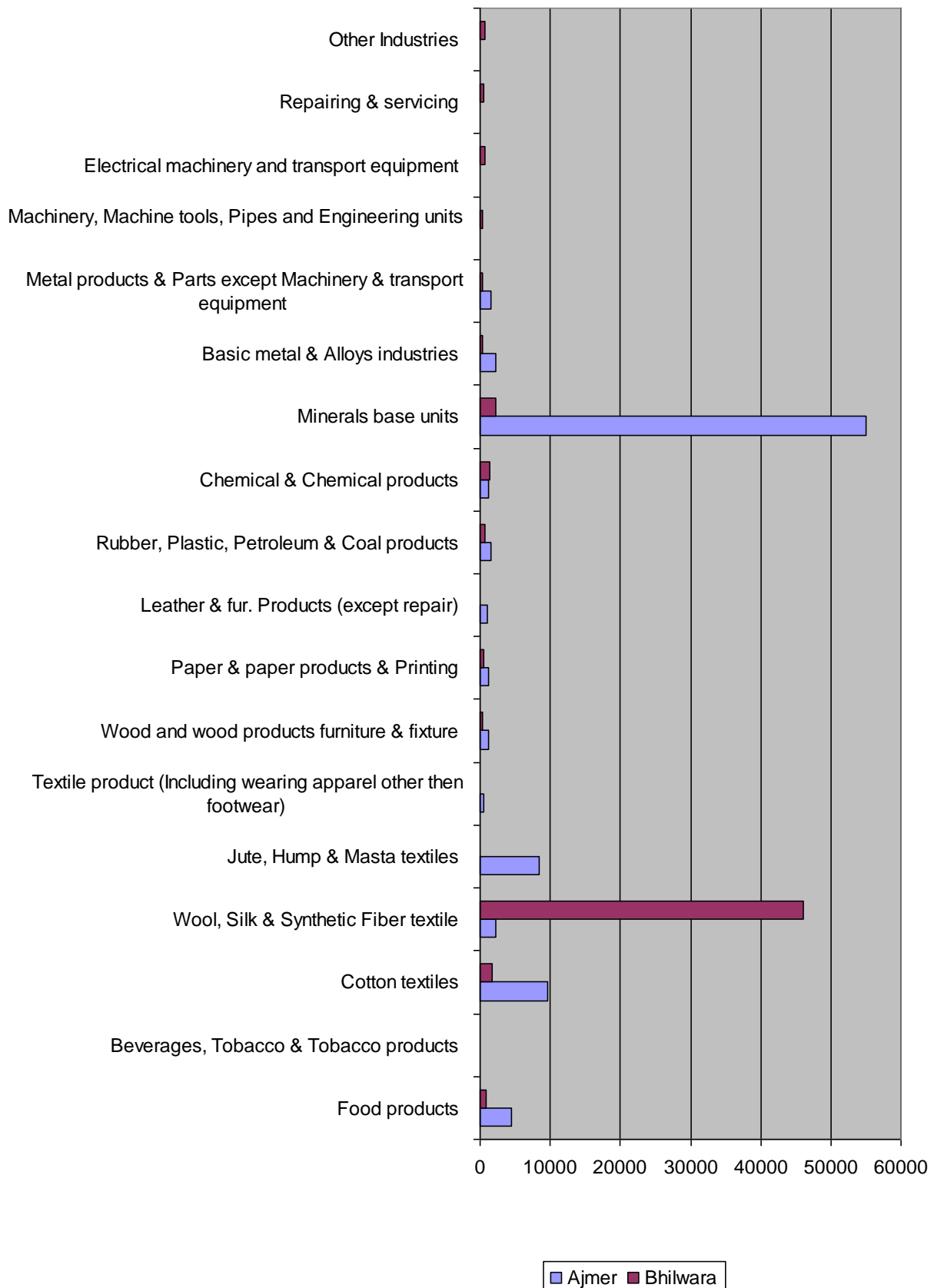


FIGURE 8: DETAILS OF INVESTMENTS (IN LACK) AT EXISTING MICRO AND SMALL ENTERPRISES AND ARTISAN UNITS AT AJMER AND BHILWARA DISTRICTS



On the other hand Tonk district is having 9 various types of micro and small enterprise and Nagaur district is represented by the 7 various types of micro and small enterprise (Table 5 and Figures 9 to 11).

TABLE 5: DETAILS OF EXISTING MICRO AND SMALL ENTERPRISES AND ARTISAN UNITS AT TONK AND NAGOUR DISTRICTS

S. No.	Type of Industry	Tonk			Nagaur		
		Unit	Employment	Investment	Unit	Employment	Investment
1	Agro Based	862	3097	3909.56	22	83	358.37
2	Forest Based	1338	4665	816.09	57	159	39.34
3	Animal Husbandry	2000	4240	817.2	89	356	71.00
4	Textile Based	1260	6502	1409.03	187	754	634.00
5	Chemical Based	59	315	189.40	-	-	-
6	Mineral Based	1277	4641	2162.45	91	594	992.74
7	Engineering	742	2204	2038.39	43	168	144.73
8	Building Material	98	698	190.81	-	-	-
9	Misc.	1142	30656	2840.01	187	606	241.94

Source: DIC Tonk, Nagaur and MSME Jaipur

FIGURE 9: DETAILS OF EXISTING MICRO AND SMALL ENTERPRISES AND ARTISAN UNITS AT TONK AND NAGOUR DISTRICTS

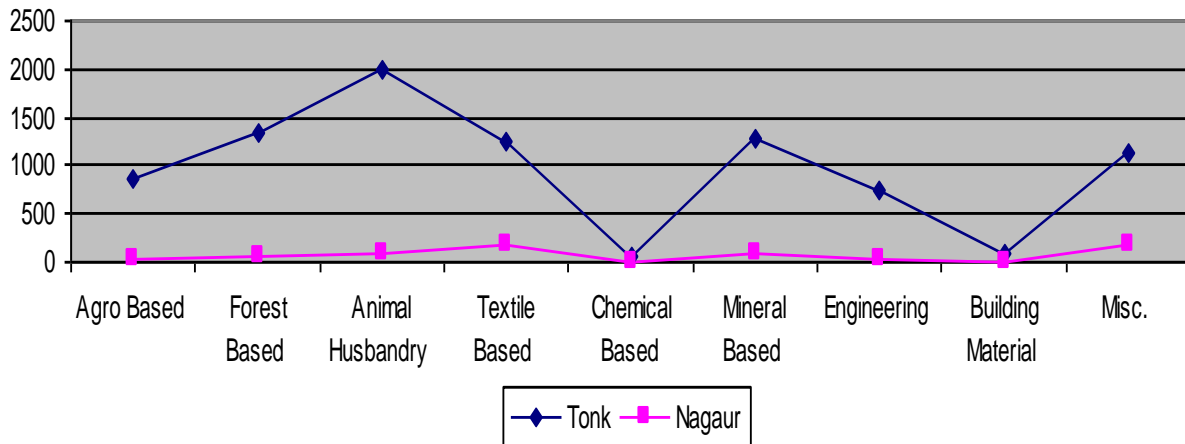


FIGURE 10: DETAILS OF EMPLOYED PERSONS IN EXISTING MICRO AND SMALL ENTERPRISES AND ARTISAN UNITS AT TONK AND NAGOUR DISTRICTS

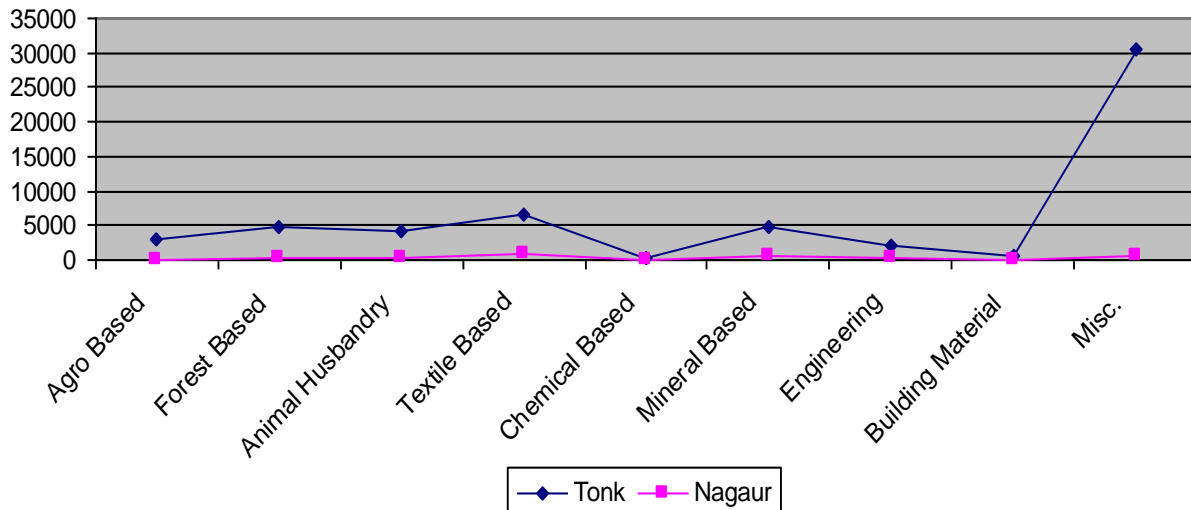
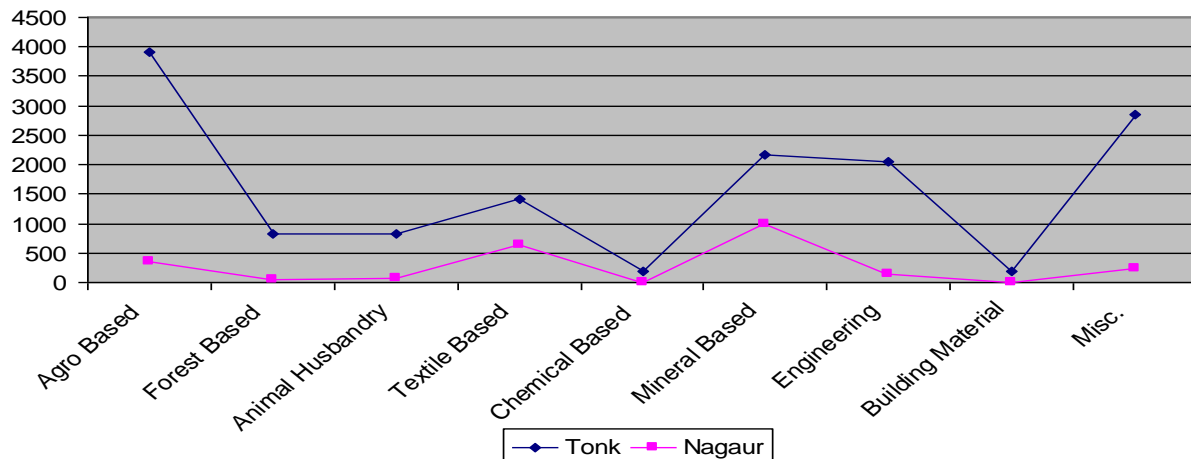


FIGURE 11: DETAILS OF INVESTMENTS (IN LACK) AT EXISTING MICRO AND SMALL ENTERPRISES AND ARTISAN UNITS AT TONK AND NAGOUR DISTRICTS



LARGE SCALE INDUSTRIES

Ajmer is having only four large scale industries registered at the Ajmer, and Major industries are based machinery and cement industries. Bhilwara district is having 62 large scale industries registered at the Bhilwara out of these most of are based on the textile and synthetic fabric production units. While the Tonk is having only one large scale industry which is based on the ball bearing production unit.

DISCUSSION AND CONCLUSION

World Bank defines the "Rural Development" as, "rural development is a strategy to improve the economic and social life of a specific group of people the rural poor, including small and marginal formers, tenants and the landless. According to Robert Chambers, "Rural development is a strategy to enable a specific group of people, poor rural woman and men, to gain for them selves and their children more of what they want and need. It involves helping the poorest among those who seek a livelihood in the rural areas to demand and control more of the benefits of rural development. According to Ensminger, "Rural Development seeks to involve a process of transformation from traditionally oriented rural cultural towards an acceptance as reliance on science and technology. Lele defines "Rural development as an improvement in the living standard of the masses of low income population residing in rural areas and making the process of self-sustaining (Suri, 1988).

Government of India (Central and State) tried hard to improve the economic and other aspects of the rural peoples. Various national and state level policies were implemented time to time for the betterment of the rural peoples and for the developing countries. But the drastic increment in the population, changes the entire scenario because the strategies were restricted to a group of peoples that is limited to only few percent of total population. Micro and Small scale industries are the better option or better solutions for providing the better employment opportunities and helps in rural development. Small and Medium scale industries were play crucial role in industrial activity and employment generation of developing countries. These types of setups not only help in economic growth of rural peoples but also prevent the migration towards metro-cities for in the search of employments opportunities. Small and Medium scale enterprises based on wide range of products, ranging from gems & jewellery, handicrafts, synthetic and cotton textile yarn, wool, marble and granite slabs, edible oils, chemicals, rubber to plastic based items, fertilizers, electrical and electronic goods, ceramic and glass, etc. were identified as potential sectors. Information Technology (IT) and IT enabled Services (ITeS) and power generations are emerging sectors identified for the Small and Medium scale industries (Sharma and Sharma, 20013).

SIGNIFICANCE OF SMALL SCALE INDUSTRIES

The overall development is a major issue, not only for the developing countries but also for the developed countries. Development is not to be restricted only for the urban areas it is required for all other sectors including the rural areas. Peoples residing at the rural areas are most of with lack of technical expertise and in term of education. Thus, to achieve the better opportunities of employment these peoples are not having required eligibility qualifications. In that case the Micro and Small scale industries are the better solution for having respectful of desirable economic growth without having any specific educational or technical qualification criteria.

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INTEGRATING INFORMATION AND COMMUNICATION TECHNOLOGY INTO THE GHANA EDUCATION HEAD OFFICES: AN EMPIRICAL EVIDENCE FROM GHANA

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CAPE COAST

ABSTRACT

Information and Communication Technology (ICT) has come to stay with us. It has become a necessary tool for development. A developing country like Ghana cannot do without it. Governments and their agencies cannot function effectively without ICT interventions. The purpose of this study was to assess how far ICT has been integrated into the Ghana Education head office and its impact on the various functions of the public service. The sample of the study covered Education Headquarters all located in Accra. Education Headquarters is made up of Ministry of Education Head Office (MOE) and Ghana Education Service Head Office (GES). In all 68 personnel participated in the study. A 5 point likert scale instrument which yielded reliability coefficients of 0.832 was used to collect data. It was established from this study that more than 50% of public sector units and their functions have experienced ICT interventions. The study also revealed that despite low performance of ICT in the public sector, with its continuous output failures, respondents still prefer ICT to manual processes, demanding that integration of ICT into public service should be pursued. Considering the findings and conclusions drawn from the study it was recommended that public sector managers should adopt a strategic plan for ICT integration in the public service.

KEYWORDS

Computers, Ghana Education Service, Manual data processing, Ministry of Education, Ghana Education head offices.

INTRODUCTION

Information and Communication Technology (ICT) was introduced into the Ghanaian public sector more than two decades ago, in various professions, to make information available, to facilitate work and to enhance productivity. The basic aim of reducing manual processing in the education offices to its minimum level was also paramount. ICT was supposed to have started on a galloping note in Ghana, as compared to other sub-Saharan African countries; as such, its impact on development could not be over-emphasized (Opoku, 2004). It was anticipated that ICT would be integrated in all facets of the public sector, and its impact felt from the seat of governance to the kindergarten school level. However, Ghana finds herself among other developing countries which have been hit by the problem of the digital divide, which is more prominent in Africa. Ghana Education offices can boast of having received more inputs in the form of ICT infrastructure, especially computers, than the private sector in Ghana. Computers can be seen in every ordinary and executive office, conference and board rooms. Again, numerous government projects have introduced more ICT infrastructure into the public sector than any other event. The development of a Ghana national fibre optic network called Voltacom Project, by the Ghana Volta River Authority is a clear example of another input towards ICT infrastructure. The Ghanaian government has partnered private investors in providing ICT infrastructure, Notable among them are the Ghana Telecom (Now Vodafone Ghana), Millicom Ghana Limited (TIGO Ghana), Scancom Ghana Limited (MTN), Globacom telecommunications (GLO) and Expresso Telecom Ghana.

REVIEW OF LITERATURE

There has been tremendous growth in ICT since its advent decades ago. ICT has seen growth in size and capacity. In 2003, UNESCO Bangkok conducted a meta-survey of the state of ICT use in education across Asia and the Pacific. Not surprisingly, the survey found a great deal of variation in the nature and extent of technology integration in the more than two dozen countries surveyed. Specifically, 'countries are at different stages of both development and implementation in the areas of policy formulation, ICT infrastructure development and access to it, content development, programme initiatives and the training provided for education personnel' (Farrell and Wachholz 2003). The differences arise not only from differences in the countries' financial and human resources, but also from differences in policymaking with regard to ICT in education. Countries in sub-Saharan Africa are still struggling to find a place for ICT in their developmental plans.

Several attempts have been made by the developing countries to allocate portions of their budgets to technological advancement. Currently, it is a painful venture which may yield fruits in the future. According to a survey conducted by National ICT Policy and Plan committee in Ghana, majority of government ministries and public sector organizations have less than 10% of their total budget on ICT (including acquisition of hardware, software, training, maintenance of ICT systems, etc.). Microsoft, in partnership with British Council in March 25, 2013, organized a two-day workshop on Information and Communication Technology (ICT) Integration in Education in Accra-Ghana. The event, dubbed: "Leveraging Innovation for Global Competitiveness," served as platform to hasten the integration of ICT in education. The workshop also provided opportunity for leaders in the field and experts in ICT education to share ideas and challenges they faced from local, regional and international perspectives and devise strategies for integrating ICT in education.

According to Memela, (2007), the individuals tasked with automating the deployment of government services need to get a move on. Government and industry both agree that the integration of technology into the state's processes and services is not proceeding as rapidly as it should. Although a number of notable processes have been automated and integrated, the majority of government's services are still bogged down by miles of red tape and human intervention that is hindering its development.

NEED/IMPORTANCE OF THE STUDY

The findings of this study will assist educational managers to assess the effects of the use of ICT in education head offices in Ghana in areas like administration, human resource, procurement, inspectorate, accounting, payroll and the like. It is hoped that this study will unveil how far ICT has been integrated into the education head office and which areas need critical attention of ICT intervention. The outcome of this study will also enable management to institute measures to ensure that all educational functions receive appropriate ICT interventions.

STATEMENT OF THE PROBLEM

Even though ICT abounds everywhere in the Ministries, departments, agencies, schools and universities in Ghana, its impact is not felt as expected, especially in the educational head offices. ICT has not been able to replace the old system of manual processing completely. Manual work is still in progress across the public educational head offices. The public servant is comfortable using the old manual system. Where computers have been introduced, they are being under-utilized. Considering the widespread benefits of ICT, it is therefore important to conduct this study to ascertain the reality on the ground.

OBJECTIVES

This case study intends to research into how far ICT is being put to use at the various facets of the education head offices in Accra. It will further investigate the impact of ICT on educational functions at education headquarters, and consider whether the integration has been slow or abreast with time.

RESEARCH QUESTIONS

This study seeks to answer the following questions:

1. To what extent has ICT been used in the various units of the public Educational head offices in Ghana?
2. What has been the impact of ICT output on Educational head offices activities as compared to Manual output in public Educational head offices Ghana?
3. What portion of public sector budget is allocated to ICT integration at Ghana Educational head offices?

RESEARCH METHODOLOGY

The research was conducted using the case study method. This study focused on education head offices in Accra, as its target population. Education head offices are made up of the Ministry of Education (MOE) head office and Ghana Education Service head office (GES). MOE head office has five (5) main Divisions. Ghana Education Service (GES) head office has ten (10) Divisions. The sample for this study did not cover all the 15 divisions and their units and sections. Purposive sampling was used to select nine (9) units or sections that have ICT incorporated in their functions. The selection included units that have not made any effort to integrate ICT into their functions. These were hand-picked because they were relevant to the research topic.

The main instrument for the study was a questionnaire developed by the researcher after an elaborate literature review. The questionnaire adopted both open and close-ended questions, providing a balance between depth and authenticity of information, and fixed-option data which are more easily quantifiable. The items were tested (SPSS. v.17) for reliability using an internal consistency method, (Cronbach's alpha co-efficient [Cronbach,1990]) which yielded reliability coefficient of 0.832. The questionnaire was administered personally from room to room. This was very successful because some heads of units assisted in the administering of the questionnaire. Out of the 75 questionnaires administered, 68 were retrieved thereby recording return rate of 86.6%.

All the items in the questionnaire were computerized using the IBM Statistical Package for Social Science (SPSS v18). It involves definition of variables, keying in of the data using codes.

RESULTS AND DISCUSSION OF THE STUDY**Research question 1: To what extent has ICT been used in the various units of the public Educational head offices in Ghana?**

The extent to which certain units at Education headquarters are equipped with ICT tools, especially computers, was investigated. The idea is to find out units which are well resourced with ICT tools and are using them extensively, units that are well resourced but use ICT less extensively as well as units that are not well resourced and, for that matter, use ICT less extensively. Table 1 shows respondents describing the extent of ICT usage in their various units.

TABLE 1: EXTENT OF ICT USAGE

Extent of ICT Usage	Frequency	Percent
Very extensive	4	6.1
Extensive	30	45.4
Seldom	32	48.5
No Response	2	0.0
Total	68	100

Field data, 2010

One can deduce from Table 1, 45.4% use ICT extensively in their functions. Thirty-two (48.5%) use ICT less extensively in their work. This is on the high side, as far as ICT integration is concerned. However, 6.1% use ICT actively. It is rather encouraging to note that more than 50% of the respondents sampled use ICT extensively. Two respondents did not choose any option.

The study further sought information on the availability of PCs in the units under study. The result is reflected in Table 2. The purpose is to determine the number of PCs available for work.

TABLE 2: DETERMINING THE NUMBER OF PCS IN EVERY UNIT OF THE SAMPLE DATA

No. of PCs in Units	Frequency	Percent
Below 1	0	0.0
Between 1-5	26	38.2
Between 6 – 10	14	20.6
Above 10	28	41.2
Total	68	100

Field data, 2010

The data in Table 2 reveals that there is no unit without a personal computer from the number of units sampled. Twenty-eight (41.2%) represents units with more than 10 PCs. Twenty six (38.2%) respondents claim they have between 1 to 5 PCs they work with. Even though there are functions which are performed manually, almost every unit can boast of a personal computer.

A follow-up question was posed to find out when these PCs were acquired. The responses are shown in Table 3. The intention is to find out how often PCs are upgraded to meet current challenges.

TABLE 3: NUMBER OF YEARS OF CURRENT PERSONAL COMPUTERS

Years of PCs	Frequency	Percent
Below 5 years	54	79.5
Between 6-10 years	12	17.6
Above 10 years	2	2.9
Total	68	100

Field data, 2010

It is very clear from the information presented in Table 3 that 54 (79.5%) PCs in use are below 5 years of age. Only 2 respondents representing 2.9%, reported that their PCs are over 10 years after acquisition.

The purpose for the acquisition of personal computers also came up for consideration. The data collected in respect of this item are analysed in Table 4. Each unit is guided by its objectives/functions, which is a deciding factor for the acquisition of various ICT tools.

TABLE 4: PURPOSE OF ACQUIRING PERSONAL COMPUTERS

Purpose	Frequency	Percent
Secretarial	35	51.5
Database update	6	8.8
Accounting	7	10.3
Payroll	11	16.2
Statistics	7	10.3
Other	2	2.9
Total	68	100

Field data, 2010

The analysis in Table 4 tells us that over 50% of personal computers that were acquired in the Ghana Education Head Offices are used for secretarial functions. Statistical functions take only 7 (10.3%) of ICT functions. Two (2.9%) respondents indicated that ICT are used for other purposes. The picture is clear from this Table, that secretarial functions receive more ICT assistance than any other functions.

Research Question 2: What has been the impact of ICT output on Educational head offices activities as compared to Manual output in Educational Head offices in Ghana ?

It is important to assess how ICT has impacted the Education headquarters, despite its output failures, and also establish if there is any unit or function ICT has impacted most. The impact must be felt or seen, and users should be proud and recommend it. Table 5 shows the rate of ICT impact on Education headquarters.

TABLE 5: THE RATE OF ICT IMPACT ON UNITS AND THEIR FUNCTIONS

Rate of Impact	Frequency	Valid Percent
Fast	0	0
Gradual and consistent	23	33.8
Slow	41	60.3
Very slow	4	5.9
Total	68	100

Field data, 2010

The figures in Table 5 show that the rate of ICT impact on various functions of Education headquarters has been slow. More than half of the respondents represented by 41(60.3%), said the rate of impact is slow. Meanwhile, 23(33.8%) were of the view that the impact is rather gradual, meaning that even though it is not as fast as expected, it was consistent. None of the respondents said it was fast.

There are units and functions ICT has impacted most. The researcher therefore wanted to find out how these functions are. Table 6 shows some of the functions of Education headquarters where ICT has impacted most.

TABLE 6: FUNCTIONS MOST IMPACTED

Functions	No. Respondents	Percent (%)
Payroll	20	29.4
Statistics	10	14.7
Secretarial	31	45.6
Account	4	5.9
Others	3	4.4
Total	68	100

Field data, 2010

The analysis in Table 6 shows that 31 (45.6%) respondents are of the view that secretarial functions of Education headquarters receives most of the ICT support hence ICT impact is mostly seen in that function. Next is payroll, with 20 (29.4%) respondents saying ICT has impacted enough.

There are units whose functions need urgent ICT intervention to make its impact felt. These units appear handicapped as far as ICT integration is concerned. The researcher tried to find out from respondents' whether ICT should be given the chance to integrate without further delay.

Table 7 shows respondents suggesting units that need urgent ICT integration.

TABLE 7: UNITS THAT NEED URGENT ICT INTEGRATION

Units	No. Respondents	Percent (%)
Public Relations	29	42.7
Posting and Transfer	21	30.9
Transport	5	7.3
Estate	5	7.3
Others	8	11.8
Total	68	100

Field data, 2010

The information in Table 7 revealed that 42.7%, indicated that Public Relations of Education headquarters needs computerization. This is followed by Postings and Transfer Unit 30.9%. Transport and Estate Unit had 5(7.3%), with 'Others', 8 (11.8%). The Public Relations unit actually needs to have enough ICT tools to make their work of disseminating information very successful.

Respondents have recommended that other units like Public Relations and Postings and Transfer units of Human Resource should be given ICT integration. These are units that render service to people across the country. They should have enough information on the internet. This facility will reduce the problem whereby people have to travel long distances to collect information which could have been made available on the internet. The ICT officer with GES – HRM, suggested that results of postings of 12,000 students across the country could be made available on the internet.

There has been a lot of criticism of the fact that ICT output does not satisfy the demand of users. This issue has been prolonged to the extent that users often times have preferred manual output to ICT output in certain categories of work. Users have challenged results produced by ICT processes in certain jobs, and others have used the results since there are no other alternatives.

TABLE 8 COMPARES ICT OUTPUT TO MANUAL OUTPUT

Output compared to Manual	Frequency	Percent
Very satisfactorily	7	10.3
Satisfactorily	16	23.5
Below average	37	54.4
Poor	8	11.8
Total	68	100

Field data, 2010

The analysis in Table 8 reveals that ICT output as compared to manual output is below average. 54.4%, were of the view that ICT output is below average. Seven respondents representing 10.3%, are very satisfied, 8 (11.8%) reject ICT output describing it as poor. In all, 45 (66.2%) respondents claim ICT output is below satisfactory.

As a follow-up to the outcome of the data in Table 9, where the performance of ICT output is below average, the researcher wanted to know some of the causes of ICT output failures in the public sector were also investigated. Table 9 outlines some of the causes of ICT output failures in the public sector.

TABLE 9: SOME CAUSES OF ICT FAILURES

Causes of ICT failures	Frequency	Percent
Managerial problems	28	41.2
Lack of funds	17	25
Change Management problems	9	13.2
Motivations	9	13.2
Others	5	7.4
Total	68	100

Field data, 2010

The data in Table 9 attributes the main cause of ICT output failures to bad attitudes and lack of interest on the part of public sector management. Out of 68 respondents, 28 (41.2%), blame top management of public sector as being the cause of ICT output failures. Public sector managements, including the Chief Executives, are yet to appreciate the immense benefits of integrating ICT into their work place. In an interview with the Finance Director, it was revealed that every management personnel wished they could incorporate ICT into their routine work, if they had the opportunity of starting their career with ICT; hence management is coping reluctantly with ICT.

Research question 3: What portion of public sector budget is allocated to ICT integration in Ghana Educational head offices?

Integrating ICT into the public sector has not received the needed financial support from government. Public sector executives have also failed to allocate adequate budget for ICT integration.

Table 10 shows how much was spent in the years 2007 and 2008. It must be noted that the budget for ICT for the two years was allocated to only two items; namely computerization of registry and purchase of computers and accessories. The registry computerization has been in the budget since 2003.

TABLE 10: BUDGET ALLOCATION FOR ICT (in GHc)

Year	Budget for Education Headquarters	Budget allocated to ICT	Percentage Allocated	Amount used	Percentage used	Percentage used from total budget
2007	25,474,850	62,438	0.25	54,435	87.2	0.21
2008	62,473,774	212,798	0.34	70,000	25.4	0.11
Total	87,948,624	275,236		124,435		

Field data, 2010

In year 2007, the budget had a provision of GHc62,438 allocated for ICT out of a total amount of GHc25,474,850 allocated to headquarters. Out of the amount allocated, GHc54,435 representing 87.2%, was used. In the year 2008, out of a total budget of GHc62,473,774 allocated to headquarters, an amount of GHc212,798.00 was provided for ICT. Out of this, only GHc70,000.00 representing 25.4% has been used. It is absurd to note that only 0.21% of 2007 budget and 0.11% of 2008 budget for education headquarters went into ICT. This is a clear manifestation of management's unwillingness to support ICT activities. Where a provision has been made in the budget for ICT integration, the willingness to pursue its intended course is not adhered to. Table 11 shows respondents' desire to see annual budget allocation to ICT increased from its current situation.

TABLE 11: INCREASING BUDGET ALLOCATION ON ICT

Budget on ICT should be increased	Frequency	Percent
Yes	58	85.3
No	4	5.9
Indifference	6	8.8
Total	68	100

Field data, 2010

Table 11 shows 58 respondents representing 85.3%, yearning for an increase in annual budget allocation to ICT in the public sector. However, 6 (8.8%) respondents are undecided as to whether it is necessary at all to increase annual budget allocation to ICT.

TABLE 12: PERCENTAGE INCREASE IN BUDGET ALLOCATION TO ICT

Portion of budget (%)	Frequency	Percent
Above 50	2	2.9
Between 40 – 50	8	11.8
Between 30 – 39	9	13.2
Between 20 – 29	36	52.9
Below 20	13	19.2
Total	68	100

Field data, 2010

Table 12 shows that 36(52.9%) respondents wish the education headquarters allocates between 20% and 29% of its annual budget to develop ICT. Two respondents, representing 2.9% wish government allows the public service to use over 50% of its annual budget on ICT development.

This is an indication that users of ICT wish to see more resources invested in ICT. They are not happy about the current state of ICT or the slow pace of development of ICT.

It can be concluded that public sector management has not invested much into ICT, as compared to the need for ICT integration. As a result there is pressure on management to increase budget allocation to ICT development.

DISCUSSION OF RESULTS, CONCLUSIONS & SUGGESTIONS

This study suggests that there is no unit without a personal computer from the number of units sampled. Even though there are functions which are performed manually, almost every unit can boast of a personal computer. The findings show that even though it has been established that every unit at Education headquarters can boast of at least a personal computer, most of these are used for secretarial functions: and hence, they are not in extensive use.

The analysis of this study also shows that the rate of ICT impact on various functions of Education headquarters has been slow. The study reveals that secretarial functions of Education headquarters receives most of the ICT support hence ICT impact is mostly seen in that function. This is in sharp contrast to McCauley (2005) finding that "Public sector organizations in many countries have put technology to good use in improving on their delivery of services." He noted that instilling flexibility and speed requires the ability to harness IT throughout the organization.

There has been a lot of criticism of the fact that ICT output does not satisfy the demand of users. This issue has been prolonged to the extent that users often times have preferred manual output to ICT output in certain categories of work. This low impact of ICT is attributed to bad attitudes and lack of interest on the part of public sector management. Shirk (2005) asserts that, for public sector organizations, swift adaptability to change will be the silver bullet for success over the next few years. The public service must look at this assertion critically and work towards it.

Public sector managements, including the Chief Executives, are yet to appreciate the immense benefits of integrating ICT into their work place.

In year 2007, the budget had a provision of GH¢62,438 allocated for ICT out of a total amount of GH¢25,474,850 allocated to headquarters. Out of the amount allocated, GH¢54,435 representing 87.2%, was used. In the year 2008, out of a total budget of GH¢62,473,774 allocated to headquarters, an amount of GH¢212,798.00 was provided for ICT. Out of this, only GH¢70,000.00 representing 25.4% has been used. It is absurd to note that only 0.21% of 2007 budget and 0.11% of 2008 budget for education headquarters went into ICT. This is a clear manifestation of management's unwillingness to support ICT activities. (National ICT Policy, 2003) Economic and Social Survey of Asia and the Pacific (ESSAP) confirmed this finding. In their 1999 survey, it was revealed that, governments' budgets tend to be tight, especially in developing countries, since this can create problems for rational ICT development and hamper the ability to react quickly to new requirements or buy the latest technology.

FINDINGS

SUMMARY OF MAJOR FINDING

1. This study revealed that Information and Communication Technology had been introduced into the public sector for over 15 years; but the public service is yet to experience the full impact of ICT in their functions.
2. An outstanding revelation of the research was that, even though a personal computer can be spotted in almost every unit, manual processes still dominate government activities in the public sector.
3. The study revealed that despite the low performance of ICT in the education head offices, with its attendant output failures, public servants still prefer ICT to manual processes, demanding that integration of ICT into the public service should be pursued.
4. It was also found out that Public Sector Management lack in-depth knowledge of what ICT can do. Hence, they do not have the urge to come out with policies to support ICT. As a result, many causes of ICT output failures emanates from them.
5. Again, the study revealed that the annual budget allocation to ICT development in the public service is insignificant, and that there is the urgent need to increase it.

RECOMMENDATIONS/SUGGESTIONS

Considering the findings and conclusions drawn from the study, the following recommendations are made:

1. Public sector managers should adopt a strategic plan for ICT integration in the education head offices.
2. Government, working through the Ghana national ICT policy, should enforce a policy which enjoins education head offices managers to allocate a substantial percentage of their budgets to ICT integration.
3. Public service ICT staff should be trained regularly and given the opportunity to take over ICT projects whenever a project comes to completion.
4. To train and retain ICT staff in the public sector, management should endeavour to motivate ICT staff.
5. Preparation of ICT projects documents should make adequate provision for training and transfer of skills to local staff.
6. ICT should be seen as an enabling or facilitating tool to benefit the whole of society and not only the elite and the urban areas.

CONCLUSIONS

Despite the numerous advantages ICT brings and its overwhelming acceptance, ICT integration in the public service for that matter education head offices faces a lot of challenges. It is to be noted that some of these challenges can be resolved if public sector management would appreciate the immense contribution of ICT to development, especially in the public service. Notwithstanding the above challenges facing ICT integration in developing countries, ICT is a necessity for developing countries, because it is the primary means of communicating with the outside world. Ghana, a developing country, should take cue from the following wise sayings: "We paid the price of not taking part in the industrial revolutionbecause we did not have the opportunity to see what was taking place in Europe. Now we see that information and communication technology has become an indispensable tool. This time, we should not miss out on this technological revolution." (Allotey, 2000) . "The message for Ghana is that, we need to embrace information, knowledge and technology. If we, Ghanaians, fail to take advantage of information technology, we will be further marginalized in the world" (Dzidonu, 2000)

SCOPE FOR FURTHER RESEARCH

This study covered Ghana Educational Headquarters only. It sampled only 68 staff and interviewed 11 senior staff members. This study was done using headquarters of a public sector. To confirm or generalize these findings to all public sectors of the country, there should be a replication of the study to other public sectors in the regions of the country. This will involve a larger population where the findings could be compared and contrasted with each region. The same study should be done at the district level of the public sector in the country.

However, to conduct such studies, it is advised that the same basic instruments of the study should be used in order to confirm or reject the findings of this study.

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