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   INTRODUCTION

   REVIEW OF LITERATURE

   NEED/IMPORTANCE OF THE STUDY

   STATEMENT OF THE PROBLEM

   OBJECTIVES

   HYPOTHESES

   RESEARCH METHODOLOGY

   RESULTS & DISCUSSION

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   RECOMMENDATIONS/SUGGESTIONS

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   ACKNOWLEDGMENTS

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   APPENDIX/ANNEXURE

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BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

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- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

THE INSTALLATION OF POS (POINT OF SALE) TERMINALS BY INDIAN BANKS

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ABSTRACT

The main objective of this research paper is to find out whether the selected Indian Banks have installed sufficient number of POS (Point of Sale) Terminals. This was pursued by collecting secondary data from RBI Reports, Regulations and Notifications, websites of RBI, selected banks and related websites of World Bank, IEEE, ISO, BASEL Committee etc and studying the various brochures, products and services as well as procedures of selected Indian banks. The Researcher also noted on-the-spot observations by visiting the branches of the banks and using their various products and services like ATM's, Net Banking, Mobile Applications, POS Terminals, Credit and Debit cards of various banks. The research clearly suggests that barring the top private sector banks, most other banks selected by the researcher in his research either do not offer this service or their exposure negligible in comparison to their size & the plastic money cards issued by them.

JEL CLASSIFICATION

M15: IT Management

KEYWORDS

Point of Sale Terminal, Point of Purchase Terminal, checkout, POS, POP.

INTRODUCTION

Credit and Debit Cards′ are electronic plastic cards that are used as a substitute for cash. Bank Debit Cards help reduce the need for carrying cash and checks. Debit cards are directly linked to a cardholder's bank account. Whenever a card holder withdraws money from an ATM or uses the debit card for making payments, his/her account balance is automatically reduced.

Debit cards and credit cards differ in some significant ways. In the case of a credit card, the issuer offers credit and overdraft facilities, this facility is not available with a debit card, which will only debit payments from existing and available funds within the cardholders account. A credit cardholder therefore has a monthly bill to pay in every month that the card is used. If they don't pay that bill, high interest charges are applied. A debit card holder is free from the hassle of paying those bills and from the risk of building up large debts to credit card companies.

The card transactions are routed through the VISA or MasterCard networks rather than directly via the issuing bank.

POS (Point of Sale) Terminals also sometimes referred to as **point of purchase** (**POP**) or **checkout** is the location where a transaction occurs. A "checkout" refers to a POS terminal or more generally to the hardware and software used for checkouts, the equivalent of an electronic cash register. A POS terminal manages the selling process by a salesperson accessible interface. The same system allows the creation and printing of the receipt after the transaction has been completed by charging via a debit, credit or prepaid card.

REVIEW OF LITERATURE

Nitsure Rupa Rege [2003][2] in her article explains that the e-banking revolution has fundamentally changed the business of banking by scaling borders and bringing about new opportunities. In India also, it has strongly impacted the strategic business considerations for banks (including the PSBs) by significantly cutting down costs of delivery and transactions. It must be noted, however, that while e-banking provides many benefits to customers and banks, it also aggravates traditional banking risks. Compared to developed countries, developing countries face many impediments that affect the successful implementation of e-banking initiatives. In this paper, she has identified some such impediments in the Indian context and have suggested ways to overcome them in order to move forward with the wave of e-banking successfully. In India there is a major risk of the emergence of a digital divide as the poor are excluded from the internet and so from the financial system. Even today, the operational environment for public, private and foreign banks in the Indian financial system is quite different. Though there has been higher acceptance of technology by public sector banks, they are at a different level in the computerization spectrum as compared to private and foreign banks. This has endangered their position in the immediate period due to the lack of adequate systems for customer and investor protection. PSBs are more susceptible to breaches of security and to disruptions in the system's availability and hence to reputational risk.

Rajshekhara K. S. [2004][3] in his study described the adoption of IT in banking has undergone several changes with the passage of time. Today IT has become an inseparable segment of banking organization. The application of information technology in the banking sector resulted in the development of different concepts of banking such as – E-banking, Internet Banking, Online Banking, Telephone Banking, Automated teller machine, universal banking and investment banking etc. Information technology has a lot of influence on banking transactions. It ensures quick service with low transaction cost to the customers. The real success of IT in the banking sector depends upon the customer's satisfaction. Therefore banks should organize and conduct customer awareness program in their service area.

Rishi & Saxena [2004][4] in their study suggest that the advancements in information and telecommunication technologies (IT) since past 25 years clearly indicate a positive impact on banking and financial institutions Innovations in information technology and development in IT sector has been enforced the convention of IT elements in maximum branch of banks. Public sector banks were late adopter of new technology as compare to private and foreign banks.

Vittaldas Leeladhar [2006][5] in his study suggests that RBI has also adopted IT in endorsing the payment system's functionality and modernization on an ongoing basis to improve the efficiency of banking sector. There is a noticeable improvement in the performance of financial institutions and the service sector by incorporating IT into their functionality. It shows an increasing share, enhanced competitiveness at the global surface because of adopting IT culture

Mittal & Dhingra [2007][6] in their study suggest that Indian banking industry has witnessed a remarkable development in the Informational Technology (IT) in last few years. Banking transactions are become easier and customer friendly due to the technological improvements. To play a supportive and key role, banks are providing with lots of services which are the combination of electronics and information technology, like, Automatic Teller Machines (ATM), plastic money i.e. Credit card, debit card and smart cards, phone banking, e- banking which is called by net-banking, etc. ATMs have emerged as the most favored channel for offering banking services to the customers in the world.

Uppal R.K. [2008][7] in his study analyzes the quality of e-banking services in the changing environment. The sample size of bank customers is 25. The data is collected through pre-tested and well structured questionnaire in Ludhiana, Punjab in May 2006.The study concludes that the customers of ebanks are satisfied with the different e-channels and their services in the spread of ebanking services. It also suggests some measures to make ebanking service more effective in the future. The present study is mainly concerned with the Indian banking industry in general and particular those banks that are producing service through e-channels i.e. ebanks.

Ashish Das & Rakhi Agarwal [2010][8] in their technical report suggest that debit cards as business proposition for POS usage brings in significant gains for the banking industry since it helps in reducing branch visits of bank account holders (merchants and consumers alike) for cash deposits and withdrawals and less dependence on ATM usage. Both the latter means of payment vehicles (branch visits and ATM usage) are relatively more expensive for the banks. Moving from such expensive payment vehicles to debit card at POS gives banks a means for cutting costs and increasing efficiency leading to increased profits. Alongside, such an innovative development in the payment system leads to increased convenience, security, accountability and financial inclusion for our countrymen. Furthermore, with advancement of time, debit cards are now looked as nothing but electronic cheques.

Erik-Jan Monshouwer & Raul Valverde [2011][9] in their study suggests that literature research and the prototype tests and evaluation in this project shows that transactions fees and performance of POS terminal payments transactions through web services can be competitive to conventional payment transactions methods and create flexibility for vendors POS terminal application. Vendor's available Internet connections and the web services standards in the market can be used for payment transactions. With web services the system can be created and changed relatively fast and simple if the right skills are available.

Mukesh Kumar Verma [2011][10] in his study concludes that there is tremendous growth in cashless banking through card payments. Banks are utilizing POS as CASA tool to attract merchant to open their account with bank. Private Banks and Foreign banks are leader and they are offering various concessions in merchant account to popularize POS and their Cards. The POS can be customized for utility bill payments, mobile top-up, foreign currency payments, cash payments etc. Thus POS is now, exclusively utilized for marketing of low cost deposit by all Indian banks.

Sushma Patil [2014][11] in her study concludes that the arrival of malls, multiplexes, online shopping stores and shopping complexes encourage the customers to make use of plastic cards. The modern day, Indian customers find it easier to make physical payment (credit card or debit card payments) rather than carrying too much cash contributing to the growth of plastic money in the country.

HYPOTHESIS

The research work was conducted to prove the assumption that the individual Indian Banks have installed less number of POS (Point of Sale) Terminals in comparison to the plastic money cards issued by them.

OBJECTIVES OF THE STUDY

The research work was conducted with the objective to find out the whether the selected Indian Banks have installed sufficient number of POS (Point of Sale) Terminals.

RESEARCH METHODOLOGY

SCOPE OF RESEARCH

Since all banks follow the norms of the RBI and the computerization by banks is done as per the recommendations of committees formed by the Central Bank from time to time, therefore their policy for implementation of the computerization in branches of a particular bank are same anywhere. Therefore, the area of research chosen by the researcher is Meerut city, as it is a well developed city having branches of most of the banks.

POPULATION

The researcher has focused his research only on the scheduled banks. The scheduled banks are SBI & its six Associates, 19 PSU's, OTHER PUBLIC SECTOR BANK-IDBI Bank Limited, 14 OLD PRIVATE SECTOR BANKS, 7 NEW PRIVATE SECTOR BANKS, 36 FOREIGN BANKS, Regional Rural Banks (Total 82 Banks are there but in UP only 7 are present and in Meerut only 1 with only one branch). There are 53 Urban Cooperative Banks, 31 State Cooperative Banks, 371 District Central Cooperative Banks and 93413 Primary Agricultural Societies in India.

SAMPLE DESIGN

Since the population size is very big it was not feasible to study the entire population, so the researcher decided to go for a sample survey. In order to get a holistic representation, the researcher has used stratified sampling and scheduled banks categorized by RBI have been divided into groups referred to as strata on the basis of the Total Turnover of the banks.

SAMPLE SIZE

The total number of banks selected by the researcher is 16 (Sample size- 16). The list of selected banks is as shown below:

LIST OF BANKS SELECTED AS SAMPLE			
S. No.	Bank	S. No.	Bank
1	SBI- State Bank Of India	9	South Indian Bank
2	PNB- Punjab National Bank	10	Nainital Bank
3	CBI-Central Bank of India	11	ICICI Bank
4	Syndicate Bank	12	HDFC Bank
5	Andhra Bank	13	Axis Bank
6	Punjab & Sind Bank	14	Yes Bank
7	IDBI Bank	15	Sarva UP Gramin Bank
8	Federal Bank	16	Zila Sahkari Bank, Meerut

RESEARCH DESIGN

DATA COLLECTION

The Data is collected from secondary sources & on-spot observations.

DATA COLLECTION FROM SECONDARY SOURCES

This was pursued by collecting secondary data from RBI Reports, Regulations and Notifications, websites of RBI, selected banks and related websites of World Bank, IEEE, ISO, BASEL Committee etc and studying the various brochures, products and services as well as procedures of selected Indian banks.

The Researcher also noted on-the-spot observations by visiting the branches of the banks and using their various products and services like ATM's, Net Banking, Mobile Applications, POS Terminals, Credit and Debit cards of various banks.

ANALYTICAL TOOL

The mainly quantitative data produced from secondary sources & on-spot observations was analyzed through GAP analysis. Gap analysis is a tool that helps organizations compares actual state with potential state. At its core are two questions: "Where are we?" and "Where do we want to be?”.

Gap analysis compares the Current State of banks (as per the collected data) with the Desired State of the banks (considering the various Guidelines, Rules and Regulations of RBI, the international Guidelines as well as Data from international organizations like World Bank etc.) and it is presented with the help of GAP Analysis Worksheets etc.

ANALYSIS, INTERPRETATIONS & FINDINGS

The details of the POS Terminals network of the selected Indian Banks as on 31st March 2011

#GAP ANALYSIS WORKSHEET 1.0								
CURRENT STATE: [12]BANK-WISE NO. OF POS TERMINALS OF SELECTED BANKS AS ON 31-03-2011				CURRENT STATE: [13]BANK-WISE NO. OF Cr & Dr CARDS OF SELECTED BANKS AS ON 31-03-2011			DESIRED STATE	GAP
Bank Name	Number of POS terminals			Number of Credit & Debit Cards				
	On-line	Off-line	Total	Cr Cards	Dr Cards	Total		
SBI & ITS ASSOCIATES							The POS Terminal is a channel of e-banking which can also be used by a non customer of the bank, should be part of the banks portfolio of e-banking facilities	
SBI	0	0	0	2088515	73134000	75222515		POS Terminals are not installed by the Bank at all
NATIONALISED BANKS								
ANDHRA BANK	2113	0	2113	121466	13567190	13688656		The no. of POS Terminals in comparison to cards issued is negligible.
CBI	729	0	729	80999	6164517	6245516		
SYNDICATE BANK	376	0	376	63431	5324961	5388392		
PNB	176	0	176	48067	2622639	2670706		
P&S BANK	0	0	0	0	48669	48669		POS Terminals are not installed by the Bank at all
OTHER PUBLIC SECTOR BANKS								
IDBI LTD.	18403	0	18403	0	4355550	4355550		The no. of POS Terminals in comparison to cards issued is decent.
OLD PRIVATE SECTOR BANKS								
FEDERAL BANK	1885	0	1885	0	3251543	3251543		Needs to increase the no. of POS Terminals
NAINITAL BANK	0	18	18	0	1663029	1663029		POS Terminals are virtually not installed by the Bank.
SIB	0	0	0	0	0	0		POS Terminal are not installed by the Bank at all
OLD PRIVATE SECTOR BANKS								
ICICI BANK	178960	3861	182821	3361684	16041986	19403670		The no. of POS Terminals in comparison to cards issued is good.
AXIS BANK	186708	0	186708	634499	10165381	10799880		
HDFC BANK	125179	0	125179	5089800	13207311	18297111		
YES BANK	1505	0	1505	0	174097	174097		Needs to increase the no. of POS Terminals
REGIONAL RURAL BANK								
SARVA UP GRAMIN BANK	0	0	0	0	0	0		POS Terminal are not installed by the Bank at all
DISTRICT COOPERATIVE BANK								
ZILA SAHKARI BANK	0	0	0	0	0	0		POS Terminal are not installed by the Bank at all

#NOTE: THE DATA OF BANK-WISE NO. OF PREPAID CARDS OF SELECTED BANKS HAS NOT BEEN INCLUDED, AS IT IS NEGLIGIBLE

The data as per GAP analysis worksheet 1.0 clearly suggests that as on 31st March 2011, the top private sector banks are the leaders in installing POS Terminals. Most other banks selected by the researcher in his research either do not offer this service or their exposure negligible in comparison to their size. Surprisingly SBI, the largest bank in the country, does not have a single POS Terminal as on 31st March 2011.

The details of the POS Terminals network of the selected Indian Banks as on 31st March 2014

#GAP ANALYSIS WORKSHEET 2.0								
CURRENT STATE: [14]BANK-WISE NO. OF POS TERMINALS OF SELECTED BANKS AS ON 31-03-2014				**CURRENT STATE: [15]BANK-WISE NO. OF Cr & Dr CARDS OF SELECTED BANKS AS ON 31-01-2014**			**DESIRED STATE**	**GAP**
Bank Name	**Number of POS terminals**			**Number of Credit & Debit Cards**				
	On-line	**Off-line**	**Total**	**Cr Cards**	**Dr Cards**	**Total**		
SBI & ITS ASSOCIATES							**The POS Terminal is a channel of e-banking which can also be used by a non customer of the bank, should be part of the banks portfolio of e-banking facilities**	
SBI	**114406**	**0**	**114406**	**2805281**	**116827184**	**119632465**		**SBI has started the installation of POS Terminals since FY2011 but are still lagging behind when compared with the no. of plastic cards issued.**
NATIONALISED BANKS								
PNB	**10460**	**0**	**10460**	**125049**	**24437226**	**24562275**		**The no. of POS Terminals have increased since FY 2011 but in they are comparison to cards issued is negligible.**
ANDHRA BANK	**2369**	**0**	**2369**	**131613**	**9408331**	**9539944**		
CBI	**1315**	**0**	**1315**	**60176**	**6680752**	**6740928**		
SYNDICATE BANK	**944**	**0**	**944**	**68487**	**6154361**	**6222848**		
P&S BANK	**0**	**0**	**0**	**0**	**444606**	**444606**		**POS Terminal are not installed by the Bank at all**
OTHER PUBLIC SECTOR BANKS								
IDBI LTD.	**14417**	**0**	**14417**	**0**	**6153024**	**6153024**		**The no. of POS Terminals have decreased since FY 2011 & cards issued has increased, therefore bank needs to install more terminals.**
OLD PRIVATE SECTOR BANKS								
FEDERAL BANK	**8559**	**0**	**8559**	**0**	**3689637**	**3689637**		**Needs to increase the no. of POS Terminals**
NAINITAL BANK	**0**	**0**	**0**	**0**	**0**	**0**		**POS Terminal are not installed by the Bank.**
SIB	**333**	**0**	**333**	**0**	**3116416**	**3116416**		**Needs to increase the no. of POS Terminals**
OLD PRIVATE SECTOR BANKS								
AXIS BANK LTD.	**240150**	**0**	**240150**	**1324790**	**13541453**	**14866243**		**The no. of POS Terminals in comparison to cards issued is good.**
ICICI BANK	**228686**	**9441**	**238127**	**3180401**	**21613061**	**24793462**		
HDFC BANK	**223006**	**0**	**223006**	**5091024**	**17532616**	**22623640**		
YES BANK	**6615**	**0**	**6615**	**0**	**574813**	**574813**		**Needs to increase the no. of POS Terminals**
REGIONAL RURAL BANK								
SARVA UP GRAMIN BANK	**0**	**0**	**0**	**0**	**0**	**0**		**POS Terminal are not installed by the Bank at all**
DISTRICT COOPERATIVE BANK								
ZILA SAHKARI BANK	**0**	**0**	**0**	**0**	**0**	**0**		**POS Terminal are not installed by the Bank at all**

#NOTE: **THE DATA OF BANK-WISE NO. OF PREPAID CARDS OF SELECTED BANKS HAS NOT BEEN INCLUDED, AS IT IS NEGLIGIBLE**

The data as per GAP analysis worksheet 2.0 clearly suggests that as on 31st March 2014, that the top private sector banks are the leaders in installing POS Terminals.

ICICI is the only bank that has installed off-line terminals.

SBI &, PNB have started the installation of POS Terminals since FY2011 but are still lagging behind.

IDBI has slowed down the installation of POS Terminals since FY 2011, where as the cards issued has increased.

Most other banks selected by the researcher in his research either do not offer this service or their exposure negligible in comparison to their size & the cards issued by them.

HYPOTHESIS TESTING

The analysis as described by GAP analysis worksheet 1.0 proves that the top private sector banks are the leaders in installing POS Terminals and most other banks selected by the researcher in his research either do not offer this service or their exposure negligible in comparison to their size, therefore it proves that the Hypothesis assumed by the researcher "The research work was conducted to prove the assumption that the individual Indian Banks have installed less number of POS (Point of Sale) Terminals in comparison to the plastic money cards issued by them." is TRUE for Public sector, Old Private Sector, Regional Rural & Cooperative Banks in India but not so, only for the top private sector banks.

CONCLUSIONS
The research clearly suggests that barring the top private sector banks, most other banks selected by the researcher in his research either do not offer this service or their exposure negligible in comparison to their size & the plastic money cards issued by them, also these banks have not made any significant progress in the last three financial years.

RECOMMENDATIONS & SUGGESTIONS
All the Indian Banks should initiate the process of setting up more POS terminals as it will increase the use of plastic money, reduce pressure on their branches as well as increase the revenue. The banks must also install off-line POS terminals.

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UNEMPLOYMENT AS A CAUSE OF HUMAN CAPITAL WASTAGE IN KARATINA TOWN, NYERI COUNTY, KENYA

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ABSTRACT

Being out of work for six months or more is associated with lower well-being among the long-term unemployed, their families, and their communities. Each week out of work means more lost income. The long-term unemployed also tend to earn less once they find new jobs and with global competition increasing, demographic change unfolding and rapid technological change intensifying and wastage of human capital has come to the forefront. This is because in many Sub-Saharan Africa faces human resources wastage in all sectors because over the past two decades its population has increased substantially, with a significant rise in the number of primary, secondary and tertiary institutions but there is no correlating increase in the formal and informal sector employment. This has resulted to many graduates remaining unemployed. This is why the current paper sought to establish unemployment as cause of human capital wastage in Karatina town. The paper objectives were was to find out the number of trained and unemployed people in Karatina town. The paper employed a descriptive survey research design. Study was limited to people in Karatina town. The paper randomly selected 10% to from target population of 3000 yield 300 people within working age in Karatina town. There were 291 valid questionnaires yielding 97% response rate. Data was collected using questionnaires. Data was analyzed descriptively using statistical package for social sciences. Descriptive statistic such as cross-tabulation means and standard deviation was computed to give the differences in responses. Data was presented in frequency tables and graphs. The research revealed that there is high rate of unemployment in the town and it increases with education. The research recommends that there is need to encourage people to advance their level of education to increase their chances of employment in the dynamic and competitive job market. Also the girl child should be given chance to further their education since the trend of unemployment in both world, Africa and Kenya shows that females are the ones affected more by unemployment. The research is expected to contribute positively to the human resource development and management for organization and government policy makers to borrow reference points regarding the human capital. It will also contribute to the existing literature gap.

KEYWORDS

Human capital wastage, Human capital, Skill utilization, Skill Mismatch, Training.

INTRODUCTION

Labour economics research has long established that education and human capital are associated with higher earnings (Sianesi & Reenen 2003). Evidence also indicates that similar levels of education can yield quite diverse earning outcomes within narrowly defined occupational classes (Devroye & Freeman 2002).

In modern societies education is probably the most important characteristic in the allocation process on the labour market. Labour market theories differ, however, about the mechanisms by which educated persons are allocated jobs. According to human-capital theory (Becker, 1964), the skills acquired in education represent human capital investment in human capital are useful, as long as they lead to higher productivity on the labour market. Employers' value labour productivity by offering the highest wages to those individuals who have obtained most human capital but this is not the case because most human capital ends up being wasted especially in the developing world through unemployment.

Two of the most dramatic aspects of the current economic crisis are, with no doubt, the high and persistent rates of unemployment and the accelerated pace at which inequalities are increasing. According to International Labour Organization estimates, global unemployment reached 210 million people in 2010. The World of Work report 2011 (ILO, 2011), under the title Making markets work for jobs, stressed that the current crisis has resulted in a global need of 80 million net new jobs over the next two years to restore pre-crisis employment rates.

According to Martin & Rogers (2000) unemployment can lead to an erosion of human capital; people unemployed for long periods may become de-skilled, as their professional skills become obsolete in an era of rapid technological change and associated rapidly changing job market. In the first place, high unemployment implies an inefficient use of resources and wasted work, not performed by the unemployed, which can never be recovered. Secondly, high unemployment also implies a lower aggregate demand; not only is consumption lower, harming current growth, but private investment in physical and human capital is also reduced, harming future production capacities (Sanchis-i-Marco, 2011).

Andrienko & Guriev (2004) found that high unemployment results in liquidity constraints, restricting labour migration and resulting in persistent unemployment and lower economic growth. Finally, high and persistent unemployment erodes individual self-esteem and life satisfaction, and confidence in the society as a whole (Ochsen & Welsch, 2011). Lower confidence and socio-economic deprivation, exclusion and marginalization from unemployment increase social dislocation, leading to unrest and conflict (ILO, 2011)

Edin & Gustavsson (2008) find that a year out of work is associated with general skills 5 percentile points lower relative to continuously employed workers, but there is no attempt to isolate the causal impact of time out of work from selection driving a larger fraction of unemployed workers being lower-ability workers over time, as higher-ability workers return to work which leads to wastage of human capital for the purposes of this paper, the author uses the term "wastage" to refer to the loss in utility of employees due to unemployment.

UNEMPLOYMENT TRENDS IN THE WORLD

In general global unemployment rose to 197.3 million in 2012, an increase of 4.2 million over the previous year and 28.4 million above the level in 2007, the year preceding the crisis. Moreover, given the slowdown in activity, the ILO's baseline projection is a further deterioration in 2013, with the global unemployment rate ticking up to 6 per cent and a further increase in the number of unemployed around the world of 5.1 million. On the basis of current macroeconomic forecasts, the global unemployment rate is projected to remain at around 6 per cent until at least 2017 (ILO 2012).

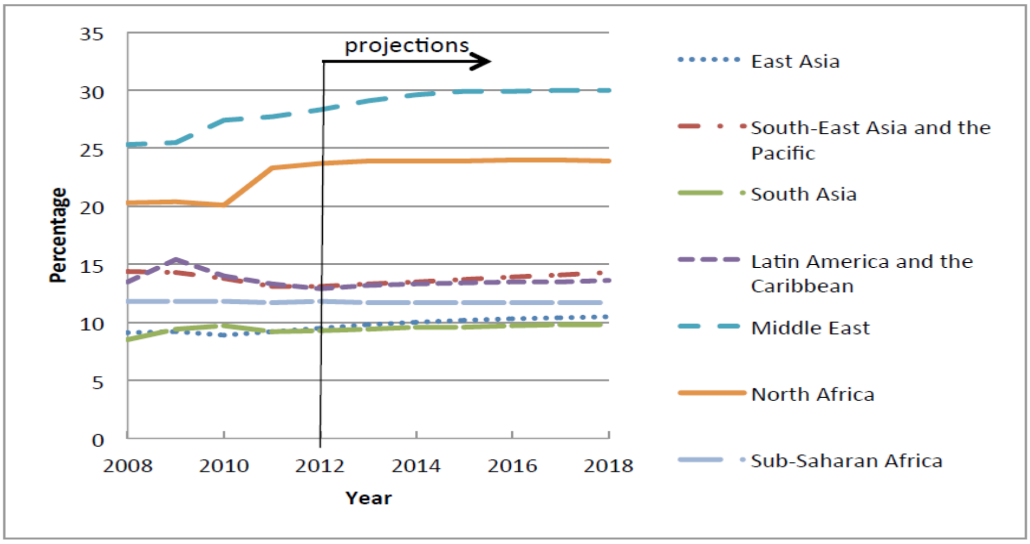
On youth, unemployment statistics indicate that it is likely to remain at over 6 percent globally until 2016 (ILO, 2008). But in 2012, the ILO estimates that the number of unemployed youth is on the rise again since 2011, after declining somewhat from the peak it reached at the height of the global financial crisis. It was expected to reach 73.4 million young people by 2013 (ILO 2012). The global youth unemployment rate has also been rising since 2011; it is currently estimated at 12.6 percent and is projected to increase to 12.8 percent by 2018. In contrast, the global adult unemployment rate, while also rising slightly, is much lower at 4.6 percent in 2013 (ILO 2012).

On youth and employment, Sub-Saharan Africa is perhaps the region of the world that will face the greatest challenges with the youth bulge going forward. Because fertility has not declined as sharply as in other regions, sub-Saharan Africa will not benefit from a demographic dividend in the coming decades. Youth are expected to be about 20 percent of the population there for the next couple of decades, and they will make up over 30 percent of the working age population through about 2045. Despite these pervasive and enduring demographic pressures, the ILO projects that youth unemployment in Africa will remain stable at 11.7 percent through 2018, a rate that is well below the world average (ILO 2012).

On development, the world will not have eradicated extreme poverty in 2015, but the Millennium Development Goal target of halving world poverty will have been met. The proportion of people living on less than $1.25 a day fell from 43.1 percent in 1990 to 22.7 percent in 2008, reaching new lows in all six developing country regions. While the food, fuel, and financial crises over the past five years worsened the situation of vulnerable populations and slowed poverty reduction in some countries, global poverty rates continued to fall in most regions. Preliminary estimates for 2010 confirm that the extreme poverty rate fell further, to 20.6 percent, reaching the global target five years early. Except in South Asia and Sub-Saharan Africa the target has also been met at the regional level (ILO 2012).

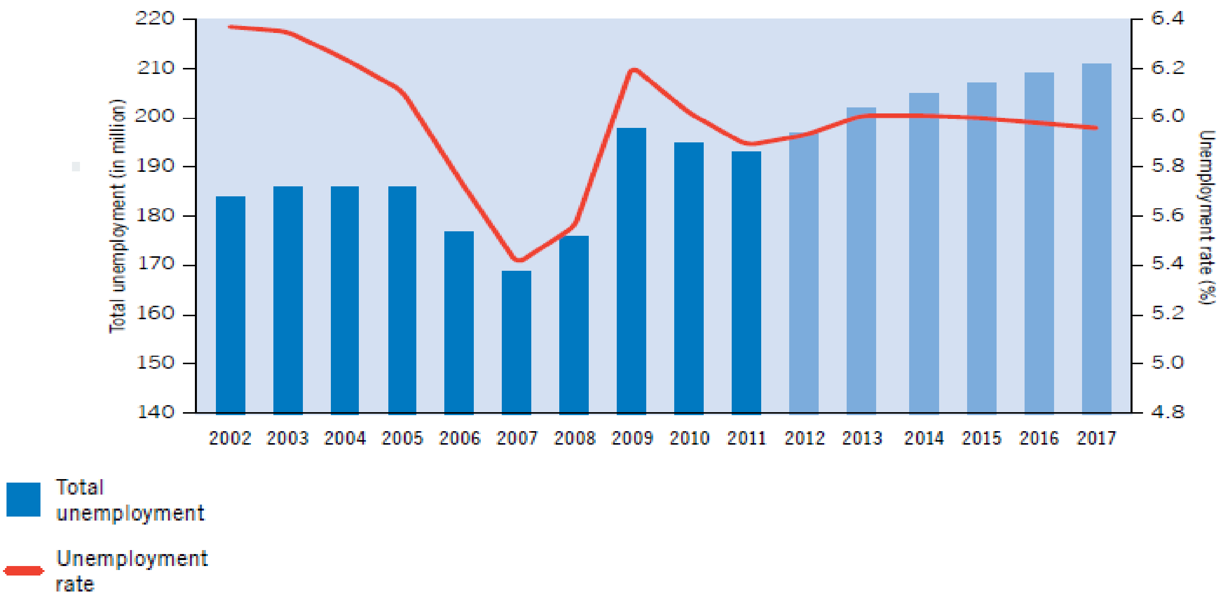
In Africa, although many policies, programmes and projects have been directed at the problem, unemployment continues to be a major obstacle to full utilization of human resources. In Kenya, unemployment rate of youths aged 15-24 years was 24% in 2005/2006 compared to the overall unemployment rate of 12.7% with urban unemployment rate (19.9%) higher than rural unemployment rate (9.8%) (ILO, 2008).

FIGURE 1: YOUTH UNEMPLOYMENT RATES BY REGION, AGES 15-24



Source: ILO (2013a)

FIGURE 2: GLOBAL UNEMPLOYMENT TRENDS AND PROJECTIONS, 2002–17



Source: ILO, Trends Econometric Models, (2012).

STATEMENT OF PROBLEM

On the labour demand side, data from the annual Economic Surveys show that formal sector employment growth has been sluggish. It rose by 1.2 per cent between 1998 and 2001. The estimated increase for 2002, 2003, 2004, 2005, 2006, and 2007 are 2.2 per cent, 2.6 per cent, 3.6 per cent, 2.5 per cent, 2.8 per cent and 2.6 per cent, respectively. Public sector employment declined by 7.4 per cent from 1998 to 2002 due to public sector reforms but recorded marginal growth of 0.3 per cent between 2002 and 2004 (GoK, 2008a). On the other hand, informal sector employment increased by 10 per cent between 1998 and 2002 and 6.4 per cent between 2002 and 2005 (GoK, 2008a). This was attributed to shrinking growth in both formal public and private sector employment which means that there is a lot of human capital wastage in the country.

In Kenya, given the contributions of education, especially at the tertiary level, to national development, countries, individuals, communities and corporations invest massively in education to uplift their educational attainment. In Kenya, there has been continuous expansion in the budgets towards the education of its citizens especially after introduction of free primary and secondary education. Alongside the government increased budget on education are the increases in enrolment rate and the number of tertiary institutions but the formal employment sector is not expanding in the same rate to meet the training output and thus human capital wastage through unemployment. In Kenya, has shown by literature data, despite the importance placed on human resource development there is still human capital wastage due to the high level of unemployment this study paper sought to fill this gap especially in Kenya since most studies done are based on the developed countries.

LITERATURE REVIEW

The literature on past studies done on human capital wastage, the literature was based on; books, journals, papers, past research studies and internet sources. The literature was under following topics; wastage as unemployment of available staff and paper gap

WASTAGE AS UNEMPLOYMENT OF AVAILABLE STAFF

The unemployment rate is an important indicator of graduates' labour market performance, that in many developed countries and despite the variations is rising fast affecting particularly young (recent) and female graduates who are among the most vulnerable groups to unemployment (Eurostat, 2009). Theories developed in economic literature explaining the difficulties young graduates encounter are based on labour market function (e.g. human capital theory, segmented labour market theory), whereas those developed in sociology emphasize the effect of social origins to educational choices and attainments (Karamesini et al., 2008). As regards gender, Lyon (1996) argues that even if women gained equal access to higher education, there are still significant imbalances depending on the field of study as well as inequalities in the labour market outcomes. The main argument is that women have been socialized so as '*…to prepare themselves for careers within spheres of work traditionally seen as female and follow career paths premised on assumptions about women's domestic roles*' (Lyon, 1996, p.320).

High unemployment remains one of the greatest challenges to Africa's development (ILO, 2008) and hence a major concern to policy makers and other stakeholders in Africa. Although many policies, programmes and projects have been directed at the problem in sub-Sahara Africa, unemployment and under-employment continue to be major obstacles to full utilization of human resources. In Kenya, at independence in 1963, the government identified poverty and unemployment as major problems facing Kenyans (Republic of Kenya, 1965). Forty five years later, and despite numerous policy efforts, poverty continues to afflict many Kenyans, and millions are unemployed, underemployed or are "working poor." A recent study by (Pollin et al., 2007) under a UNDP project shows that in 2005/2006, a large number of individuals who are working could be categorized as working poor because their labour earnings were below the poverty line.

Until the first oil price shock in 1973/74, the Kenyan economy posted relatively high growth rates. This was followed by relatively lower growth rates until the mid 1980s when the economy picked up until 1990. The subsequent recovery lasted until the mid 1990s. The economy went into recession towards the end of the 20th century when GDP growth rate declined from 4.7 per cent in 1995/96, to 2.4 per cent in 1996/97, 1.8 per cent in 1997/98, 1.4 per cent in 1998/99 and 0.3 per cent in 1999/2000.

Beginning 2003, Kenya experienced economic recovery. The GDP growth rate was 2.8 per cent in 2003 and rose to 5.9 per cent in 2005. In 2006 and 2007, real GDP grew by 6.4 per cent and 7.0 per cent, respectively (GoK, 2006; 2008a). While the agricultural sector remained a major contributor to the economic recovery, services sectors also performed well, particularly transport and communication. Overall, inflation declined from 11.6 per cent in 2004 to 10.3 per cent in 2005. The foreign exchange rate showed that the Kenya shilling strengthened against all major international and regional currencies.

However, while economic performance has markedly improved in the recent years, growth in productive employment and income generating opportunities has not kept pace with growth in the labour force. On the labour supply side, 12 million Kenyans were in the labor force in 1999 (CBS, 2003) and 14.5 million in 2005/2006 (GoK, 2008a). Further, the number of students sitting for the Kenya Certificate of Primary Education (KCPE) exams has been rising. Those who do not join secondary schools enter the labour market or engage in low productivity activities. Similarly, many young persons have been sitting for the Kenya Certificate of Secondary Education (KCSE) but only few join universities leaving a large proportion to join either colleges or the labour market as unskilled labour resulting to human capital wastage.

On the labour demand side, data from the annual Economic Surveys show that formal sector employment growth has been sluggish. It rose by 1.2 per cent between 1998 and 2001. The estimated increase for 2002, 2003, 2004, 2005, 2006, and 2007 are 2.2 per cent, 2.6 per cent, 3.6 per cent, 2.5 per cent, 2.8 per cent and 2.6 per cent, respectively. Public sector employment declined by 7.4 per cent from 1998 to 2002 due to public sector reforms but recorded marginal growth of 0.3 per cent between 2002 and 2004. On the other hand, informal sector employment increased by 10 per cent between 1998 and 2002 and 6.4 per cent between 2002 and 2005 (GoK, 2008a). This was attributed to shrinking growth in both formal public and private sector employment which means that there is a lot of human capital wastage in the country which the current paper sought to find out if the same trend applied to Karatina town.

HUMAN CAPITAL WASTAGE THEORIES

This paper will be pegged on labour market theories that is; human capital theory, technological change theory and assignment theory. As pointed out by Quintini (2010), there has been no attempt so far to develop a unified theory of education mismatch, unemployment and general human capital wastage but a number of theories are useful for helping to understand a range of labour market imperfections which could be behind several of these types of skill imbalances. These include: human capital theory and technological change theory.

Human capital theory

Human capital theory (Schultz, 1961, 1975; Becker, 1962, 1964; Mincer, 1958, 1962, 1974) focuses on the *productivity-enhancing* effects of education. The main premise follows a causal line of reasoning as follows: education develops skills which lead to higher productivity and hence higher pay. Under neoclassical assumptions the theory predicts that in the long run, market forces lead to an equilibrium where there is no mismatch and skills are utilized to maximum potential.

The theory of human capital assumes the existence of a single, efficient and fair labour market that distributes jobs and pay on the basis of workers' qualifications, and that knowledge and skills are of pre-eminent importance in the labour market. The theory focuses on the long run supply side of the labour market and pays no attention to variables structuring the demand side such as the individual's occupation, job or job tasks (Hartog, 1985). Jobs and job tasks are effectively treated as homogeneous in the sense that they do not factor into the earnings or matching function. It may be said that job differences are implicitly accounted for, but this is only to the extent that jobs differ in the amount of human capital, and possibly other characteristics, that individuals bring to each job.

Thus the assumption is that individuals are always allocated to their optimal position and there is no mismatch. Although mismatch may arise, it is external to the model and is seen as a temporary phenomenon that will resolve itself in the long run. The prediction is that mismatch will set off an adjustment to the production process by the employer in order to make full use of skills available and thus allow for an increase in productivity that is commensurate with available supply of skills; or alternatively, the employee will seek a more appropriate match to fulfil his/her production potential and hence maximize earnings. Quintini (2010) astutely points out complementary theories to the human capital framework which help to explain why mismatch may be observed in the short run and may even remain in the long run. These include Technological Change theory, Career Mobility theory.

RESEARCH GAP

This paper explored the current literature on human capital wastage in regards to unemployment. The conceptualization of human capitals is closely linked to some fundamentals of economics and firm performance. The literature reviews show that there are reasonably strong evidences to show that the infusion of 'human capital enhancement' in organizations promotes innovativeness and greater firm performance. Studies also clearly substantiate the fact that there is various ways of capital wastage in both developed and developing countries but most of the studies and literature is based on the developed world and this is why the current paper seeks to fill this gap by establishing the unemployment as a cause of human capital wastage in Karatina town.

METHODOLOGY

This paper was conducted through a descriptive survey research design approach. Survey design describes and explains the events as they are in the real life context in which they occurred. This paper was based in Karatina town; the paper targeted all people both employed, unemployed in formal and informal sectors. From the target population of 3000 respondents the paper sampled 10% which was 300 respondents. Simple random sampling was used to select the respondents in the town, the respondents were grouped into formal and informal sector and from each sector 150 respondents were sampled randomly to yield the paper sample. The main data collection instrument was questionnaire to the sampled respondents. The data collected from the research instruments was entered into SPSS and check for any data entry error before data analysis begins. The data was analyzed descriptively through frequency, percentage, mean and cross tabulations and presented using tables and charts.

FINDINGS DISCUSSION

BACKGROUND INFORMATION

From the findings most of the 36.8% were aged between 36-45 years, 30.6% aged between 26-35 and 21.6% were aged between 18-25 years as shown in table 1.

TABLE 1: AGE OF RESPONDENTS

Age	Frequency	Percentage
18 – 25	63	21.6
26 – 35	89	30.6
36 – 45	107	36.8
46 – 55	17	5.8
56 – 59	14	4.8
Non response	1	.3
Total	**291**	**100.0**

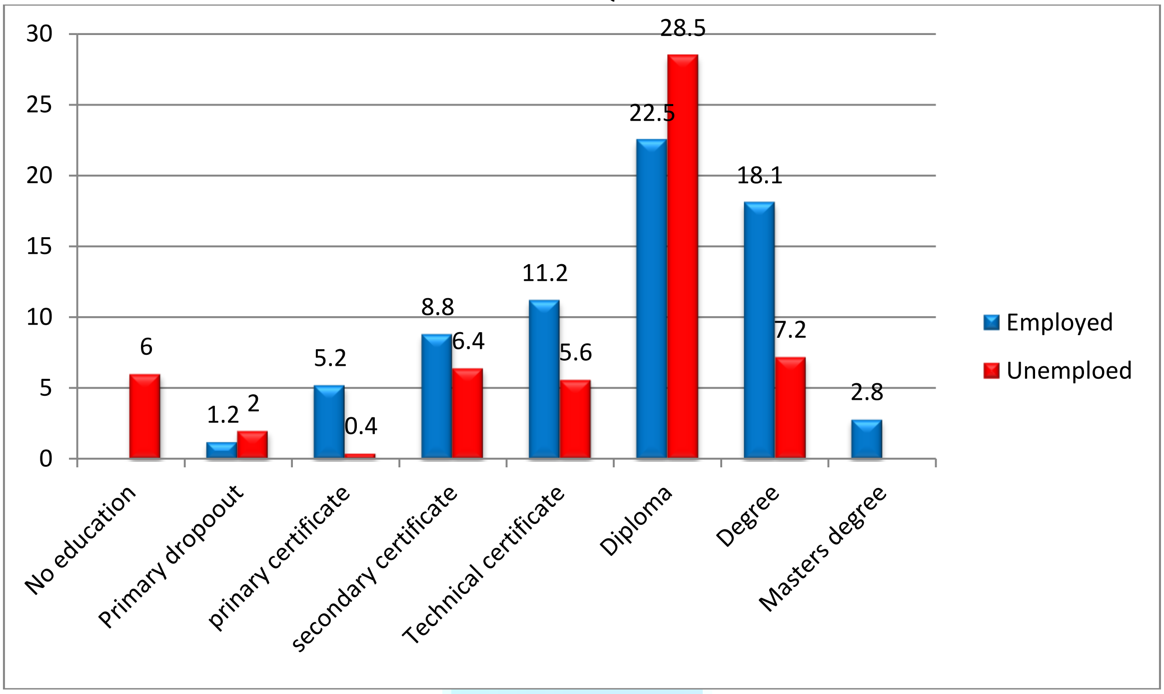
Source: Survey 2012

The findings in table 1 implies that majority of the respondents were the youth. It was also revealed that 50.2% were male while 46.45 were females. This could mean that majority of the respondents in town are male which is true in most Kenyan rural towns. From the study findings it was revealed that 60.8% of the respondents were employed while 31.4% were unemployed. The findings shows that employment rate is 60.8% while unemployment stands at 27.8%, the paper further sought to establish relation of employment with education. The paper results show that employment rate is 60.8% while unemployment stands at 27.8%. This is in line with the GoK, (2008a) the level of unemployment in Kenya like other developing countries is very high. The hardest hit are the youth who after graduating from Universities and other institutions of learning, find themselves unable to secure formal employment opportunities, thereby failing to gainfully contribute to economic development of this country despite their enthusiasm, energy and drive. The resulting idleness has sometimes made the youth to drift into undesirable activities which have ended up wasting their energy. Although the government on the other hand, has been on overdrive trying to address these problems, it has for instance promised to improve the operational environment such that the economy can create at least 500,000 new jobs every year. Available statistics however, indicate that the unemployment problem is far from being over. It was also revealed that has the education level increases the level of unemployment increases because the learners depend mostly on being employed but from the paper the highest percentage of unemployed are those with diploma 28.5%, followed by degree holders then technical certificate 7.2% and followed by secondary 6.4%, primary and primary dropouts. This can be supported by (GoK, 2008a) survey results that data from the annual Economic Surveys show that formal sector employment growth has been sluggish. It rose by 1.2 per cent between 1998 and 2001.

RELATIONSHIP BETWEEN ACADEMIC QUALIFICATION AND EMPLOYMENT

From the findings 1.2% of the respondents dropped out of primary education and employed while 2% are not employed. Those who have primary school certificate and employed are 5.2% while unemployed were 0.4%, those with secondary certificate and employed were 8.8% unemployed were 6.4%, those with technical education and employed were 11.2% unemployed were 16.9% . The respondents with a diploma and employed were 22.5% unemployed were 28.5%, those with a degree and employed were 18.1% unemployed were 25.3% and those with a masters degree and employed were 2.8% and non was unemployed as shown in figure 3.

FIGURE 3: RELATIONSHIP BETWEEN ACADEMIC QUALIFICATION AND EMPLOYMENT TREND



Source: Survey 2012

The findings means that as the level of education increases the unemployment also increases but employment start increasing the highest percentage of unemployed are those with diploma, followed by degree holders then technical certificate and followed by secondary, primary and primary dropouts. However, as the learners advance their education to master's level most of them stand a chance of being employed in the labour market. It was also shown that most 37.1% of the males are employed while when it comes to unemployed most of the unemployed 31.5% were the females. This is supported by Lyon (1996) findings which argue that even if women gained equal access to higher education, there are still significant imbalances depending on the field of paper as well as inequalities in the labour market outcomes. The main argument is that women have been socialized so as to prepare themselves for careers within spheres of work traditionally seen as female and follow career paths premised on assumptions about women's domestic roles. However Stampini & Verdier-Chouchane, (2011) findings in Tunisia showed that Youth unemployment in Tunisia was estimated at 14.2% in 2010, and is even more pronounced among young graduates with masters' degrees in law, economics and management, estimated at 47 percent in 2007 for individuals between 23-29 years old but regarding years (figure 5) the trend is the same with one experienced in Karatina.

RELATIONSHIP BETWEEN GENDER, AGE AND EMPLOYMENT

The research further sought to find out the relationship between gender and employment of respondents at Karatina town and from findings; 37.1% male were employed while 31.5% females were employed. Those unemployed 15.3% were males with 16.1%. The paper further sought to establish the relationship between respondents' age and employment and from the paper findings; of those aged between 36-45 years 26.8% were employed while 8.2% unemployed; those aged between 26-35 years 24.55 were employed while 8.2% unemployed; for those aged between 18-25 years 8.9% were employed while 12.85 were unemployed as shown in table 2.

TABLE 2: GENDER AND EMPLOYMENT

			Are you employed?		**Total**
			Yes	**No**	
Gender	Male	Count	92	38	130
		% of Total	37.1%	15.3%	52.4%
	Female	Count	78	40	118
		% of Total	31.5%	16.1%	47.6%
Total		**Count**	**170**	**78**	**248**
		% of Total	**68.5%**	**31.5%**	**100.0%**
			Are you employed?		**Total**
How old are you? (Years)	18 – 25	Count	23	33	56
		% of Total	8.9%	12.8%	21.8%
	26 – 35	Count	63	21	84
		% of Total	24.5%	8.2%	32.7%
	36 – 45	Count	69	21	90
		% of Total	26.8%	8.2%	35.0%
	46 – 55	Count	13	2	15
		% of Total	5.1%	.8%	5.8%
	56 – 59	Count	8	4	12
		% of Total	3.1%	1.6%	4.7%
Total		**Count**	**176**	**81**	**257**
		% of Total	**68.5%**	**31.5%**	**100.0%**

Source: Survey 2012

As illustrated in table 2 regarding age and employment it was revealed that most of the people 29.9% who are unemployed in the town were the youths aged between 18-45 years. This is true in the current unemployment trend in the Kenyan labour market. This is supported by GoK, (2006: 3) findings that Kenya's population is largely youthful. 75% of the country's population is made up of persons aged 1 to 30 years. Youth number 10.1 million, accounting for 32% of the country's population. Of these, 51.7% are female and 48.3 % male. Youth form about 60% of the total labour force in the country, but a majority, about 65%, is unemployed. This is trues in Africa as well where according to Stampini & Verdier-Chouchane, (2011) 60% of the total unemployed, the youth make up the bulk of the unemployed or underemployed in Africa. The share of unemployed youth among the total unemployed can be as high as 83% in Uganda, 68% in Zimbabwe, and 56% in Burkina. Recent estimates of the AfDB based on household surveys for selected countries in Sub-Saharan Africa and data from ILO reveal that youth unemployment, including those who have stopped actively searching for employment is around 34% (Figure 5).

World Bank, (2007) showed that Youth represent 30 percent of Kenya's population and their unemployment is twice the country's average. Almost one third of Kenyans are between 15 and 29 years, and the total reached almost 11 million people in 2006 (compared to 8.5 million in 1999). According to the KPIA this age cohort is now at a historical high (in absolute and relative terms). This is because of the current bulge of youth in the world and mostly in developing world. Altogether there are over 1.2 billion young people in the world between the ages of 15 and 24. About 90 per cent of them live in developing countries: the largest population of young people the world has ever seen (figure 4 the share of the youth population in your region.). Most developing countries are experiencing a youth bulge, where young people represent more than 30 per cent of the working-age population. Developed economies, on the other hand, are undergoing population ageing. Other past studies dicussed below support above findings on youth and unemployment.

According to International Labour Organization (ILO 2012) estimates, the global economic crisis increased world unemployment. The unemployment estimate was at 178 million in 2007 and shot up to 212 million in late 2009. "Nearly 75 million youth are unemployed around the world, an increase of more than 4 million since 2007,"ILO report (2012). In addition and according to ILO (2012), By 2016, the youth unemployment rate is predicted to remain at the same high level, it is likely to remain at over 6 percent globally until 2016 (ILO, 2008). But in 2012, the ILO estimates that the number of unemployed youth is on the rise again since 2011, after declining somewhat from the peak it reached at the height of the global financial crisis. It was expected to reach 73.4 million young people by 2013 (ILO 2012). The global youth unemployment rate has also been rising since 2011; it is currently estimated at 12.6 percent and is projected to increase to 12.8 percent by 2018. In contrast, the global adult unemployment rate, while also rising slightly, is much lower at 4.6 percent in 2013 (ILO 2012).

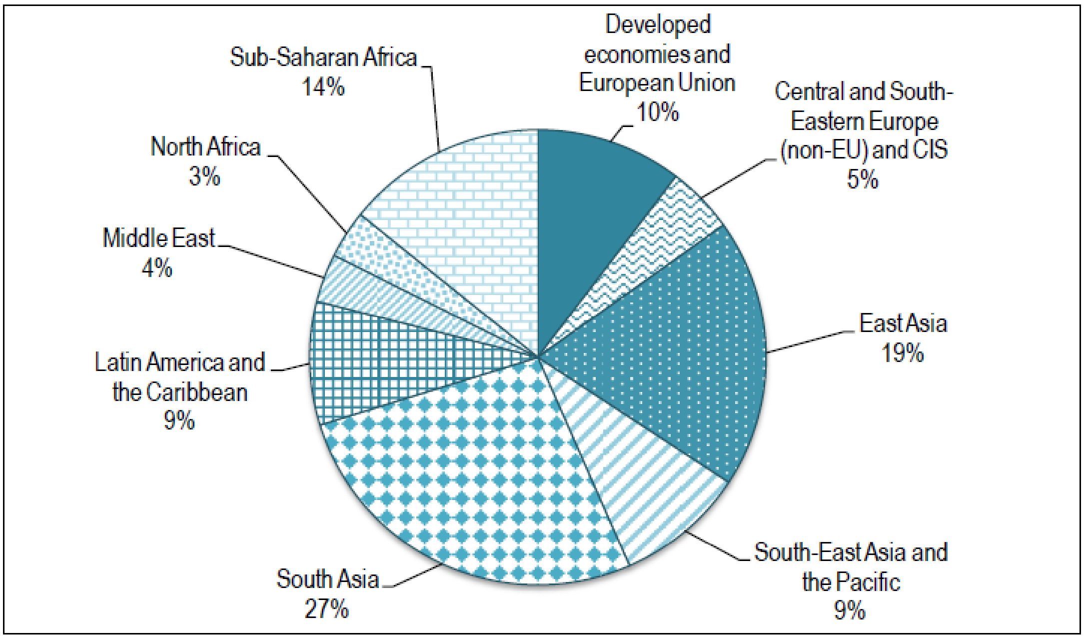
On youth and employment, Sub-Saharan Africa is perhaps the region of the world that will face the greatest challenges with the youth bulge going forward. Because fertility has not declined as sharply as in other regions, sub-Saharan Africa will not benefit from a demographic dividend in the coming decades. Youth are expected to be about 20 percent of the population there for the next couple of decades, and they will make up over 30 percent of the working age population through about 2045. Despite these pervasive and enduring demographic pressures, the ILO projects that youth unemployment in Africa will remain stable at 11.7 percent through 2018, a rate that is well below the world average (ILO 2012). In Africa, although many policies, programmes and projects have been directed at the problem, unemployment continues to be a major obstacle to full utilization of human resources.

The scenario is not any different in Kenya where the employment challenge has been growing with the youth being the main casualty (GoK, 2008), the rate stands at 40 % from 12 % (ILO, 2012).Despite numerous policy efforts, reforms and other mitigations and four decades later, unemployment continues to afflict many Kenyans where millions of Kenyans especially youth and women remain unemployed (Omondi, 2012).

Despite this fact, young people in Kenya are underrepresented among the employed population. In fact, persons aged 15 to 24 accounted for less than 20 per cent of total employment in 2011, 17 percentage points below their share in the working-age population. As such, the youth employment rate in the country, like, the employment-to-population ratio, is less than half the adult employment rate and one of the lowest youth employment rates in the region (ILO, 2012).

In fact, the gap between youth and adult employment rates reached 43 percentage points in 2011, placing Kenya among the countries with the largest disparities between youth and adults in SSA – the gap in the country is more than twice than that observed in the region as a whole. Moreover, at 32.5 per cent in 2011 the youth employment-to-population ratio in Kenya was 15 percentage points below the average observed for SSA as a whole. Further, between 2000 and 2005, the youth employment rate fell by close to 4 percentage points, stabilizing at around 32 per cent thereafter (UNDP, 2013).

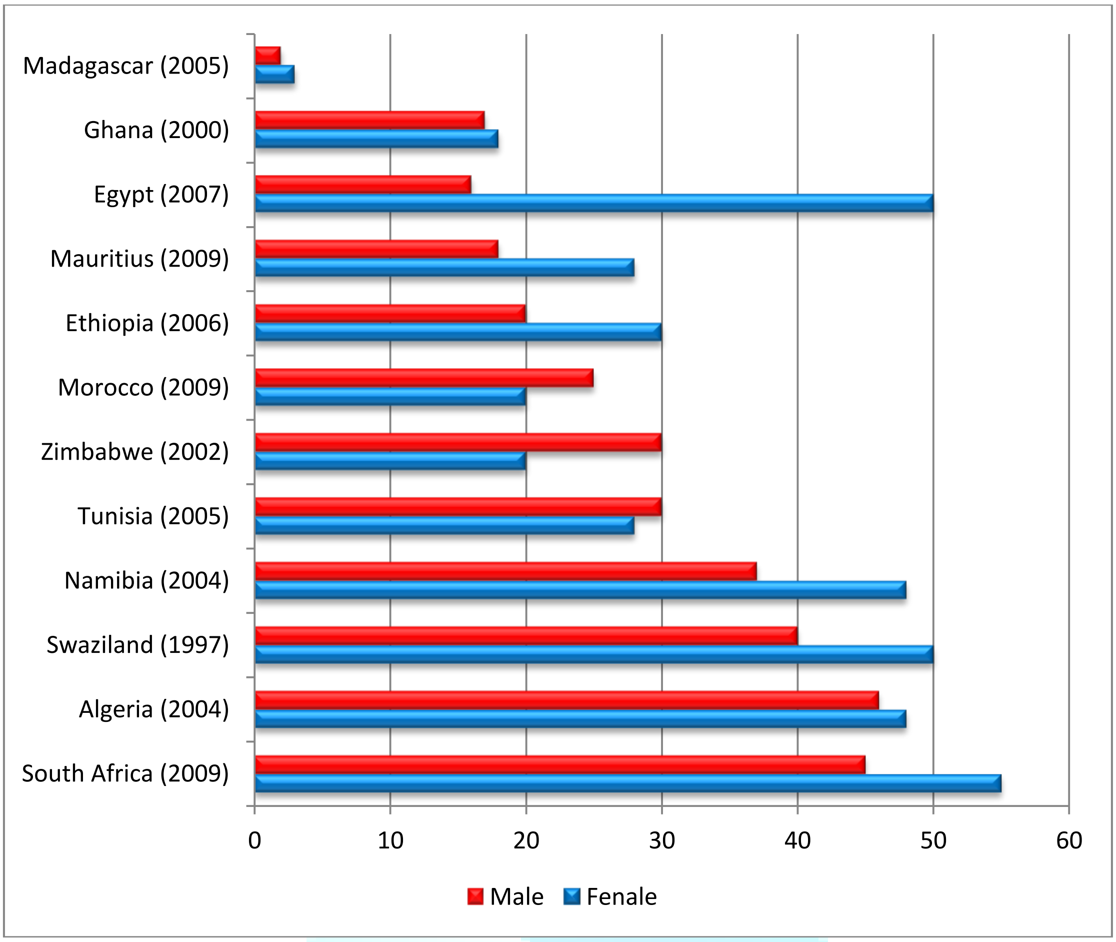
FIGURE 4: REGIONAL DISTRIBUTION OF THE YOUTH POPULATION, 2012



Source: United Nations: World Population Prospects, the 2010 Revision database.

Findings from other African countries support Karatina findings that females are most likely to be unemployed (figure 5), in Tunisia, unemployment is higher for women (51% vs. 35% for males) especially for female graduates in Law estimated at 68%. In Egypt unemployment rates for females are close to 50% as compared to less than 20% for males. On average, labor force participation rate in Africa is 78.3% for men vs. 61% for women. There are however large disparities in female labor force participation within Africa. Female participation tend to be much higher in West Africa (80% and higher in Burkina Faso, Burundi, Gambia, Ghana, Guinea, and Sierra Leone) and lower in East Africa (under 40% in Ethiopia, Kenya, Malawi, Uganda) Arbache, et al (2010). More strikingly, the share of female participation in the labor force in North Africa is almost half that of Sub-Saharan Africa. In addition, female youth in Africa may be at a greater disadvantage as they face more family constraints. In Mozambique, Malawi, Niger, Chad, Uganda, and Gabon between 40-50% of female youth (15-24) had already given birth at least once World Bank (2008).

FIGURE 5: HIGH LEVELS OF UNEMPLOYMENT AMONG YOUNG PEOPLE THROUGHOUT AFRICA

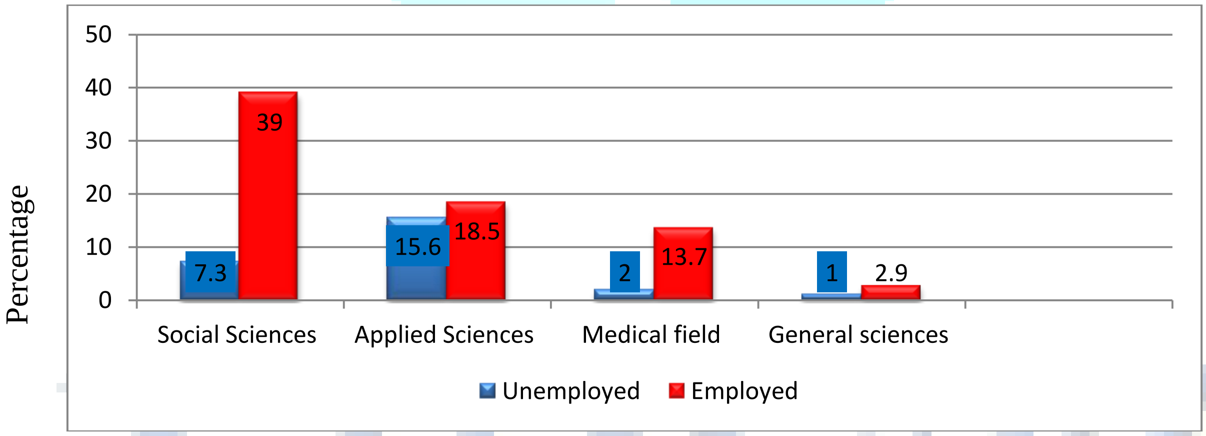


Source: ILO Key indicators of Labour Market, Version 6

FIELD OF STUDY AND UNEMPLOYMENT

Study sought to relate to field of study and unemployment, 15.3% of unemployed have done applied Sciences, 7.3% have done Social Sciences, 2% have done Medical field, 1% have done General sciences as shown in figure 6.

FIGURE 6: FIELD OF STUDY AND UNEMPLOYMENT



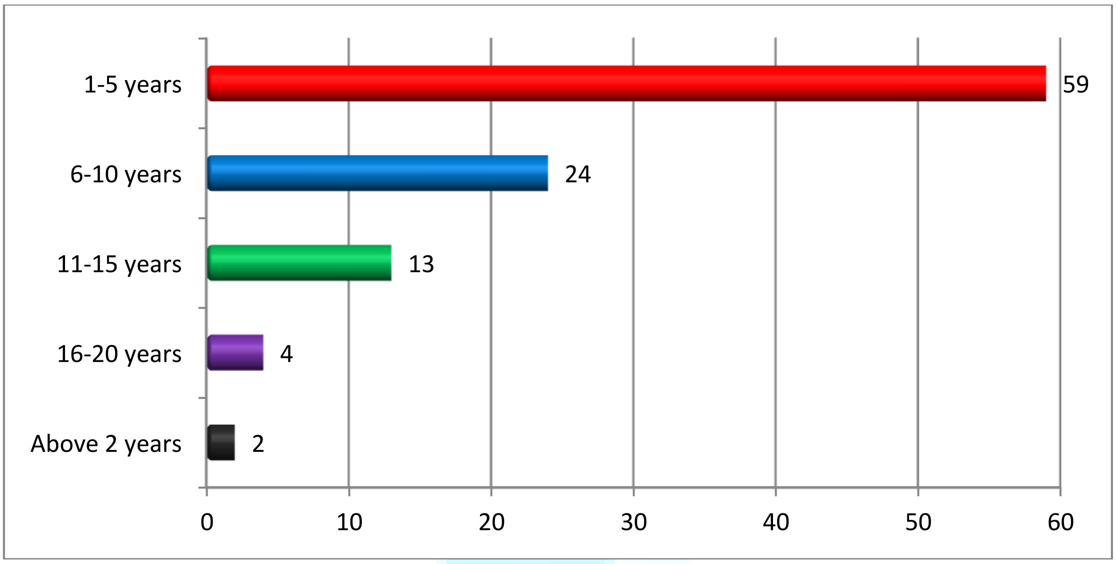
Source: Survey 2012

From the study it meant that most of the unemployed in the town have done applied sciences followed by social sciences, medical field and few who have done zoology. Youth in Kenya face serious challenges, including high rates of unemployment and underemployment. In relation to the field of paper and unemployment the paper results showed that most of the unemployed in the town have done applied sciences 15.6% followed by social sciences 7.3%, medical field 2% and few who have done zoology 1%. Robst (2007) survey that used the 1993 US National Survey of College Graduates to find that about 55% of respondents are in a job that closely relates to their degree field, while 25% are in jobs that are somewhat related to their area of paper and 20% are in jobs that are not related to their studies. Indeed, many individuals are found to obtain a qualification in a specific field only to work in a different field but the extent of mismatch varies sharply by field of paper. A Swedish paper by Nordin, Persson & Rooth (2010) using register data which helps to circumvent sample size problems found horizontal mismatch rates as high as 80% for biology graduates and rates as low as 4% for graduates who studied medicine. Their paper focused on only Swedish born adults aged 28-39 who completed a college/university degree. Most of the fields of education left in their analysis were precise and matched one distinct occupation perfectly, but some fields of education were broader and matched two occupations (like, social sciences) this supports findings of Karatina town.

NUMBER OF YEAR WITHOUT EMPLOYMENT

It was revealed that in Karatina town most of the respondents 59% have been unemployed for between 1-5 years with 24% having not been employed for between 6-10 years as shown in figure 7.

FIGURE 7: YEARS OF UNEMPLOYMENT



Source: Survey 2012

The findings in figure 7 indicates that most of the respondents have been out of work for between 1-10 years this means that there is high level of human capital wastage. According to Watkins, (2011) what the world has recently witnessed is an educated youth, suffering from humiliation, hopelessness and resentment and mass unemployment Overall in sub-Saharan Africa and despite annual economic growth rates of 5 percent in recent years, there has not been a sufficient increase in stable employment opportunities for young people. High unemployment rates across the African continent coupled with low labor productivity in the bulky informal sector, where the majority of youth works, reinforces income inequality that in turn, undermines the pace of economic growth and social peace.

CONCLUSION

High and persistent unemployment is likely associated to increasing inequalities and human capital wastage. Furthermore, there are sensible reasons to expect that this process of high and persistent unemployment, in which inequality increases, has a negative effect on subsequent long-run economic growth. Survey carried out in Karatina shows that unemployment is at 27.8% and unemployment increases with education level but when the learners advance their education to masters degree they increase their chances of employment. Majority of the people unemployed in the town are the youths but more females are unemployed than males and in regards to field of study most of those who are unemployed have done applied sciences, followed by social sciences and medical sciences this is true in the Kenya at large because there are few medical practitioners. The unemployed have also been out of work for between 1 to10 years which indicates high level of capital wastage as a result of unemployment.

RECOMMENDATION

The research was limited to human capital wastage in Karatina town but to achieve maximum benefits of Human Resource the recommendations are following; the research recommends that there is need to encourage learners to advance their level of education to increase their chances of employment and achieve maximum benefits, the society should be encouraged to give more chance for female career development so as to have better chances of employment in the competitive job market and learners should also be advised to do courses which are competitive and marketable in the current dynamic employment market. There is also need to encourage youth to seek self employment instead of depending on employment.

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THE EFFECT OF THE COMPANIES ACT 2013 ON AUDITING AND AUDITORS

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ABSTRACT

The Institute of chartered accountants of India defines Auditing as a systematic and independent examination of data, statements, records, operations and performances (financial or otherwise) of an enterprise for a stated purpose. The original companies act 1956 required many changes. Hence the new companies act 2013 came into effect. There are many important changes in the act especially related to the audit of companies and auditors. The paper tries to study the impact of changes in the companies act with respect to the auditors.

KEYWORDS

Auditors, Auditing.

INTRODUCTION

Auditing is defined by the **The IAASB** as "the objective of audit of financial statements is to enable the auditor to express an opinion whether the financial statements are prepared in all material respects, in accordance with an identified financial reporting framework." The **Institute of chartered accountants of India** defines Auditing as a systematic and independent examination of data, statements, records, operations and performances (financial or otherwise) of an enterprise for a stated purpose. The word audit has been derived from a latin word Audire which means to hear. It is the independent examination of financial information of any entity, whether profit oriented or not, and irrespective of its size or legal form, when such an examination is conducted with a view to expressing an opinion thereon. The auditors were required to report on whether the financial statements show a true and fair view. An auditor collects information and evaluates the evidence in order to make a report. The objectives of audit are to lend credibility to information and thereby improve its reliability for the decision makers. Auditing serves as a check on the integrity of the person at the helm of affairs. It acts as a control system.

As per the provisions of the companies act, the financial statements of the companies is supposed to be audited mandatorily. Changes in legislations and compliance procedures have an influence on auditors and auditing as well. Companies Act, 2013 (2013 Act) was assented by the honorable President of India on 29 August 2013 and published in the Official Gazette on 30 August 2013. The amended act has brought in new changes which are going to impact accounting, auditors and the auditing profession as a whole.

OBJECTIVES OF THE STUDY

1. To know the recent changes in companies act with respect to the auditing and auditors.
2. To know the impact and influences of the changes on the auditing and the auditors.

RESEARCH METHODOLOGY

In order to achieve the objectives secondary sources were adopted for the study. Various journals, articles , websites, circulars were studied for the purpose.

MAJOR FINDINGS

The original act of 1956 required various changes. There were a few occasions in the past when the companies act was sought to be amended. The present bill was was assented by the honorable President of India on 29 August 2013 and published in the Official Gazette on 30 August 2013. The company's act 2013 has given many new concepts. Some of the key ones are discussed below:

IMPACT ON AUDIT AND AUDITORS

The act now requires the rotation of auditors after a specified time frame. It also included provisions related to the joint audits. The auditor will now be appointed for a period of five years, with a requirement to ratify such an appointment at each annual general meeting. In case of listed companies it would be mandatory to rotate auditors every five years in case of the appointment of an individual as an auditor and every 10 years in case of the appointment of an audit firm with a uniform cooling off period of five years in both the cases. The firms having common partners in the outgoing audit firm will also be ineligible for appointment as auditor during the cooling off period .

Further any any non audit services which are to be rendered by the auditor should be approved by the board of directors or the audit committee.

The auditor is also restricted from providing specific services, such as Accounting and book keeping services

,Internal audit, Design and implementation of any financial information system, Actuarial services, Investment advisory services, Investment banking services, Rendering of outsourced financial service, Management services, and any other service which may be prescribed. Similarly such services cannot be rendered by the audit firm either directly or indirectly through itself or any of its partners, its parent or subsidiary or through any other entity whatsoever, in which the firm or any other partner from the firm has significant influence or control or whose name or trademark or brand is being used by the firm or any of its partners. The main purpose of such restrictions is to achieve auditors independence.

Auditors have to comply with the accounting standards. The importance of the fact that standards are converged the the International Financial Reporting Standards have been taken into consideration in many sections of the act. For example, the definition of a financial statement includes a 'statement of changes in equity' which would be required under Ind AS. There is a provision for secretarial audit for bigger companies such as listed companies or other companies having a [aid up share capital of more than Rs 100 crores.

The importance of internal audit has been well acknowledged. The 2013 Act now mandates the appointment of an internal auditor who shall either be a chartered accountant or a cost accountant, or such other professional as may be decided by the Board to conduct internal audit of the functions and activities of the company.

All listed companies, public companies having paid-up share capital of more than Rs.10 crore and public companies having outstanding loans or borrowings from banks or public financial institutions of more than Rs25 crores or which has accepted deposits of more than Rs 25 crores at any point of time during the last financial year.

Further in respect of appointment of a firm as the auditor of a company, the firm shall also include a limited liability partnership incorporated under the Limited Liability Partnership Act, 2008. However only the partners who are chartered accountants shall be authorized to act and sign on behalf of the firm

LIABILITY OF AUDITORS

Scope of the liability of auditors has been enhanced. The auditor's liability has become more stringent. The auditor is now subjected to multiple regulators such as the National Financial Reporting Authority apart from ICAI. These regulatory bodies can investigate into matters relating to the misconduct of auditors. There are provisions regarding monetary penalties, imprisonment, debarring of the auditor and the firm, and in case of frauds, can even be subject to class action suits.

AUDIT REPORT

There are certain new aspects which need to be covered in an auditors' report. The auditor has to give his observations and comments on financial transactions or matters which have any adverse effect on the functioning of the company. The auditor has to state any qualification, reservation or adverse remark relating to the maintenance of accounts and other matters connected with it. He has to comment on whether the company has adequate internal financial controls system in place and and has to comment on whether the operating effectiveness of such controls exists.

CONCLUSION

Thus it seems that the changes in the new act are done in order to bring more transparency in the audit process. This will provide more investor and shareholder protection. The major changes are for audit and auditor. The purpose is to enhance the independence of the auditors and to make the audit process more effective and less biased. The stringent provisions ensure that accounting and auditing frauds do not take place in the future.

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CAUSES OF ATTRITION AND THEIR EFFECTS IN INFORMATION TECHNOLOGY INDUSTRY IN SOUTH INDIA

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ABSTRACT
The greatest challenge that the corporate houses gets to deal with these days is not attracting the prospective employee but retaining their skilled employee. The highly skilled employees are most wanted by different organizations across India. Information Technology (IT) organizations in south India is no exemption to this. Higher productivity with high quality deliverables and bringing in innovation rely majorly on the highly skilled employees. Business knowledge and domain knowledge coupled with technical skill and tenure in an organization makes an employee so special that an organization would not want to lose that employee. Information Technology (IT) organizations in south India is facing a huge task of retaining their bests and highly competent. The aim of this research is to identify and analyse various causes of attrition and their effects in Information Technology (IT) industry in south India. There are various reasons for an employee to leave an Information Technology (IT) organization, from job dissatisfaction, compensation, job location, work pressure, work-life balance to having issues with supervisor. The employee attrition leads to direct and indirect losses to an organization, from loss in income due to productivity loss, loss of business knowledge, experience of the skilled resource to reputation of the organization, demoralizing other employees of the organization. It not just has an effect on the morale of other employees but also on the financial position, reputation of the organization. Thus, it has become indispensable for the organizations to comprehend the factors that prompt employees to leave an organization.

KEYWORDS
Attrition effects, causes of attrition, employee attrition, IT employee, IT organizations.

INTRODUCTION
In India, Information Technology (IT) industry has grown to a greater extent in the last couple of decades contributing about 6% in India's Gross Domestic Product (GDP) by means of software export from India. As the offshoring and outsourcing are becoming so common throughout the world, India as a country has gained a lot from it and expected to gain a lot more. Over 10 Million IT professionals are expected to provide software related services from India by 2020 according to a report from the National Association of Software and Services Companies (NASSCOM).

There are so many technologies (Java, Mainframes, .Net, etc), software (Consulting, Services and Outsourcing) and multiple business segments (Insurance, Banking, Health care, Logistics, Retail, etc) that are supported from India. There are Indian organizations gone globally as well overseas organizations setting up their division in India to support the software requirements globally. South India plays a significant role in providing IT services to organizations over the world. Cities like Bangalore, Chennai, Hyderabad, Kochi, Coimbatore, Trivandrum in south India acts as Hub for software organizations.

The IT industry attracts employees mainly due of the work environment it offers, the culture the industry brings in, the compensation an employee gets, the career opportunity that one can get. In addition, there are other fringe benefits like Option to work from home, Transportation, owning company shares, Health Benefits, gifts etc.

The IT industry has become so competitive that a skilled employee is the most sought after. The expertise and skills of the tenured employee in an organization improves the prospect of the organization in the market. Recruiting the right people for the right job and above all retaining those talented employees have become enormous tasks for employers. According to a study conducted by "Global Talent Metrics" in 2011, the attrition rate was 18-25% on high-skilled IT professionals.

LITERATURE REVIEW
Attrition can be comprehended as "A reduction in the number of employees through retirement, resignation or death." Attrition can be viewed in many forms; the major form of attrition is attrition due to employees themselves choosing to leave an organisation by means of resignation [6].

Attrition has always been a head-ache to Human Resource (HR) managers and of course to the organizations. Even though high salaries are provided across all industries, the industries have been overwhelmed with attrition across the board, especially in the recent years. This continuous raise in attrition rates keeps the organizations under tremendous financial pressures [1].

Information Technology (IT) organizations are going through a very tough phase handling attrition. Attrition in IT organizations is mainly due to the numerous opportunities available for an IT professional and also the change in their mind set [3]. However, pointing out one reason for attrition is not easy. Though the reasons vary from person to person, environment to environment and organization to organization, there are quite a few apparent and common reasons at a large number and distinguishable simple reasons at small numbers [2]. There are reasons which can be restricted by the organization with the support of their managers and there are reasons which the employer has absolutely no direct control over but can only work on minimizing the impact [5].

There are two major classifications for the cause of attrition – Push factor and Pull factor. Push factors include earning less compensation, issue with supervisor, estranged work environment, not receiving support from colleagues, unable to balance work and life, loss of trust in the organization, no opportunity for career development, monotonous work assignments, etc. The pull factors on the other hand are the factors that are external that other organizations offer which are flattering that the employees would want to leave their current organization for. The factors include but not restricted to attractive compensation offers, special allowances, challenging work assignments, promising career growth, promotions, better working environment, job location, additional facilities like provision for work from home, Gymnasium [4],[8],[9].

Losing talents and skilled employees leads to performance losses which can have negative effect on companies on a longer term particularly if the employee leaves behind knowledge gaps in which case it doesn't stop with the loss incurred in productivity and the effort required to bring new resource up to speed but it continues to affecting the balance of the team and the relationship with the customer. By losing key talented employees, an employer incurs costs associated with recruitment processes such as selection, recruitment and administration. Besides, it also includes loss of knowledge, reputation of the organization and it also affects the morale of the employees of the team [7],[10].

With attrition rates being a blight of every industry, IT organizations in India are working on introducing new ground-breaking approaches regularly to curtail the attrition and advancing retention ratio.

STATEMENT OF THE PROBLEM

Attrition of Information Technology (IT) professionals leads to additional costs to an organization in addition to bringing down the revenue. It also affects the morality of other employees, affects the relationship with customer and affects the reputation of an organization in the market.

According to a study conducted by "Global Talent Metrics" in 2011, the attrition rate was 18-25% on high-skilled IT professionals in India with south India taking a big share of it.

OBJECTIVES OF THE STUDY

- The objective of this research is to identify and analyse the causes of employee attrition in IT industry in South India.
- The objective of this research is also to identify and analyse the effects of employee attrition in IT industry in south India.

HYPOTHESIS

- **H0:** There is no difference between Male and Female employees in choosing to leave an organization.
- **H1:** Male employee leaves an organization more than the Female employees.

RESEARCH METHODOLOGY

DATA COLLECTION

This research tries to identify the various causes that lead to attrition and the impacts that attrition leads to with respective to IT organizations in south India. Two well-structure questionnaires were formed to collect Primary data by means of survey for this descriptive research. The first survey was conducted on a sample population of 219 Information Technology (IT) professionals of varying experience from 2-10 years working from various cities(Bangalore, Chennai, Hyderabad, Trivandrum, Kochi and Coimbatore) representing different organizations of South India. The survey included both Male and Female employees aging from 22 to 35, working in different section of IT industry ranging from Developers, Testers, Support professionals, Administrators and other areas.

The second survey was conducted among 54 leaders/managers of both genders performing roles such as Project Management, Human Resource (HR) management, people management, Business area management for IT organizations belonging to various cities (Bangalore, Chennai, Hyderabad, Trivandrum, Kochi and Coimbatore) across South India.

The questionnaires consisted of 2 parts. The first part was used to collect information about the respondent including their work location, organization that they work for, experience, job role, experience in current role, age, etc. The second part consisted of factors. The survey used Likert rating scale.

SPSS V22 was used for analyzing data. This research used data analysis techniques like Chi-square, Friedman's Test, factor analysis.

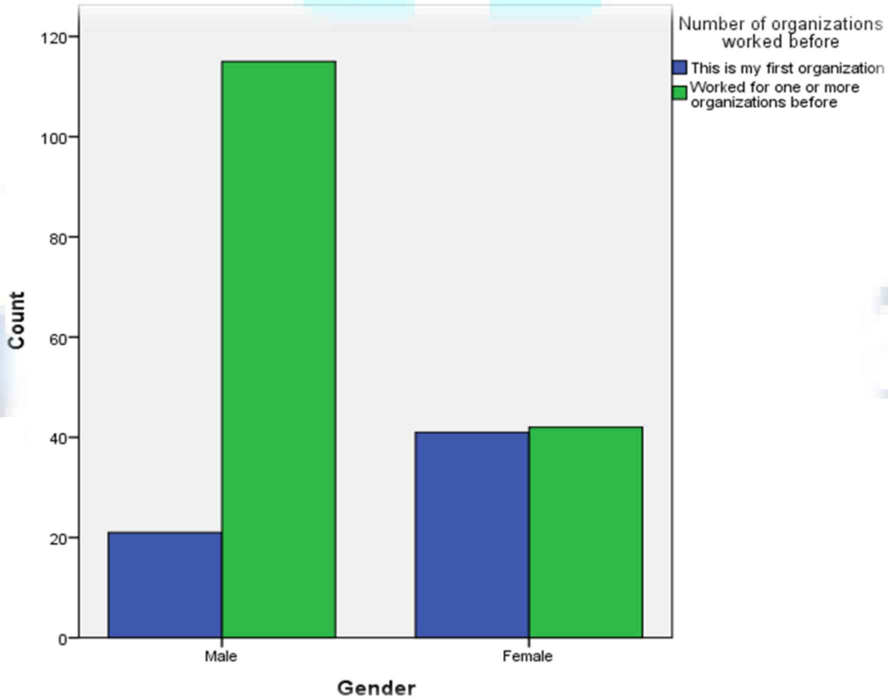
RESULTS & DISCUSSION

TABLE 1: GENDER *NUMBER OF ORGANIZATIONS WORKED BEFORE - CHI-SQUARE TEST

Gender	Number of organizations worked before		Total	Chi Square value	P value
	This is my first organization	Worked for one or more organizations before			
Male	21 (15.4%) [33.9%]	115 (84.6%) [73.2%]	136 [62.1%]	29.283	.000
Female	41 (49.4%) [66.1%]	42 (50.6) [26.8%]	83 [37.9%]		
Total	62 (28.3%)	157 (71.7%)	219 [100.0%]		

Note: 1. The value within ( ) refers to Row Percentage, [ ] refers to Column Percentage

FIG 1: GENDER VS ATTRITION



The P value (.000) which is less than the alpha value .05 from the Table 1 indicates that there is a strong relationship between Gender (Male, Female) and their preference to leave an organization.

It is evident from the Table 1 that 84.6% of the Male employees had worked on at least one organization before, compared to 50.6% of Female employees. For 49.4% of female employees, it was their first organization. This concludes that Male employee leaves an organization more than their Female counterparts.

ATTRITION CAUSES

HYPOTHESIS

H0: There will be no difference in the participant's rank order for the various causes of attrition.

H2: There will be significant difference in the participant's rank order for various causes for attrition.

In order to ascertain the factors that lead to attrition of Information Technology (IT) employees in south India, data was collected on 20 different variables and were analysed. The data was collected using Likert scale having the options 'Strong Agree' given a weightage of 5, 'Agree' having a weightage of 4, 'Neither Agree Nor Disagree' having a weightage of 3, 'Disagree' having a weightage of 2 and 'Strongly disagree' having weightage of 1. Based on the data collected, Freidman's test and Kendall's Coefficient of Concordance were run and the results of the tests are presented in the Table 2.

TABLE 2: RANKS

Parameters	Mean Rank	Chi Square Value	Kendall's Coefficient of Concordance value	P value
Differences with the manager	15.89	1584.491	.38	.000
Poor Compensation	13.20			
Monotonous and non-challenging work	13.09			
Higher studies	5.47			
Loss of Trust in the organization	5.26			
Personal reasons	4.35			
Employees expectations not meeting with employer	3.74			
Unable to balance work and life	10.88			
Lack of visibility of their contribution	9.90			
Lack of appreciation	10.24			
Job Location preference	8.20			
Lack of Trust among team members	9.78			
Lack of Recognition	14.52			
Lack of opportunities to grow	13.66			
Work Pressure	12.73			
Biased performance appraisal process and promotion	12.69			
Poor Work culture	12.34			
Dissatisfaction with the job role	12.17			
Better opportunity available else where	11.16			
Unfriendly work environment	10.73			

The test was significant χ^2=1584.491, *p*<.05 (Table 2) and the Kendall's coefficient of concordance of .38 (Table 2) indicates fairly strong differences among the 20 variables (causes of attrition). The result of the analysis indicates that there is a differential rank order for various causes of attrition. We can conclude that Friedman's test is a reliable test for finding causes of attrition.

The Table 2 containing various causes of attrition above analysed with Friedman's test gives interesting results. Out of the total of 20 different causes, there are 9 corresponding causes that are clustered with high ranked creative tensions (Difference with Manager, Lack of recognition, Lack of opportunity to grow, Poor compensation, Monotonous and non-challenging work, Work pressure, biased performance appraisal process and promotion, Poor work culture, and dissatisfaction with the job role). Similarly, there are 5 causes that are clustered with the low ranked creative tensions (Job location preference, higher studies, Loss of trust in the organization, Personal reasons, and Employee expectations not meeting with the employer).

EFFECT OF ATTRITION

In order to ascertain the impacts that attrition of Information Technology (IT) employees from south India leads to, 14 different variables were analysed. The data was collected using Likert scale having the options 'Strong Agree' given a weightage of 5, 'Agree' having a weightage of 4, 'Neither Agree Nor Disagree' having a weightage of 3, 'Disagree' having a weightage of 2 and 'Strongly disagree' having weightage of 1. Based on the data collected, Factor analysis was performed and the result of the analysis is presented in the Table 3.

TABLE 3: FACTOR ANALYSIS ON EFFECT OF ATTRITION**

Factor Group	Factors	Component				Eigen value*	% of variance	Cumulative %
		1	2	3	4			
Factor 1	Incurred additional costs and overhead associated with recruitment and training	**.708**	.258	-.100	-.127	4.38	31.25	31.25
	Loss of intellectual property - Domain, technical, business, application skills	**.601**	.199	-.034	-.215			
	Tough to find same skilled person from outside market	**.858**	.143	.261	-.060			
	Loss of expertise and efficiency	**.714**	-.057	-.034	.079			
	Other team members getting overloaded with share of work	**.491**	.339	.249	.067			
	Unhappy customer	**.573**	-.005	.471	.277			
Factor 2	Delayed deliverables	.524	**.661**	-.059	-.042	1.93	13.8	45.02
	Cascaded effect - Other team members tending to leave	.190	**.887**	.212	.062			
	Effort required to rebuild the relationship with client	.103	**.887**	.109	.040			
	Shortage of skilled resource	.050	**.662**	-.378	.153			
Factor 3	Affecting morality of entire team	.152	.400	**.780**	.065	1.69	12.09	57.12
	Loss of productivity until the new resource is ready	-.023	-.139	**.741**	-.028			
Factor 4	Loss of business	-.161	.234	.183	**.736**	1.19	8.47	65.60
	Revenue loss for the organization	.035	-.035	-.111	**.837**			

* Extraction Method: Principal Component Analysis.

**Rotation Method: Varimax with Kaiser Normalization.

Varimax rotation was applied for the 14 variables and the variables were clubbed into 4 factors.

The total variance shown in Table 3 accounted for by all of the 4 components explains nearly 66 percent of the variability in the original 14 variables.

Factor 1 : This contains variables, Incurred additional costs and overhead associated with recruitment and training, Loss of intellectual property like domain, technical, business, application skills, Tough to find same skilled person from outside market, Unhappy customer, Other team members getting overloaded with share of work, Loss of expertise and efficiency - **K**nowledge loss.

Factor 2 : This contains variables, Delayed deliverables, Cascaded effect like other team members tending to leave, Effort required to rebuild the relationship with client, Shortage of skilled resource - **I**mpact to service.
Factor 3 : This contains variables, Affecting morality of entire team, Loss of productivity until the new resource is ready **– I**mpact to the work environment.
Factor 4 : This contains variables, Loss of business, and Revenue loss for the organization - Impact to the income of the organization.

FINDINGS

- Male employee leaves an Information Technology (IT) organization more than their Female counterparts.
- The most common and the most important reasons for an IT employee to choose to leave an organization are :
  - Differences with their leader/manager
  - Lack of Recognition
  - Lack of opportunities to grow
  - Poor Compensation
  - Monotonous and non-challenging work
  - Work Pressure
  - Biased performance appraisal process and promotion
  - Poor Work culture
  - Dissatisfaction with the job role
  - Better opportunity available else where
  - Unable to balance work and life
  - Unfriendly work environment
  - Lack of appreciation
  - Lack of visibility of their contribution
  - Lack of Trust among team members
  - Job Location preference
- The impact that an IT employee brings to the organization when he/she leaves the organization are associated with Knowledge loss, Impact to service, Impact to work environment, and Impact to the income of the organization.

SUGGESTIONS/RECOMMENDATIONS

- The impact that an employee leaves behind when he or she choose to leave an organization is pretty high on various aspects from affecting revenue of the organization to knowledge loss to change in work ambience, etc. Retaining talents saves cost, knowledge and improves morality among team members. Keeping this in mind, the Leaders have to have regular meeting with their team to understand each of the employees reporting to them and address their concerns.
- Leaders/Managers should not be bossy and can be more friendly and approachable that way the employees whoever having any issues within the work environment would be able to speak up rather than quitting.
- Organization can follow the industrial standard as far as the Compensation is concerned.
- Leaders/Managers have to be realistic with work assignments and share the work load equally among the team members.
- Well planned work and assigning right task to the right people will avoid any unnecessary work pressure pushed on employees.
- Recognition is an important factor for any employees and keeping that in mind, regular appreciations for good work done by the employees can be shared in team meetings, via email and in possible cases, the high performed and outstanding employees who think out of the box can be Awarded and rewarded that would boost not only the morality of the employee who receives the award/reward but also it would boost the morality and encourage other team members.
- Leaders/Managers can set a career map for each employee and have them trained and according to their skills level, be promoted or given different opportunities to show case their talent. This way higher positions need not to be filled from outside by having their team member up skilled which reduces cost and increases the job satisfaction of the employees.

CONCLUSION

From this research, it is evident that Male employees tend to leave an organization more than their female counterparts and employee attrition in Information Technology (IT) industry leads to knowledge loss, impact to service, impact to the work environment and impact to the income of the organization. It is also evident that factors like Differences with the manager, Lack of Recognition, Lack of opportunities to grow, Poor Compensation are the major reason for employees choosing to leave an organization.
Taking into the consideration of the effect that attrition brings in, the organization can help their employees by addressing their concerns and helping them to be retained which would benefit the organization and their employees. Leaders/Managers play a crucial role in employee attrition and as well in employee retention. A well organized, approachable, unbiased, trustworthy, motivating leader/manager would be able to reduce attrition ratio in an organization with the support from the organization.

LIMITATION OF THE STUDY

- This study is restricted to Information Technology (IT) employees in South India alone.
- The Inferences are based on the inputs provided by the respondents.
- Employees having less than 2 years of experience are not considered for this research since the industry exposure would be limited for them.

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A STUDY ON TRACKING PERSONAL TRAITS LINKED TO ENTREPRENEURSHIP AMONG COLLEGE STUDENTS

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ABSTRACT

Entrepreneurs are the creators and builders of new ventures that not only fulfill their dreams, bring them huge fortunes but also make a strong positive impact on the economy and improve the lives of people. Entrepreneurial culture among youth will bring India under Top Ten countries in the world ranked for Happiness Index. Youth will be indulging in productive activities thus not falling into the clutches of naxals, terrorist, drug traffickers, mafias and criminals. This paper mainly focused on tracking the personal/psychological traits linked to entrepreneurship among students who are the potential entrepreneurs. The study is undertaken by collecting data through a structured questionnaire among 100 women students from an Arts & Science college situated in the rural outskirts of Tirunelveli district in Tamilnadu. It has been found and recommended that efforts must be taken to boost the self-esteem of women students.

KEYWORDS
Entrepreneurship, Psychological trait.

INTRODUCTION
In India approximately 39 per cent of the people still live below poverty line and there is widespread unemployment. Natural supply of entrepreneurs is falling short of country's requirements and macroeconomic policies have not created sufficient wealth and jobs. In developed countries the situation is completely different. President of United States of America Mr. Barak Obama designated November as the "National Entrepreneurship Month" because entrepreneurs are an important force in the global economy. In 2012, the White House launched a "Start-up America"' to celebrate and accelerate the growth of entrepreneurship and pledged $2 billion over the course of five years to support entrepreneurship. "Inspire EU" is a project looking to foster entrepreneurship across EU. Thus developed nations still become well developed through entrepreneurship and it is the right time for India too to promote entrepreneurship very particularly among youth.

IMPORTANCE OF THE STUDY
Students pursuing courses in Arts & Science colleges have very little scope for employment. They are less opted by private companies. Even if they are recruited by private sector companies, the salary they are getting is very meager i.e. as low as Rs.2, 000 p.m. Further the parents of the girl students are hesitant to send their ward to companies offering jobs outside their place of residence. So there is a tendency growing at an alarming rate among the students very particularly women showing least interest in studies and their parents indulging vigorously in getting their daughters married earlier. Thus getting admission into Arts & Science colleges especially in rural areas is views as stop gap adjustment for marriage. If this trend is not put to an end, the empowerment of women will be in doldrums in rural areas. The right solution will be giving assurance that they too can become economically independent by taking up entrepreneurship as their profession. Entrepreneurship Development Courses and training programmes may motivate enterprising students opt for self-employment and entrepreneurial career. Hence there arises the need to identify the students and the gap in their entrepreneurial traits so as to mould them into job providers.

STATEMENT OF THE PROBLEM
Entrepreneurship can be nurtured among the youth through educational institutions. Motivational camps aiming at inducing final year students to take up entrepreneurship as their career can be arranged. The content of the camp must be designed in such a way that the entrepreneurial trait less found in students should be touched upon and addressed so that they may be really motivated to take up entrepreneurship. Thus identifying the gap in entrepreneurial traits very particularly psychological traits i.e. innovation, personal control, self esteem and achievement among students needs to be found out. The present paper is directed towards assessing the psychological traits of students that are closely linked to entrepreneurship.

OBJECTIVES OF THE STUDY
- To assess the personal traits linked to entrepreneurship possessed by students.
- To summarise the findings and offer suggestions.

METHODOLOGY
SOURCES OF DATA: The present study is based on primary and secondary data. Primary data is collected through a structured questionnaire designed and applied during the academic year 2013-14. The questionnaire contained 20 questions aimed at assessing the psychological attributes that may motivate students to take up entrepreneurship. Respondents' attitudes were evaluated using a 5 point Likert scale. Secondary data are collected from journals and websites.
SAMPLE SIZE: Total 100 Arts & Science College students formed the sample. They were selected by purposive sampling method.
STATISTICAL TOOL USED: Simple percentage method is used to analyse and interpret the data

DATA ANALYSIS AND INTERPRETATION
People exposed to entrepreneurship frequently express that they have more opportunity to exercise creative freedom, higher self-esteem and overall greater sense of control over their own lives. Hence focus has been given for four entrepreneurial traits viz., **innovation, self esteem, personal control and achievement.**
The existence of essential traits of an entrepreneur among the students has been studied by collecting the response of students pertaining to 20 statements aimed at measuring core entrepreneurial qualities viz., Innovation, Self-esteem, Personal control and Achievement. The results have been furnished below.
S.A. – Strongly Agree D.A. – Disagree S.D.A. – Strongly Disagree N.O. – No Opinion

TABLE 1: DEGREE OF INNOVATION POSSESSED BY STUDENTS

.Statements	S.A.	Agree	D.A	S.D.A.	N.O.
I have skill and creative thinking	54	13	13	20	-
I am fairly curious	44	18	10	20	8
For me what counts is action	54	-	19	20	-
I have positive mindset to new ideas	49	20	7	19	5
Total	201/4 (50%)	51/4 (13%)	49/4 (12%)	86/4 (22%)	13/4 (3%)

Source: Primary Data

From the above table it is cleared that 50 percent of the students possess highest degree of innovation as they have strongly agreed to the above statements meant to measure innovation and 13 percent possess high degree of innovation whereas 34 percent expressed their disagreement over the above statements.
It is concluded from the above table that majority (63%) of the students possess innovative skill, the much sorted entrepreneurial quality.

TABLE 2: DEGREE OF PERSONAL CONTROL POSSESSED BY STUDENTS

Statement	S.A.	Agree	D.A.	S.D.A.	N.O..
I feel that I can influence things that happen to me	45	25	11	19	-
My life is determined by my own actions	39	29	15	14	3
I am able to protect my personal interest	30	32	13	19	6
I am effective in stressful situations	39	21	15	22	3
Total	153/4 (38%)	107/4 (27%)	54/4 (14%)	74/4 (18%)	12/4 (3 %)

Source: Primary Data

From the above table it is cleared that 38 percent of the students possess highest degree of personal control as they have strongly agreed to the above statements meant to measure personal control and 27 percent possess high degree of personal control. 32 percent of the respondents expressed their disagreement to the above statements.
It is concluded from the above results that majority (65%) of the students expressed that they have personal control, yet another trait needed to take up entrepreneurship.

TABLE 3: DEGREE OF SELF ESTEEM POSSESSED BY STUDENTS

Statement	S.A.	Agree	D.A.	S.D.A.	N.O.
I study my option, then decide	13	21	41	21	3
I speak and present clearly and effectively	13	19	28	37	2
I know how to motivate a team	17	12	34	35	1
I know how to empower a team	12	21	33	28	5
I delegate responsibilities effectively	13	18	36	29	3
I always worry what others will think of me	14	16	33	27	9
I can face difficult situations	19	25	13	38	4
Total	101/7 (15%)	132/7 (19%)	218/7 (31%)	215/7 (31%)	27/7 (4%)

Source: Primary Data

From the above table it is cleared that only 15 percent of the students possess highest degree of self esteem as they have strongly agreed to the above statements meant to measure self esteem and 19 percent possess medium level of self esteem. 62 percent of the students were found to have less self esteem.
It is concluded from the above analysis that the students have low self esteem since only 34% of the respondents expressed their assent to the above statements.

TABLE 4: DEGREE OF ACHIEVEMENT TRAIT POSSESSED BY STUDENTS

Statement	S.A.	Agree	D.A.	S.D.A.	N.O.
I set and work towards goals		29	45	11	5
I want to do something that will be recognized publicly	38	26	11	22	3
Where others see problem I see possibilities	40	29	13	14	4
I produce accurate, clear ,error-free results	25	39	16	15	5
I like receiving feedback about my work	32	31	13	21	3
I take responsibility for the outcome	31	34	12	18	5
Total	211/6 (35%)	188/6 (31%)	75/6 (13%)	101/6 (17%)	25/6 (4%)

Source: Primary Data

From the above table it is cleared that 66 percent of the students possess good degree of achievement trait as they have strongly agreed and agreed to the above statements meant to measure achievement. 30 percent have the opposite trend.
It is concluded from the above discussion that sizeable number of student respondents possess achievement attitude – an important trait of an entrepreneur.

FINDINGS

- Majority of the students (63%) were found to have innovative spirit in them
- 65% of the students possess personal control , the much needed quality of an entrepreneur.
- 62% of the students approached were found to have low self-esteem.
- It has been tracked that 66% of the respondents' achievement motive was appreciable.

RECOMMENDATIONS

- The women students pursuing their course in Arts & Science colleges must be imparted with lectures/training intended to boost up their self esteem.
- Successful first generation entrepreneurs must be invited to the institutions and the students should be given a chance to hear their success stories and to have in-depth interaction. This may boost their self esteem .
- Parents must be made to realize that entrepreneurship is the best choice to wage-employment for their daughters.
- Students should be motivated to form groups which should be made to attend EDPs at regular intervals and fix a future venture alongside their studies.
- Package of incentives, mentoring and follow-ups must be available for the students to turn them into job creators.
- Educational institutions must issue credibility certificates to worthy students and it should be duly recognized by financial institutions and government departments towards granting loan and subsidy.

CONCLUSION

It is essential to identify the gap in the need of students' entrepreneurial trait so as to structure and tailor-made EDPs to the benefit of students. Efforts must be taken to boost the self esteem of Arts & Science students. They already possess the high degree of achievement attitude followed by personal control and innovative spirit. Government and the Ministries concerned should play a keen role in stimulating entrepreneurship. Institutions of Higher Education must also redesign their curriculum and priorities towards promoting entrepreneurial culture among the youth.

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A SURVEY ON STIGMERGETIC CONTROL PROTOCOLS FOR DISTRIBUTED AD HOC WIRELESS NETWORK

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ABSTRACT

A MANET is an autonomous collection of mobile devices connected via wireless links where these network is decentralized, where all network activity including discovering the topology and delivering messages must be executed by the nodes themselves, i.e., receiving and forwarding of data will be incorporated into mobile nodes. A vital challenge, which is considered as heart of building a MANET, is finding the shortest path from source node to destination node. Therefore, developing a MANET goes hand in hand with developing a good routing protocol to find the optimal path in such a dynamic network. In this paper we review, a collection of ant colony algorithms which monitor traffic and provides an optimal solution of good path. Moreover, we discuss the general principles and applications of swarm intelligence routing.

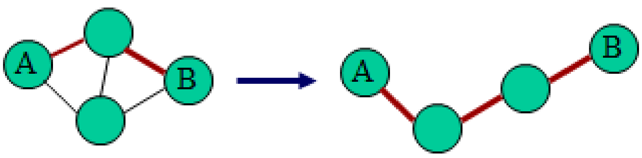
KEYWORDS

Ad hoc, Ant Colony, Stigmergy, Swarm intelligence.

1. INTRODUCTION

A MANET is built dynamically by a loosely connected domain of routers. These routers may communicate over wireless channels with asymmetric reachability, may be mobile, and may join and leave the network at any time [1]. The system was designed to self-organize, self-configure, and detect radio connectivity for the dynamic operation of a routing protocol without any support from fixed infrastructure. This network uses multi-hop radio relaying. The routing and resource management are done in a distributed manner in which all nodes coordinates to enable communication among them. This requires each node more intelligence so that it can function both as a network host for transmitting and receiving data and as a network router for routing packets from other nodes. Since ad hoc networks can be deployed quickly it finds applications in many areas, such as battle field surveillance, collaborative and distributed computing, earth quake monitoring and tsunami monitoring. However their low battery power, bandwidth constraint, quality of service, network lifetime raises several issues to these autonomy requirements. So while designing a protocol these issues should be taken into account, mainly mobility of nodes from one place to another should be considered while designing the protocol. Since the network topology is dynamic, when a link goes down, all paths that use that link are broken and have to be repaired.

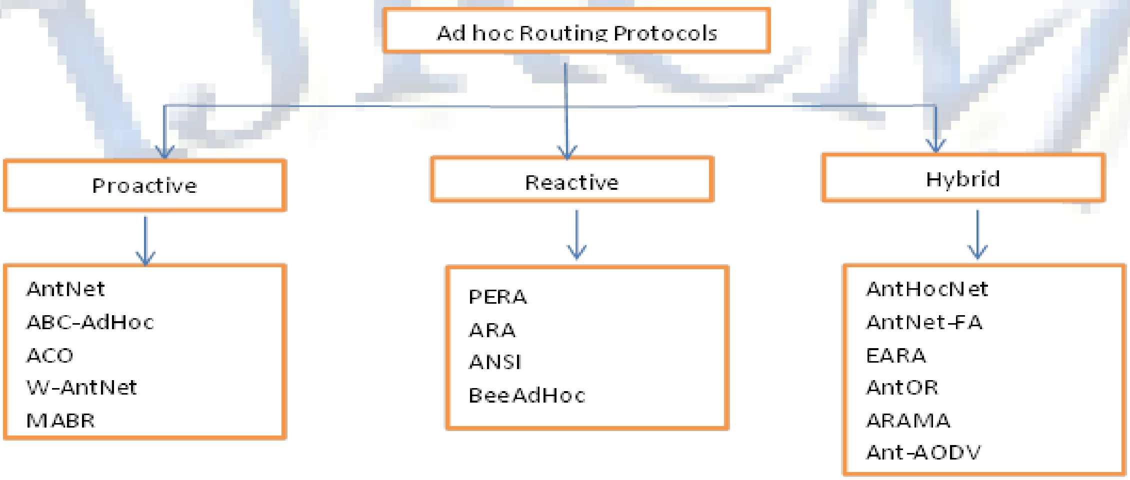
FIG 1: FREQUENT CHANGES OF TOPOLOGY



Routing protocols for ad hoc wireless network can be classified into several types based on different criteria. In proactive protocols, every node maintains the network topology information in the form of routing tables by periodically exchanging routing information. Routing information is generally flooded in the whole network. Whenever a node requires a path to a destination, it runs an appropriate path finding algorithm on the topology information it maintains, whereas, the reactive protocols do not maintain the network topology information. They obtain the necessary path when it is required, by using a connection establishment process. Hence these protocols do not exchange routing information periodically. Hybrid protocols combine the features of both above two categories.

Swarm intelligence looks at nature as a source of inspiration, studying the collective behavior and properties of complex, self-organized, decentralized systems with social structure as fish schools, bird flocks, ant colonies and animal herds. The aforementioned systems are organized in small societies (swarms) [4]. Grass's used the term *stigmergy* to describe this particular type of communication in which the "workers are stimulated by the performance they have achieved". The two main characteristics of stigmergy that differentiate it from other forms of communication are the following. Stigmergy is an indirect, non-symbolic form of communication mediated by the environment insects exchange information by modifying their environment; and Stigmergic information is local: it can only be accessed by those insects that visit the locus in which it was released (or its immediate neighborhood). In section 2 we present the basics and the background of ant colony optimization meta-heuristic. In section2, 3, and 4 we present an algorithm for proactive, reactive and hybrid algorithm respectively. Section 5 present conclusions.

FIG. 2: CATEGORIZATION OF SWARM ROUTING PROTOCOLS



2. PROACTIVE BASED ALGORITHM

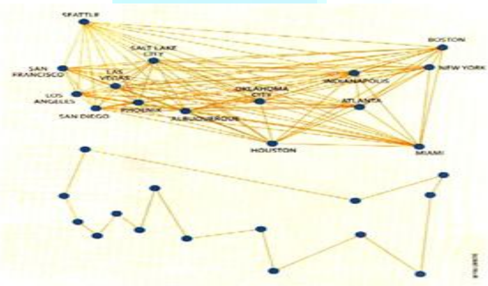
2.1 Ant Colony Optimization (ACO)

The ACO Ant Colony Optimization (ACO) metaheuristic, especially due to the fact that the ACO algorithm [2] was inspired by the behavior of an authentic ant colony, more specifically real ants in a food search process. When ants are out searching for food, they leave their nest and walk toward the food. When an ant reaches a crossroad, it must decide which way to follow. While walking, ants deposit pheromones, leaving behind tracks of the route taken. Ants can smell pheromone and they are more likely to follow paths characterized by strong pheromone concentrations. The pheromone trails allow ants to find their way to the food source, or back to the nest. The same pheromone can be used by other ants to find the location of the food sources discovered by their mates. Based on this approach, there are many successful applications about the combinatorial optimization problems such as the Traveling Salesman Problem (TSP), Vehicle Routing Problem (VRP) and routing algorithms in mobile ad hoc networks. The ACO algorithm has three important steps (1). Generate solution (2). Update action probability (3). Pheromone update with these steps ACO can be implemented on every discrete optimization problem. At first all solutions will be distinct and then we should compute probability and update pheromone for each of them.

2.2 ACO for the travelling Salesman Problem

In the traveling salesman problem, a set of cities is given and the distance between each of them is known. The goal is to find the shortest tour that allows each city to be visited once and only once. In more formal terms, the goal is to find a Hamiltonian tour of minimal length on a fully connected graph. In ant colony optimization, the problem is tackled by simulating a number of artificial ants moving on a graph that encodes the problem itself: each vertex represents a city and each edge represents a connection between two cities. A variable called pheromone is associated with each edge and can be read and modified by ants. Ant colony optimization is an iterative algorithm. At each iteration, a number of artificial ants are considered. Each of them builds a solution by walking from vertex to vertex on the graph with the constraint of not visiting any vertex that she has already visited in her walk. At each step of the solution construction, an ant selects the following vertex to be visited according to a stochastic mechanism that is biased by the pheromone: when in vertex *i*, the following vertex is selected stochastically among the previously unvisited ones. In particular, if *j* has not been previously visited, it can be selected with a probability that is proportional to the pheromone associated with edge *(i, j)*. At the end of an iteration, on the basis of the quality of the solutions constructed by the ants, the pheromone values are modified in order to bias ants in future iterations to construct solutions similar to the best ones previously constructed.

FIG. 3: TRAVELLING SALES ANT



3. REACTIVE BASED ALGORITHMS

3.1 Probabilistic Emergent Routing Algorithm (PERA)

Probabilistic Emergent Routing algorithm (PERA), (Baras and Mehta) is purely reactive algorithm; forward ants are only sent out at the start of a communication session, or when all existing routing information is out of date. They are flooded through the network towards the destination. For every copy of the forward ant that reaches the destination, a backward ant is sent to the source, so that multiple paths are created at the route setup time.in simulation studies, PERA is found to have a performance that is comparable to AODV itself.

3.2 Ad hoc Networking with Swarm Intelligence (ANSI)

ANSI proposed by (Sundaram Rajagopalan) [5] is a hybrid routing protocol for hybrid ad hoc networks comprising of both proactive and reactive routing components. Pure MANET (mobile) nodes in ANSI use only reactive routing, and choose routes deterministically, while nodes belonging to more capable, infrastructured networks use a combination of both proactive and reactive routing and perform stochastic routing when multiple paths are available. The outline of the process of ANSI routing is as follows:

When a route to a destination D is required, but not known at a node S, S broadcasts a forward reactive ant to discover a route to D. When D receives the forward reactive ant from S, it source-routes a backward reactive ant to the source S. The backward reactive ant updates the routing table of all the nodes in the path from S to D, allowing for data transfer from S to D. When a route fails at an intermediate node X, X first checks if there are other routes which can be used to route the packet to D. If not, then ANSI buffers the packets which could not be routed and initiates a route discovery to find D by using a forward reactive ant to perform local route repair. Additionally, X sends a route error message back to the source node S. Nodes belonging to more capable; infrastructure networks maintain routes to their connected components proactively, by periodic routing updates using proactive ants. Nodes belonging to more capable, infrastructured networks also use stochastic routing when multiple paths are available. In addition, each node in the infrastructure collects information about which mobile nodes are connected to which infrastructure node. When a route at D is known at a MANET node S, ANSI deterministically chooses the best next hop to reach the destination. If S is part of a highly capable infrastructure, then S may choose to perform stochastic routing to the destination D, depending on the availability of multipath routes.

4. HYBRID BASED ALGORITHM

4.1 An Adaptive Nature-Inspired Algorithm for Routing in Mobile Ad Hoc Networks (AntHocNet)

AntHocNet [6] is a hybrid multi-path algorithm designed along the principles of ACO-based routing in ad-hoc networks. The algorithm has four major phases: reactive path setup, stochastic data routing, proactive path maintenance and exploration, and handling link failures. The reactive path setup phase has reactive forward ant-like agents launched by the source in order to find multiple paths to the destination. Similarly, backward ant-like agents return to the source to set up the paths. The path setup phase creates a number of good paths between the source and the destination, which can be used for subsequent routing. The forwarding of data packets takes place stochastically. When a node has multiple hops for the destination of the data, it will randomly select one of them with a probability calculated as a function of their quality. This procedure leads to automatic load balancing.

The next phase is of proactive path maintenance and exploration where some control packets are sent in the network to improve the quality of the paths. In order to guide the path of the forward ants better, the algorithm also makes use of hello packets, which are short messages broadcasted by the nodes after a constant interval of time. These messages are also used to detect broken links. An updated view of its immediate neighbors is maintained by AntHocNet in order to detect link failures in the soonest possible time. It broadcasts a link failure notification message when a broken link is identified. Including the above, other ACO-based routing schemes such as AntNet devised for ad-hoc networks, were not targeted towards energy conservation. AntHocNet emerges as a reactive, adaptive, multipath and proactive algorithm (hybrid).it is reactive because it has agents operating on-demand to set up routes to destinations. It is proactive because it has agents collecting information and these agents can discover new routes which serve as alternatives if a link fails. It is a multipath because it provides different routes to send information to the destination. It is adaptive because it adapts to traffic conditions and networks. However, AntHocNet is less efficient in terms of routing overhead.

4.2 Ant Routing Algorithm for Mobile Ad hoc networks (ARAMA)

Ant Routing Algorithm for Mobile Ad hoc networks (ARAMA) proposed by (Osama H. Hussein) has many advantages. ARAMA is a reliable and survivable routing algorithm. ARAMA has many of the on-demand and table routing advantages and at the same time avoids many of their drawbacks. In addition, ARAMA is self-built and self-configured optimization algorithm that matches the characteristics of MANETs. It depends on probability routing tables, thus providing a high number of redundant and already graded paths to the destination, which increases the survivability of the algorithm. When the best path fails (due to mobility, node battery depletion, etc.), the algorithm immediately uses the next available path. These paths increase the survivability of the algorithm. The updating of the tables is done on demand and is done mainly in the nodes, which leads to the best paths. This lowers the overhead comparable to both table driven algorithms and on demand algorithms. Both table driven and on demand algorithms updates needed and unneeded paths to the destination. In ARAMA, every path discovery packet (ant) generated at the source will result in number of receptions/transmissions proportional to the distance (number of hops) from the source to the destination. This number in the ARAMA case is less than the case of other algorithms, which depend on flooding. In these algorithms, every path discovery results in a number of reception/transmissions proportional to the number of nodes in the network.
ARAMA is a suitable routing algorithm for managing the energy usage in MANETs. ARAMA is a dynamic routing algorithm with controlled routing overheads. The routing packets are concentrated in the best paths regions. This allows better optimization with lower number of packets. In addition, old explored, unexplored, and bad region are visited with lower rate. This controlled overhead increases the scalability of ARAMA. In addition, ARAMA is self-built and self-configured optimization algorithm that matches the characteristics of MANETs. The algorithm can use different parameters in the optimization process. In this paper, the number of hops and the batteries' remaining energy has been applied as optimization parameters. The algorithm has the ability to continuously check for better paths in the network with controlled overheads, which make the algorithm more suitable for network resources management. ARAMA combines many advantages of the on-demand-based and table-based routing algorithms. The redundant paths increase the survivability of the algorithm.

5. CONCLUSION

Ad hoc networks consist of large sets of resource-constrained nodes. The design of effective, robust, and scalable routing protocols in these networks is a challenging task. On the other hand, the relatively novel domain of swarm intelligence offers algorithmic design principles, inspired by complex adaptive biological systems that well match the constraints and the challenges of ad hoc networks. Therefore, a number of routing protocols for ad hoc network have been developed in the last years based on SI principles, and, more specifically, taking inspiration from foraging behaviors of ant and bee colonies. In this paper, we have presented a rather extensive survey of these SI-based algorithms for routing in ad hoc networks. Note that although these routing algorithms show promising results, but should be implemented very carefully. Some parameters such as number of ants, evaporation rate, etc are influence in the simulation results. If these parameters select carefully, these algorithms are very well substituting for traditional routing protocols.

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CORPORATE DISCLOSURE AND ITS USEFULNESS: AN EMPIRICAL STUDY

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ABSTRACT

Corporate Disclosure is the communication and reporting of accounting and non-accounting information to various direct and indirect users for the purpose of their analysis and decision making. The annual report has long been used by an enterprise as primary vehicle of communication, not only with its investors but also with other stakeholders who, for variety of reasons, have a legitimate interest in the affairs and operations of the enterprise. Users while making decisions look to annual reports to provide information which will help them to assess performance, to evaluate management quality, to estimate future prospects and to assess financial strength. In recent times, some concern has been expressed about the general quality of annual reports which varies significantly among enterprises. This study was under taken to ascertain whether the present corporate disclosure practices through annual reports fulfill investors needs while forming sound economic decisions.

KEYWORDS

Annual Report, Corporate Disclosure, Direct Users, Economic Information, Indirect Users, Individual Investor.

INTRODUCTION

Modern economic development, to a considerable extent, depends on the availability of capital. In developing countries where the goal is to have rapid economic growth, capital is very essential to increase the output and supply of economic goods for the benefit of member of society. Achieving the goal of increasing the output of economic goods in a society requires the efficient allocation of scarce resources including capital. Effective allocation of capital resources among business firms may be accomplished with the help of centralized / authoritative planning of free enterprise systems. Corporate disclosure is vital to the functioning of a free enterprise system which depends on the actions and reactions of a very large number of investors, consumers and businessmen. The **'economic information'** should be available in such a form that these interested parties having diverse economic interests are capable of supporting their actions in a logical and rational manner. There are many aspects of the economic information needed for the purpose. The most important aspect is the reporting of economic success or failure of the economic units that control and use the substantial portion of the scarce capital resources of the country. Adequate reporting would reflect the economic efficiency of the use of resources and thereby help in directing the flow of capital into the most productive channels. Therefore, if an economic society is to function effectively, it is essential that this reporting should be an adequate measure of economic performance.

NATURE OF CORPORATE DISCLOSURE

Disclosure can be defined as a process through which a business enterprise communicates with the external parties. It is the communication of various details regarding the activities of the business which are to be disclosed either statutorily or otherwise, and it is to convey a true and fair view of the operating results and financial position to the users of financial reports. It is nothing but the communication of financial information of the activities of the undertaking to the interested parties for facilitating their economic decisions. It is the reporting of accounting information of an entity (individual, firm, company, government enterprise etc.) to a user or a group of users. It is a system of communication between the management and user groups of the financial statements in order to report the results of the business activities of a corporate enterprise and also to demonstrate the credibility, accountability and reliability of its working.

THE LEGAL BACKGROUND TO CORPORATE DISCLOSURE IN INDIA

The corporate disclosure practices are governed by the laws in the form of rules, doctrines, ordinances and statutes. What has to be reported, how the contents of annual reports should be presented, who is accountable for financial reporting are governed by laws in India. The Companies Act, and agencies such as ICAI, SEBI and others are in place to monitor the corporate reporting in our county. The legal environment as for corporate disclosure is concerned, there exists a sound and comprehensive laws in place.

Corporate disclosure in India is governed by six major factors, i.e., (a) companies act; (b) pronouncement of the Institute of Chartered Accountants of India; (c) SEBI; (d) users' informational needs; (d) managements' preference; and (f) the requirements of the Bureau of Public Enterprises (in case of the public sector companies only). These factors taken together constitute the corporate disclosure (financial reporting) environment in India.

NEED FOR INFORMATION

Information in annual reports may be used for a number of diverse purposes. In broad terms, however, annual reports – including financial statements and other supplementary information - should reflect the past and present and future activities of an organization so that users have a basis for making economic decisions.

The question of whether users have similar information needs lies at the heart of general-purpose external financial reporting and has important policy implications. Specifically, if the information needs of the various groups that use external financial statements are highly similar, than the concept of general-purpose external reporting is feasible. On the other hand, if the information needs are materially different, then accountants may wish to abandon the concept of general-purpose reporting and instead prepare a variety of single-purpose information sets with each set tailored to satisfy the needs of a particular user groups.

OBJECTIVES OF ANNUAL REPORT

The annual report is primarily a communications document which is shaped by an organization's management, taking into consideration regulatory requirements and generally accepted accounting principles for financial reporting. The primary objective of the annual report is to communicate in a readily understandable way timely, reliable and relevant information on the past, present and future activities of an organization as a basis for making economic decisions. The main purpose of preparing annual report is, simply put, to communicate relevant, reliable information to users to facilitate interpretation of an organization's activities for the purpose of economic decision making.

POTENTIAL USERS OF ANNUAL REPORTS

The list of potential users of annual reports is lengthy indeed. Although the annual report may be able to satisfy the information needs of many of these users, it is not practicable to attempt to satisfy all audiences. Accordingly, the research study, of necessity, focuses on the primary users of annual reports and their information needs. It is widely acknowledged that annual reports have three primary groups of users – investors (shareholders), creditors, and analysts /

advisers who act on their behalf. Government departments and regulatory agencies are not considered primary users because, under law, they can readily impose their requirements for information. Meeting the information needs of the primary users will, in many cases, satisfy the information needs of other user groups.

REVIEW OF LITERATURE
N. Das Gupta, in a study on 'Financial Reporting in India', has critically analysed the financial reporting practices prevalent in India. The author has also reviewed the financial reporting requirements in foreign countries, such as USA, Australia, UK, France, Japan, etc. He has suggested that the 'statement of highlights ', 'summarised balance sheet and profit and loss account', 'narrative statements', 'statement of sources and application of funds', 'statistical records', 'diagrams and charts', and inflation adjusted statements' should be included in the annual reports so as to make these reports more informative and to serve the increasing needs of their users.
Maria Cadiz Dyball's Critical accounting research has viewed corporate annual reports as the signed public records of organizations' dominant managerial groups and/or as reflective and constitutive of a wider set of social values.
CICA in its handbook - observes that the annual report is a multipurpose document which communicates information about an organization to variety of audiences. It reflects the messages that management needs to convey to shareholders and other interested parties, taking into consideration generally accepted accounting principles for financial reporting and relevant regulatory requirements.
Dr. Ibrahm Mohd. Atieq carried out a study on "Extent of disclosure, validity and usefulness of the information contained in financial statements" and have reached a conclusion that the balance sheet and income statements included in the annual reports do not truly and fairly present the state of affairs and the performance of the company due to legal requirements involving the presentation of these statements are not absolutely adhered thereto.
Susan A. Bartlett and Roy A. Chandler in their research work found that the corporate annual report is seen s an important device for communication between management and shareholders (and others).
Courtis, John K. examines four suggestions for improving the financial reporting package, especially within annual reports: the use of single summary statistics to report corporate risk and the quality of management, the use of a search strategy to guide users through annual report detail to directional information acquisition, and the provision of more quantified expectational information.

STATEMENT OF THE PROBLEM
People in every walk of life are affected by corporate reporting, the cornerstone on which our process of capital allocation is built. An effective allocation process is critical to a healthy economy that promotes productivity, encourages innovation, and provides an efficient and liquid market for buying and selling securities and obtaining and granting credit. Conversely, a flawed allocation process supports unproductive practices, denies cost-effective capital to companies that may offer innovative products and services that add value, and undermines the securities market.
Without adequate information, users of corporate reporting cannot judge properly the opportunities and risks of investment opportunities. To make informed decisions, they need a variety of information, including data about the economy, industries, companies, and securities. Complete information provided by the best sources enhances the probability that the best decision will be made.
The traditional accounting system and its major product – the publicly released financial reports – essentially reflect past transactions (sales, purchases, borrowings etc. ,) only, and recognize physical and financial assets (plant and equipment, securities), to the exclusion of most intangible assets (patents, brands, know-how, unique organizational designs). Such narrowly-based, backward-looking corporate reports are ill-suited to provide the information needed by investors, creditors and policy makers. The result is a Corporate Disclosure Gap, which reports incomplete or distorted information about a company's worth and is of diminished relevance to investors. Clearly there is need to change the type of information provided and the way it is presented.
However, the issue is how to make it more relevant to investors, to better reflect what management is doing for creating shareholder value.
The annual report is the most widely disseminated company document. It is a multi-purpose document intended for many stakeholders such as shareholders, the news media, brokerage firms and analysts, lenders, customers, suppliers, educators, and prospective and current employees.
Views differ as to the priority each of these stakeholders should and do assume in managements' targeting. How issuer differences influence the function of the annual report is also a controversial topic. Little research has been conducted on the annual report from the point of view of the issuer and user. Hence this study.

OBJECTIVES OF THE STUDY
1. To ascertain whether the present corporate disclosure practices through annual reports fulfill investors' needs while forming economic decisions.
2. To identify the short comings and suggest steps for further improvement in corporate disclosure

RESEARCH METHODOLOGY
To ascertain whether the present corporate disclosure practices through annual reports fulfill investors' needs while forming economic decisions, the study covered 200 individual investors who have invested in the stocks, bonds of one or more companies. The investor respondents were selected from Bangalore city on random basis. The study adopted survey - cum - descriptive method of gathering primary data. The tools and techniques used to elicit primary data were 'Questionnaires' and personal interview. To make presentation lucid, fair and adequate, the data gathered were presented by using statistical techniques like averages, percentages, 't' test, Mean, Standard Deviation and Coefficient Variation etc. The findings are based on the data supplied by the respondents. It is not a conclusive study in terms of scope.

DATA ANALYSIS AND INTERPRETATION
The data provided by individual investors who have been chosen for the study is analyzed in the following tables. The important parameters covered are investment objectives, sources of information for investor decisions, annual report as a source of information, significance of different parts of annual reports, general impression of annual reports and the statements to improve the annual report utility and the like.

TABLE 1: GENDER-BASED CLASSIFICATION OF RESPONDENTS

Segment	Number	Percent
Male	143	72
Female	57	28
Total	**200**	**100**

Source : Primary Data

Out of 200 individual investors, 72 percent represent male category investors and the remaining 28 percent female ones. As usual, male investors are predominantly play active role in investment in India.

TABLE 2: MARITAL STATUS OF RESPONDENTS

Marital Status	Number	Percent
Married	133	67
Unmarried	67	33
Total	**200**	**100**

Source : Primary Data

67 percent of respondent are married and the remaining 33 percent are unmarried.

TABLE 3: QUALIFICATION-BASED CLASSIFICATION OF RESPONDENTS

Educational Qualification	Number	Percent
Under graduates	21	10
Graduates	105	53
Post Graduates	74	37
Total	**200**	**100**

Source : Primary Data

53 percent of respondents are graduates; interestingly 37 percent are post graduates, while only 10 percent belong to under-graduate category.

TABLE 4: OCCUPATION-BASED CLASSIFICATION OF RESPONDENTS

Occupation	Number	Percent
Business	81	40
Employed	111	56
Retired	8	4
Total	**200**	**100**

Source : Primary Data

56 percent of individual investors are employed either in public or private sector, whereas 40 percent of the total sample investors are pursuing their own business, and the remaining 4 percent of respondents are retired from their service.

TABLE 5: TYPES OF SECURITIES POSSESSED

Types of Securities	Number	N	Percent
Equities	169	200	84.5
Preferred	5	200	2.5
Convertible	5	200	2.5
Corporate Bonds	82	200	41

Source : Primary Data

84.5 percent of respondents possessed 'equities' (N=200) 41 percent possessed 'corporate bonds' (N=200). 2.5 percent each possessed 'preferred' and convertible securities'. Thus individual investors inclination is towards 'equities.'

TABLE 6: REGULARITY OF TRADING IN SECURITIES

Response	Number	Percent
Yes	186	93
No	14	7
Total	**200**	**100**

Source : Primary Data

93 percent of individual investors regularly bought and sold securities while remaining seven percent are not.

TABLE 7: SHARE AND BOND HOLDINGS IN DIFFERENT COMPANIES

Number of Companies	Number	Percent
1 to 5	65	32
6 to 10	54	27
11 to 20	28	14
More than 20	53	27
Total	**200**	**100**

Source : Primary Data

32 percent of individual investors hold shares and bonds of 1 to 5 companies whereas 27 percent each of respondents hold the securities in companies ranging from 6 to 10 and more than 20. While remaining 14 of the total respondents hold the securities of 11 to 20 companies.

TABLE 8: TRANSACTIONS IN SECURITIES

Number of Transactions	Stocks		Bonds	
	N=200	Percent	N=200	Percent
0	1	0.5	119	59.5
1 to 5	25	12.5	47	23.5
6 to 10	45	22.5	25	12.5
11 to 15	74	37.0	09	4.5
16 to 20	42	21.0	-	-
21 and above	13	6.5	-	-

Source : Primary Data

37 percent of respondent transacted 11 to 15 times in the last year on stocks, 22.5 percent and 21 percent of respondents trading in stocks were 6 to 10 times and 16 to 20 times respectively. In respect of Bonds a large chunk of 59.5 percent of the respondents never transacted. Whereas 23.5 percent of respondents carried on transactions between 1 to 5 times. The remaining 12.5 and 4.5 percent of respondents have effected transaction between 6 to 10 and 11 to 15 times respectively.

TABLE 9: AMOUNT INVOLVED IN INVESTMENT OF STOCKS AND BONDS

Amount Invested (in Rupees)	**Number**	**Percent**
Less than 25,000	50	25
25,000 and above	150	75
Total	**200**	**100**

Source : Primary Data

75 percent of the respondent invested more than Rs.25,000, while remaining 25 percent of the sample respondent individual investors invested less than Rs.25,000 on securities.

TABLE 10: INVESTMENT OBJECTIVES

Sl.No	**Investment Objectives**	**Mean Rank**
a	A satisfactory and stable dividend yield	2.53
b	Maximum capital appreciation in the long run	1.89
c	Maximum gains from market price fluctuations in the short run.	2.99
d	Maximum return in the long run from a combination of dividends and capital appreciation	2.59

FRIEDMAN TEST

N	**Chi-Square**	**df**	**Asymp.Sig.**
200	75-243	3	.000

Source : Primary Data

The Friedman test shows that there is significant agreement among investors with regard to the relative importance of investment objectives: the most important being maximum capital appreciation in the long run, with mean rank of 1.89, followed by a satisfactory and stable dividend yield, with a mean rank of 2.53, and maximum return in the long run from a combination of dividends and capital appreciation, with a mean rank of 2.59, and finally maximum gains from market price fluctuations, with a mean rank of 2.99. It can be concluded from the above analysis that capital appreciation is considered more important than dividends or market price fluctuations as investment objectives while taking investment decisions.

TABLE 11: TYPES OF INFORMATION ON BUYING AND SELLING OF STOCKS AND BONDS 'T' TEST (H_O : μ=3)

Types of information	**N**	**Mean**	**Std. Deviation**	**t**	**df**	**Sig.(2-tailed)**
The outlook of the company	200	3.7650	1.0024	10.793	199	.000
Company's financial structure	200	4.5200	0.8445	25.454	199	.000
Past financial data of the company	200	2.9850	1.4052	-1.51	199	.880
Recent development in the company such as management changes product introductions, acquisitions etc.,	200	4.2900	0.9647	18.912	199	.000
Information on the major Business units with the company	200	3.5050	0.9243	7.727	199	.000
Company stock performance such as price history, P/E ration, etc.,	200	4.7850	0.6088	41.465	199	.000
Potential risks to which this Company is exposed	200	3.5050	1.3562	5.266	199	.000
Information on the company's products	200	2.9950	1.4987	-0.047	199	.962
Verbal advice on the company from professional such as brokers or investment advisors etc.,	200	2.7500	1.3846	-2.553	199	.011
Research reports and written Analysis on the company from a brokerage firm	200	4.0950	1.2665	12.227	199	.000

Source : Primary Data

The most significantly important variable is company's stock performance such as price history, P/E ratio, etc., with mean rating 4,7850 and t-value 41.465 (p=.000)

The second most significantly important variable is company's financial structure, with mean rating 4,520.

The third most significantly important variable is recent developments in the company, such as management changes, product introductions, acquisitions etc., with mean rating 4.2900.

The less important variable is verbal advice on the company from professionals such as brokers or investment advisors, with mean rating 2.7500.

The second least important variable is past financial data of the company, with mean rating 2.9850

TABLE 12: SOURCES OF INFORMATION FOR INVESTMENT DECISIONS

Source of Information	***Percent (%)***	***Rank***
Company Annual Reports	84	1
Financial News Papers (Economic Times, Financial Express etc.)	72	2
Business Publications (Business Today, Business World, Capital Market etc.)	69	3
Broker	68	4
Personal contacts	64	5
Company quarterly reports	46	7
Company prospectus / IPO Document	59	6
Investment Information services	32	8
Investment advisor	30	9
Brokerage firm analysis / reports	28	10
Trade association / publications (Industry studies etc.,)	19	11
Television / Radio	13	12
Company press releases	11	13
Investment letters	9	14
Share holders meeting	9	15

Source: Primary Data

The important sources of information for individual investor respondents are company annual reports (84%), financial newspapers (72%) business publications (69%), broker (68%) and the like. The least important source of information are shareholders meeting (8%), investment letters (9%), company press releases (11%) and the like.

TABLE 13: SIGNIFICANCE OF SOURCES FOR INVESTMENT DIVISIONS

	Percent (%)	Rank
My Investment advisor	85	1
My Broker	74	2
Personal contacts	71	3
Company annual report	65	4
Brokerage firm analysis	64	5
Company prospectus	63	6
Investment information services	54	7
General news papers	53	8
Business publications	50	9
Company quarterly reports	46	10
Trade associations / publications	42	11
Company press releases	36	12
Share holders meetings	32	13
Investment letters	16	14
Television radio	12	15

Source : Primary Data

85 percent of the sample respondents perceived their 'investment advisors' were the important source for investment decisions. 74 percent considered as 'brokers'. The personal contacts received the third place. The television, radio as source for decision-making on investment gained the last place with 12 percent. To conclude, the "most used" does not correlate with "most useful" when a source is inexpensive and easy to get, it is widely used, it may not be very useful.

TABLE 14: RECEIPT OF ANNUAL REPORTS

Response	Number	Percent
Yes	183	92
No	17	8
Total	**200**	**100**

Source : Primary Data

92 percent of respondents said they had received annual reports either regularly or at times, while the remaining eight percent expressed that they not all ever received annual reports from the company.

TABLE 15: READING THE ANNUAL REPORTS

Sl. No	Action	Response	
		Number	Percentage
1	Throw it away without reading it	5	2.73
2	Save it without reading it	6	3.30
3	Glance through it, stopping to read items that attract your attention	27	14.75
4	Seek out specific items of information	85	46.44
5	Read the entire report	60	32.78
	TOTAL	**183**	**100**

Source :Primary Data

Seeking out specific items of information from the annual report as soon as they received it was the prime importance for 46.44 percent of the respondents, followed by reading the entire report 32.78 percent and remaining aspects assumed less significance.

TABLE 16 : REVIEWING OF ANNUAL REPORTS

Response	Number	Percent
Yes	170	85
No	30	15
Total	200	100

Source : Primary Data

70 percent of respondents reviewed the annual reports with other persons and 30 percent of the remaining are not.

TABLE 17 : PERSONS CONSULTED FOR REVIEW OF ANNUAL REPORTS N=200

Sl. No	Source	Response	
		Number	Percentage
1	Stock Brokers	85	42.5
2	Financial Consultants	81	40.5
3	Friends / Relatives	79	39.5
4	Chartered Accountant	39	19.5
5	Bank Advisor	13	6.5
6	Lawyer	01	0.5

Source : Primary Data

By and large, some of the individual investors lack the knowledge in understanding the annual reports thoroughly; as a result, they consult other persons like Brokers, Chartered and Financial accountants and so on. In the present study 42.5 of the sample respondents have been consulting stock brokers, while 40.5 percent availed the services of financial consultants 39.5 percent of respondents made use of the services of Chartered Accountants.

TABLE 18: SIGNIFICANCE OF DIFFERENT PARTS OF ANNUAL REPORTS 'T' TEST ($H_O : \mu = 3$)

	N	*Mean*	*Std Deviation*	*t*	*df*	*Sig (2-Tailed)*
Chairman's Speech	200	3.6550	1.4199	6.524	199	.000
Director's Report	200	4.6050	0.9128	24.867	199	.000
Management's review, that is the statement of Corporate goals and objectives	200	4.2550	1.0224	17.360	199	.000
Commentary on the company that includes non-financial information on the company's products and lines of business	200	2.9000	0.9133	-1.548	199	.123
Financial Highlights	200	4.2650	0.9588	18.658	199	.000
Income Statement, that is data on income, expenses and profit	200	4.8400	0.5439	47.838	199	.000
Balance Sheet, that statement of Assets, Liabilities and share holders equity	200	4.7800	0.5773	43.605	199	.000
Cash flow statements, that is an accounting of sources and use of funds	200	4.8000	0.6261	40.660	199	.000
Historical Operating results, for example a 10 year financial summary	200	3.4600	0.9660	6.735	199	.000
Foot notes to financial statement	200	3.2950	0.8785	4.749	199	.000
Audit Report	200	3.8350	1.0408	11.346	199	.00
Detailed Financial information on each of the company's line of business	200	3.7750	1.0196	10.750	199	.000
List of Managing personalities and executives	200	4.1200	1.2383	12.792	199	.000

Source : Primary Data

The Most significant parts of the annual report are income statement, cash flow statement, balance sheet, etc., for investment decisions by the respondents.

TABLE 19: READING OF QUARTERLY REPORTS

Response	Number	Percent
Yes	135	67.5
No	65	32.5
Total	**200**	**100**

Source : Primary Data

67.5 percent of the respondents read quarterly reports on one or other occasions. The remaining 32.5 percent are not.

TABLE 20: SIGNIFICANCE OF QUARTERLY REPORTS

Opinion	Number	Percent
Very Significant	93	46.5
Significant	97	48.5
Not at all Significant	10	5
Total	**200**	**100**

Source : Primary Data

48.5 percent of the sample respondents indicated that quarterly reports are 'significant' followed by 46.5 percent shown as 'very significant' and only remaining 5 percent of the respondents categorized as 'not at all significant'. Thus quarterly report is significant, because it shows the movement of financial performance by the company and gives a clear and probable picture of the state of affairs of the company which are considered as significant to respondents for their investment decision making

TABLE 21: INVESTORS PERCEPTION OF ANNUAL REPORTS ($H_O : \mu = 3$)

S. No	*Statement*	*N*	*Mean*	*Std Deviation*	*t*	*df*	*Sig (2-Tailed)*
A	As a share holder, annual report make me feel comfortable about my investments	200	3.8850	1.6046	7.800	199	.000
B	The financial data in annual reports are too difficult for me to understand	200	3.3950	1.6068	3.477	199	.001
C	Annual reports are useful to me in making a decision to buy a company's stock	200	4.0550	1.3970	10.680	199	.000
D	Annual reports are the most useful published source of information on a company	200	4.3550	1.2795	14.976	199	.000
E	Annual reports are written to project the most favorable impression of company management	200	3.3850	1.5841	3.437	199	.001
F	Companies should publish different versions of annual report for different stake holders, for eg. Individual shareholders, employees and Professional analysis	200	2.8200	1.8011	-1.413	199	.159
G	An expensive looking annual report is a waste of share holders money	200	3.5000	1.5819	4.470	199	.000
H	The appearance of a company's annual report for eg. Colour, graphics, and the quality of paper, contributes to my impression of a company	200	2.2950	1.7096	-5.832	199	.000
I	I have to read the foot motes to the financial statements to get an accurate picture of a company's performance	200	4.1350	1.1460	14.006	199	.000
J	Annual reports are too detailed for my needs	200	1.8750	1.3297	-11.965	199	.000

Source : Primary Data

The most significantly important statement is that "annual reports are the most useful published source of information on a company", followed by the statement on "I have read footnotes to the financial statements to get an accurate picture of a company's performance" and so on and so forth.

The significantly less important statements according to respondents are that "annual reports are too detailed to their needs", followed by "the appearance of a company's annual report contributes to their impression of a company".

TABLE 22: SUGGESTIONS FOR IMPROVING ANNUAL REPORTS 'T' TEST (H0 : μ =3)

S. No	*Statement*	*N*	*Mean*	*Std Deviation*	*t*	*df*	*Sig (2-Tailed)*
a	Management plans to the future were clearly defined	200	4.5200	0.9872	21.776	199	.000
B	They provide financial projections or forecasts for the company	200	4.2600	0.9628	18.507	199	.000
c	They present more information in the form of graphs	200	3.4500	1.7065	3.729	199	.000
D	They used understandable language without technical jargons	200	3.9150	1.0693	12.101	199	.000
E	They provided a brief abstract sumarising key facts and figures to be found in the annual report	200	3.3450	1.6399	2.975	199	.003
f	They provided information on the performance of the company's stock	200	4.0000	1.3525	10.457	199	.000
g	The Management discussions was frank about reporting poor company performance	200	3.4450	1.3661	4.607	199	.000
H	They Showed key financial ratios such as debt to equity return on sales and profit margin	200	3.5450	1.8012	4.279	199	.000
i	They provided price level adjusted accounts and current value accounts	200	3.4800	1.5945	4.257	199	.000
j	The presented Human resource statements and social accounting	200	2.6700	0.9879	-4.724	199	.000
k	They provided environmental accounting and social accounting	200	3.1150	1.4148	1.149	199	.252
l	They were provided on video cassettes	200	1.9800	1.1902	-12.119	199	.000
m	They were shorter with less redundancy	200	2.2850	1.5672	-6.452	199	.000
N	Increased disclosure of existing information (Specify)	200	3.1850	1.5980	1.637	199	.103

Source : Primary Data

"Management plans to the future need to be clearly defined in the annual report" is the most significant suggestion put forth by individual investors and the next most important suggestion made by them and that the annual report must provide financial projections or forecasts for the company.

TABLE 23: ASSESSMENT OF FINANCIAL ASPECTS FROM ANNUAL REPORTS

Sl. No	Financial Aspects	Mean Rank
a	Profitability	1.21
b	Potential Bankruptcy	4.43
c	Capacity to survive	3.09
d	Managerial efficiency	2.67
e	Investment policy	3.60

FRIEDMAN TEST

N	Chi-Square	df	Asymp. Sig
200	459.948	4	.000

Source : Primary Data

The Friedman test that there is significant agreement among investors with regard to realistic assessment of financial aspects in the annual report. The most important financial aspects that are realistically assessed are profitability and managerial efficiency.

TABLE 24: IMPROVED WAYS OF FURNISHING FINANCIAL INFORMATION

Response	Number	Percent
Yes	63	32
No	137	68
Total	200	100

Source : Primary Data

32 percent of the respondents suggested that there is a scope for improved way of furnishing financial information in the annual reports of the companies, while 68 percent denied the same.

TABLE 25: SATISFACTION LEVEL OF CURRENT DISCLOSURE PRACTICES

Response	Number	Percent
Yes	158	79
No	42	21
Total	200	100

Source : Primary Data

79 percent of the respondents are satisfied with the current disclosure practices, while 21 percent of the remaining respondents are not.

FINDINGS ON ANNUAL REPORT AND ITS USEFULNESS TO INDIVIDUAL INVESTORS' INVESTMENT DECISION MAKING

a. 56 percent of Individual investors are employed either in public or private sector and 32 percent of Individual investors hold shares and bonds of 1 to 5 companies.
b. The most important investment objective of Individual investors is maximum capital appreciation in the long run.
c. The most important type of information on buying and selling of stocks and bonds is stock performance such as price history, price earning ration.
d. The annual reports of the company are the 'most used sources of information' for investment decision making.
e. 92 percent of the individual investors had received annual reports either regularly or at times. 41.4 percent of the investors have sought "specific items" of information from the annual report as soon as they receive it.
f. 48.5 percent of the individual investors indicated that 'quarterly reports' from the company are 'significant' for investment decision making.
g. A large number of individual investors have perceived "annual report" as the most useful published source of information about a company and significant parts thereon being "income statement, cash flow statement and balance sheet".
h. Even though profitability and managerial efficiency of the company are considered as important aspects of annual report, it is widely suggested that "The annual report must contain management plans need to be clearly defined in the annual report".

SUGGESTIONS

For changing demand for corporate disclosure, the annual report must be prepared within five broad categories of information outlined below:

I	**Financial and Non-Financial Data**
	a. Financial statements are related disclosure b. High-level operating data and performance measurement uses to manage the business.
II	**Management Analysis of the Financial an Non-Financial Data**
	c. Reasons for changes in the financial, operating and performance related data.
III	**Forward Looking Information**
	d. Opportunities and risks, including those resulting from key trends e. Management's plans, including critical success factors f. Comparison of actual business performance to previously disclosed opportunities, risks, and management plans
IV	**Information about Management and Share Holders**
	g. Directors, Management, composition, major shareholders, and transactions and relationship among related parties
V	**Background about the company**
	h. Broad objectives and strategies i. Scope and description of business and properties j. Impact of industry structure on the company

CONCLUSION

Even though there are many sources available for investment decision making, the Annual Report is still the most important source used by more investors than any other source. The significance attached to different parts of the annual report varies from investor to investor. More number of investors are satisfied with the current disclosure practice in company annual reports, but they still feel there is a lot of scope for further improvement in disclosure practices by corporate sector.

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DETERMINANTS OF FINANCIAL STRUCTURE OF INDIAN CEMENT INDUSTRY: A NEW METHODOLOGICAL APPROACH

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ABSTRACT

The financial structure can be made initially from the point of view of the time for which funds are needed. It includes both the sources of finance, i.e., long-term and short-term. Thus financial structure refers to the makeup of permanent capital of firm. Over the past, many researchers have tried to establish the factors which influence a firm's financial structure. The association between a firm's financial structure and its size, profitability similar other operating characteristics have gained considerable importance. Some of them have presented affirmative evidences in respect of a particular factor or a group of factors as determinant of corporate financial structure; others have presented dissenting evidences in respect of the same factor or factors to be a clear determinant of financial structure. Therefore in this study an attempt has been made to study the corporate financial structure relationship with reference to size, profitability, operating leverage, external financing and income gearing. Attempts are also made here to offer an econometric interpretation to the factors which determine the financial structure of selected companies of Indian cement industry.

KEYWORDS
Financial Structure, Sources of Finance, Size, Profitability, Operating Leverage and Income Gearing.

INTRODUCTION
Accounting regarding the financial structure of a business consists of three elements: assets, liabilities and capital. The financial structure provides an insight in to the various types of sources tapped to finance, the total assets employed in a business enterprise. That part of financial structure which represents long-term sources is known as capital structure. Since the balance sheet is a detailed form of the fundamental, or structure equation, it is set for the financial structure of an enterprise. It states the nature and amount of each of the various assets, liabilities and property interest of the owner or owners. Stating the nature of the assets, liabilities and capital is not as difficult as stating their amounts. The financial structure can be made initially from the point of view of the time for which funds are needed. It includes both the sources of finance, i.e., long-term and short-term. Thus financial structure refers to the makeup of permanent capital of firm. Over the past, many researchers have tried to establish the factors which influence a firm's financial structure. The association between a firm's financial structure and its size, profitability similar other operating characteristics have gained considerable importance. Some of them have presented affirmative evidences in respect of a particular factor or a group of factors as determinant of corporate financial structure; others have presented dissenting evidences in respect of the same factor or factors to be a clear determinant of financial structure. Scott[1] and Scott et al[2] presented empirical evidences claiming that industrial class has got influence on the firm's financial structure. Remmers, et al[3] in their study, however, presented dissenting evidence arguing that neither size nor industry class is a clear determinant of the firm's financial structure. Therefore in this study an attempt has been made to study the corporate financial structure relationship with reference to size, profitability, operating leverage, external financing and income gearing. Attempts are also made here to offer an econometric interpretation to the factors which determine the financial structure of selected companies of Indian cement industry.

OBJECTIVES OF THE STUDY
The primary purpose of the present study is to obtain a true insight into the financial structure determinants of the selected cement companies in India.

HYPOTHESES
The following hypothesis are framed and tested for the study.
(i) Financial leverage is independent of industry class.
(ii) Financial leverage is independent of industry size.
(iii) Financial leverage and profitability are independent of each other.
(iv) Financial leverage and operating leverage have got no association between them.
(v) Financial leverage and external financing are independent of each other.
(vi) Financial leverage has got no association with income gearing.
The above hypotheses have been taken for the study and they have been tested with the help of chi-square test and 'F' test.

SELECTION OF SAMPLE
Keeping in view the scope of the study, it is decided to include all the companies under cement industry working before or from the year 1995-96 to 2009-10. But, owing to several constraints such as non-availability of financial statements or non-working of a company in a particular year, merged companies, it was compelled to restrict the number of sample companies to eight. The Capitaline and CMIE database publish key financial data of Indian corporate sector systematically. Hence, Capitaline and CMIE databases proved to be complimentary to finalize the sample for the study. The exhaustive list of cement industry in India from Capitaline was cross checked with CMIE database to sort out companies to fit in as the sample for the study. The comprehensive list of companies prepared from the database was modified by sorting out the firms using the following criteria; Which were not in operation for a year during the period of study; Which were in operation but non-availability of data for the whole study period; Which were merged with another company during the period of study; Which were not listed in Bombay Stock Exchange; and which had above 20,00,000 MT installed capacity. There were 42 large cement companies and 94 mini cement companies operated in India. The list of large cement companies selected included in the present study along with year of incorporation and their market share is presented in Table 1. It is evident from Table 1 that sample companies represent 39.13 percentage of market share in the Indian cement industry.

DETERMINANTS OF FINANCIAL STRUCTURE-ECONOMETRIC ANALYSIS

In this part an attempt is made to measure the degree of relationship that exists between a firm's financial structure and the different factors which have bearing on the financial structure. The objective of this discussion is to examine the determinants of financial structure in the selected Indian cement companies during the study period. Based on earlier empirical studies, the specific factors are chosen for analyzing determinants of financial structure in Indian cement industry. The factors considered in the model and their measurement is described in methodology. The model to be estimated using from specific cross section data proposed is as follows:

$$FL = b_0 + b_1 PR_{ij} + b_2 OL_{ij} + b_3 S_{ij} + b_4 PROFIT_{ij} + b_5 EF_{ij} + b_6 IG_{ij}.$$

Where,

PR_{ij}	-	Payout Ratio - for firm (i) in year (j)
OL_{ij}	-	Operating Leverage - for firm (i) in year (j)
S_{ij}	-	Size - for firm (i) in year (j)
$Profit_{ij}$	-	Profitability - for firm (i) in year (j)
EF_{ij}	-	External Financing - for firm (i) in year (j)
IG_{ij}	-	Income Gearing - for firm (i) in year (j)

The results of the regression analysis are presented in the Table 76 to Table 83.

FINANCIAL LEVERAGE AND INDUSTRY

The first hypothesis relates to the possible association between companies and financial structure. Firms in the same industry should experience similar amount of business risk because they produce similar products, incur similar set of rules, regulations, guidelines and environment. Since business risk has got relationship with the types of product, and the product with types of industries, there is reason to believe that a firm's financial structure is influenced by its industrial classification. The same logic should also hold good for inter-industry comparison. Since industries deal with different products, operate under different environment, rely on different technology, have different cost structure, their business risks should essentially be different. As such, their financial structures should also be different. To test whether the financial leverage of selected Indian cement companies significantly differs, Analysis of Variance (ANOVA) has been applied and result of which is displayed in Table 2. It is evident from Table 2 that F ratio (8.57) is higher than the table value of F (2.10) at 5 per cent level of significance. This indicates that the means of the financial leverages of the selected companies of Indian cement industry differ significantly. Thus the null hypothesis that financial leverage is independent of industrial class is rejected leading to the conclusion that financial leverage depends upon industrial class.

FINANCIAL LEVERAGE AND SIZE

Large firms are generally more diversified, enjoy easier access to capital markets, receive higher credit ratings and pay lower rates of interest on borrowed capital. Moreover as the level of activity increases with size, more debt is expected in the financial structure of large corporations. Hence, size of the firm should be positively related to its financial structure. The same logic should also hold good for inter-industry variations. In order to test the validity of the second null hypothesis that financial leverage and industry size are independent, correlation co-efficient between financial leverage and industry size have been calculated for all the selected cement companies during the study period. To test the significance of correlation co-efficient, t values have also been computed. From the Table 3, it is observed that the results found in respect of the hypothesis concerning financial leverage and industry size. It is apparent from this table that negative correlation between financial leverage and industry size in Associated Cement Companies Limited, Birla Corporation Limited, Grasim Industries Limited and Whole Industry. Further, the table reveals that positive correlation between financial leverage and industry size in Chettinad Cement Corporation Limited, Dalmia Cement Limited, India Cements Limited, Madras Cements Limited and Shree Cement Limited. The relations are statistically significant at 5 per cent level in case of all the selected companies and whole industry during the study period and the null hypothesis is rejected.

FINANCIAL LEVERAGE AND PROFITABILITY

The third hypothesis is pertaining to the relationship between a firm's profitability and its financial structure. A firm's ability to generate internal surpluses for business expansion depends upon its earning capacity. A more profitable firm may be considered to be in a better position to generate internal funds by way of reserves and surpluses. As reserves and surpluses will grow, the firm's dependence on external financing will decline, and consequently its dependence on dept capital too. This is because, a firm going for external funds will certainly prefer low-cost source and debt will be the first choice. Hence, a negative relationship should exist between a firm's financial leverage and its profitability. This phenomenon should also be true for industry level comparison, for profitability differs from industry to industry. In order to test the validity for the null hypothesis that financial leverage and profitability are independent of each other, correlation co-efficient between financial leverage and profitability have been calculated along with t value for all the selected companies and whole industry and empirical results are presented in Table 3. It is evident from the Table 3 that the existence of negative correlation between financial leverage and profitability in all the selected companies except Dalmia Cement Limited and Shree Cement Limited and the relation are statistically significant at 5 per cent level in case of all the selected companies and whole industry during the study period. The null hypothesis is rejected.

FINANCIAL LEVERAGE AND OPERATING LEVERAGE

The fourth hypothesis relates to the suspected influence of operating leverage on financial structure. Ferri and Jones[4] define operating leverage as "the use of fixed costs in the firm's production scheme but is generally associated with the employment of fixed assets". According to them, the use of fixed assets can magnify the variability of the firm's future income and hence, "operating leverage should be negatively related to the firm's financial structure". Determining the validity of this hypothesis in case of Indian cement industry was thus the purpose of the fourth test. In order to test the validity of the null hypothesis that financial leverage and operating leverage have got no association between them, correlation co-efficient between financial leverages and operating leverages have been calculated along with t value for all the selected companies and whole industry and empirical results are presented in Table 3. In case of Indian cement industry, however a definite conclusion could not be reached as far as the relationship between operating leverage and financial leverage is concerned. Empirical evidences from Table 3 show that there exists negative correlation between operating leverage and financial leverage in case of Associated Cement Companies Limited, Dalmia Cement Limited, India Cements Limited and Shree Cement Limited and the relationships are statistically significant at 5 per cent level. The table also reveals that there exists positive correlation between financial leverage and operating leverage in case of Birla Corporation Limited, Chettinad Cement Corporation Limited, Grasim Industries Limited and Madras Cements Limited. Thus, the null hypothesis that operating leverage and financial leverage are independent of each other could not be fully rejected in the sense there exists both negative as well as positive correlation between them in different companies in the same period.

FINANCIAL LEVERAGE AND EXTERNAL FINANCING

The fifth hypothesis relates to the association between the external financing and financial structure. Generally firms prepare internal to external financing and they will prefer the safest security first, i.e., they will choose debt before equity financing, in case they seek external financing to finance real investments with a positive net present value. This implies that when external financing will increase, the proportion of debt in the total financing will also increase. Hence there should exist, a positive relationship between external financing and firm's financial leverage. This logic should also be valid for inter-industry comparison. Empirical evidence form Table 3 shows that there exists a strong and statistically significant positive relationship between financial leverage and external financing in case of Associated Cement Companies Limited, Chettinad Cement Corporation Limited, Dalmia Cement Limited, India Cements Limited, Madras Cements Limited and Shree Cement Limited. The Table 3 further shows that the existence of negative significant correlation between financial leverage and external financing in case of Birla Corporation Limited, Grasim Industries Limited and Whole Industry. Thus the null hypothesis that financial leverage and external financing are independent of each other could not be fully rejected in the sense there exists both positive as well as negative correlation between them in different companies in the same period.

FINANCIAL LEVERAGE AND INCOME GEARING

The sixth and the last hypothesis relates to the possible association between income gearing and a firm's financial leverage. Income gearing is considered to be a measure of corporate vulnerability to fluctuations in general economic conditions. Since firms operate under different economic conditions, and economic conditions have bearing on capital as well as debt markets, there should exist relationship between income gearing and a firm's financial leverage. Empirical evidence from Table 3 shows that there exists a statistically significant positive relationship between income gearing and corporate financial structure in case of Birla Corporation Limited, Chettinad Cement Corporation Limited, Grasim Industries Limited, India Cements Limited, Madras Cements Limited and Whole Industry. In case of Birla Corporation Limited, India Cements Limited and Whole Industry, the relations though positive are found to be statistically insignificant. Thus, while rejecting the null hypothesis that there is no association between income gearing and financial leverage, it may conclude that income gearing and financial leverage are positively correlated except in Associated Cement Companies Limited, Dalmia Cement Limited and Shree Cement Limited.

DETERMINANTS OF FINANCIAL STRUCTURE-ECONOMETRIC ANALYSIS

In this part an attempt is made to measure the degree of relationship that exists between a firm's financial structure and the different factors which have bearing on the financial structure. The objective of this discussion is to examine the determinants of financial structure in the selected Indian cement companies during the study period. Based on earlier empirical studies, the specific factors are chosen for analyzing determinants of financial structure in Indian cement industry. The factors considered in the model and their measurement is described in methodology. The model to be estimated using from specific cross section data proposed is as follows:

$$FL = b_0 + b_1 PR_{ij} + b_2 OL_{ij} + b_3 S_{ij} + b_4 PROFIT_{ij} + b_5 EF_{ij} + b_6 IG_{ij}.$$

Where,

PR_{ij}	-	Payout Ratio - for firm (i) in year (j)
OL_{ij}	-	Operating Leverage - for firm (i) in year (j)
S_{ij}	-	Size - for firm (i) in year (j)
$Profit_{ij}$	-	Profitability - for firm (i) in year (j)
EF_{ij}	-	External Financing - for firm (i) in year (j)
IG_{ij}	-	Income Gearing - for firm (i) in year (j)

The results of the regression analysis are presented in the Table 76 to Table 83.

WHOLE INDUSTRY

Analysis of the regression results of Indian cement industry (Table 4) reveals that the adjusted R^2 is 0.89 and the F ratio is significant, which implies that the independent variables collectively explain 89 percentage of the total variations in the dependent variable. The analysis shows that variables like payout ratio, operating leverage, size, profitability and income gearing which are found to be statistically significant in explaining financial structure of Indian cement industry. However the external financing is found to be statistically insignificant in explaining financial structure of Indian cement industry. As far as the importance of individual variable are concerned, operating leverage followed by income gearing, external financing, size, payout ratio and profitability are found to be the most important factors explaining the variations in the financial structure of Indian cement industry during the study period. The results thus indicate that the independent variables explaining the dependent variable well during the study period.

ASSOCIATED CEMENT COMPANIES LIMITED (ACCL)

Analysis of regression results of the factors determining financial structure of Associated Cement Companies Limited are presented in Table 5. It is evident from the table that the independent variables explain about 99 per cent variation in the dependent variable. The analysis shows that factors like payout ratio, operating leverage, size, profitability and income gearing are found to be statistically significant in explaining the financial structure of Associated Cement Companies Limited. However, external financing is found to be statistically insignificant. It is evident from the results that income gearing is the stronger determinant of financial structure followed by external financing, payout ratio, profitability, operating leverage and size. The overall explanatory power of regression appears to be good. This may be inferred from the co-efficients of determinants (R^2). It is 99 per cent and the adjusted explanation is 98 per cent.

BIRLA CORPORATION LIMITED (BCL)

The results of analysis of the regression of Birla Corporation Limited are presented in Table 6. Analysis of the regression results shows that the adjusted R^2 is 0.95 and the F ratio is significant, which implies that the independent variables collectively explain 95 percentage of the total variation in the dependent variable. The analysis shows that payout ratio, operating leverage, size, profitability, external financing and income gearing are found to be statistically significant in explaining financial structure of Birla Corporation Limited. It is also found that operating leverage has been the most important factor influencing the financial leverage of Birla Corporation Limited followed by income gearing, payout ratio, external financing, profitability and size. The results thus indicate that the independent variables explain dependent variable well during the study period.

CHETTINAD CEMENT CORPORATION LIMITED (CCCL)

The results of regression analysis of the factor determining the financial structure of Chettinad Cement Corporation Limited are presented in Table 7. It is found from the Table 7 that the independent variables collectively explain about 72 per cent of the total variations in the dependent variable in Chettinad Cement Corporation Limited during the study period. The analysis shows that factors like payout ratio, operating leverage, size, profitability, external financing, income gearing are found to be statistically significant in explaining financial structure of Chettinad Cement Corporation Limited. As far as individual variables are concerned, it is found that size, followed by operating leverage, external financing, profitability, income gearing and payout ratio are the most significant variables influencing the financial structure of Chettinad Cement Corporation Limited during the study period. The results also indicate that the independent variables explain the dependent variable well in Chettinad Cement Corporation Limited during the study period.

DALMIA CEMENT LIMITED (DCL)

The results of regression analysis of the factor determining the financial structure of Dalmia Cement Limited are presented in Table 8. It is found from the Table 8 that the independent variables collectively explain about 79 per cent of the total variations in the dependent variable in Dalmia Cement Limited during the study period. The analysis shows that factors like payout ratio, operating leverage, size, profitability, external financing and income gearing are found to be statistically significant in explaining financial structure of Dalmia Cement Limited. As far as individual variables are concerned, it is found that size, followed by profitability, external financing, income gearing, payout ratio and operating leverage are the most significant variables influencing the financial structure of Dalmia Cement Limited during the study period. The results also indicate that the independent variables explain the dependent variable well in Dalmia Cement Limited during the study period.

GRASIM INDUSTRIES LIMITED (GIL)

The results of regression analysis of the factor determining the financial structure of Grasim Industries Limited are presented in Table 9. It is found from the Table 9 that the independent variables collectively explain about 97 per cent of the total variations in the dependent variable in Grasim Industries Limited during the study period. The analysis shows that factors like payout ratio, operating leverage, size, profitability, external financing and income gearing ratio are found to be statistically significant in explaining financial structure of Grasim Industries Limited As far as individual variables are concerned, it is found that income gearing, followed by payout ratio, operating leverage, external financing, profitability and size are the most significant variables influencing the financial structure of Grasim Industries Limited during the study period.

INDIA CEMENTS LIMITED (ICL)

The results of regression analysis of the factor determining the financial structure of India Cements Limited are presented in Table 10. It is found from the Table 10 that the independent variables collectively explain about 69 per cent of the total variations in the dependent variable in India Cements Limited during the study period. The analysis shows that factors like payout ratio, operating leverage, profitability, external financing and income gearing are found to be statistically significant in explaining financial structure of India Cements Limited. The other factor size are found to be statistically insignificant. As far as individual variables are concerned, it is found that payout ratio, followed by income gearing, size, external financing, profitability and operating leverage are the most significant variables influencing the financial structure of India Cements Limited during the study period.

MADRAS CEMENTS LIMITED (MCL)

The results of regression analysis of the factor determining the financial structure of Madras Cements Limited are presented in Table 11. It is found from the Table 11 that the independent variables collectively explain about 74 per cent of the total variations in the dependent variable in Madras Cements Limited during the study period. The analysis shows that factors like payout ratio, operating leverage, size, profitability, income gearing are found to be statistically significant in explaining financial structure of Madras Cements Limited. The other factor external financing are found to be statistically insignificant. As far as individual variables are concerned, it is found that payout ratio, followed by operating leverage, income gearing, size, external financing and profitability are the most significant variables influencing the financial structure of Madras Cements Limited during the study period. The results also indicate that the independent variables explain the dependent variable well in Madras Cements Limited during the study period.

SHREE CEMENT LIMITED (SCL)

The results of regression analysis of the factor determining the financial structure of Shree Cement Limited are presented in Table 12. It is found from the Table 12 that the independent variables collectively explain about 69 per cent of the total variations in the dependent variable in Shree Cement Limited during the study period. The analysis shows that factors like payout ratio, operating leverage, size, profitability, external financing and income gearing are found to be statistically significant in explaining financial structure of Madras Cements Limited. As far as individual variables are concerned, it is found that size, profitability, external financing, operating leverage, income gearing and payout ratio are the most significant variables influencing the financial structure of Shree Cement Limited during the study period. The results also indicate that the independent variables explain the dependent variable well in Shree Cement Limited during the study period.

CONCLUSION

The analysis of determinants of financial structure of Indian cement industry reveals that the selected variables collectively explain 81 percentage of the total variation in Indian cement industry, 98 per cent in Associated Cement Companies Limited, 95 per cent in Birla Corporation Limited, 72 per cent in Chettinad Cement Corporation Limited, 79 per cent in Dalmia Cement Limited, 97 per cent in Grasim Industries Limited, 69 per cent in India Cements Limited, 74 per cent in Madras Cements Limited and 69 per cent in Shree Cement Limited during the study period. As far as the importance of individual variables are concerned, operating leverage followed by income gearing, external financing, size, payout ratio and profitability are found to be the most important factors explaining the variations in the financial structure of Indian cement industry during the study period. The results thus indicate that the independent variables explain the dependent variable well during the study period. The analysis of variance reveals that the means of financial leverage differ significantly in the case of Indian cement industry and all the selected companies.

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APPENDIX

TABLE 1: LIST OF SAMPLE COMPANIES INCLUDED IN THE PRESENT STUDY

Sl. No.	Companies	Year of Incorporation	Market Share (%)
1	Associated Cement Companies Limited	1936	10.16
2	Birla Corporation Limited	1919	2.69
3	Chettinad Cement Corporation Limited	1962	1.91
4	Dalmia Cement Limited	1951	2.12
5	Grasim Industries Limited	1946	5.42
6	India Cements Limited	1947	9.71
7	Madras Cements Limited	1957	3.32
8	Shree Cement Limited	1979	3.8
	Total		**39.13**

Source: PROWESS Database

TABLE 2: ANALYSIS OF VARIANCE (ANOVA) FOR FINANCIAL LEVERAGES OF SELECTED INDIAN CEMENT COMPANIES

Companies			**Mean**		**No. of items**
Associated Cement Companies Limited			0.45		15
Birla Corporation Limited			0.47		15
Chettinad Cement Corporation Limited			0.63		15
Dalmia Cement Limited			0.52		15
Grasim Industries Limited			0.40		15
India Cements Limited			0.56		15
Madras Cements Limited			0.61		15
Shree Cement Limited			0.51		15
Source of variations	**Sum of Squares**	**Df**	**Mean square**	**F ratio**	**F Value (at 5%)**
Between the years	0.48	14	0.03	2.99*	1.79
Between the companies	0.69	7	0.10	8.57*	2.10
Error	1.12	98	0.01		
Total	**2.29**	**119**			

* - Significant of at 0.05 level

Source : Computed

TABLE 3: CORRELATION COEFFICIENTS, T-VALUES AND LEVELS OF SIGNIFICANCE OF FINANCIAL LEVERAGE AND DIFFERENT FACTORS

Industry	Correlation between	r-value	t-value	Significant / Not significant
Associated Cement Companies Limited	FL and size	-0.667	123.43	Significant*
	FL and profit	-0.924	9.77	Significant*
	FL and ol	-0.068	4.09	Significant*
	FL and ef	0.077	18.13	Significant*
	FL and ig	-0.227	4.72	Significant*
Birla Corporation Limited	FL and size	-0.854	123.46	Significant*
	FL and profit	-0.928	4.53	Significant*
	FL and ol	0.780	6.43	Significant*
	FL and ef	-0.624	25.19	Significant*
	FL and ig	0.792	0.63	Not Significant
Chettinad Cement Corporation Limited	FL and size	0.438	149.83	Significant*
	FL and profit	-0.014	16.88	Significant*
	FL and ol	0.157	4.78	Significant*
	FL and ef	0.428	5.67	Significant*
	FL and ig	0.571	5.50	Significant*
Dalmia Cement Limited	FL and size	0.753	122.79	Significant*
	FL and profit	0.248	14.74	Significant*
	FL and ol	-0.414	1.69	Not Significant
	FL and ef	0.740	3.36	Significant*
	FL and ig	-0.341	6.43	Significant*
Grasim Industries Limited	FL and size	-0.900	160.42	Significant*
	FL and profit	-0.350	16.97	Significant*
	FL and ol	0.442	5.33	Significant*
	FL and ef	-0.776	13.48	Significant*
	FL and ig	0.892	10.36	Significant*
India Cements Limited	FL and size	0.013	114.93	Significant*
	FL and profit	-0.425	9.83	Significant*
	FL and ol	-0.721	0.74	Not Significant
	FL and ef	0.064	8.54	Significant*
	FL and ig	0.534	0.83	Not Significant
Madras Cements Limited	FL and size	0.512	150.13	Significant*
	FL and profit	-0.667	17.36	Significant*
	FL and ol	0.604	11.42	Significant*
	FL and ef	0.395	5.16	Significant*
	FL and ig	0.449	9.55	Significant*
Shree Cement Limited	FL and size	0.664	130.95	Significant*
	FL and profit	0.570	12.76	Significant*
	FL and ol	-0.026	1.84	Significant*
	FL and ef	0.606	4.52	Significant*
	FL and ig	-0.051	3.65	Significant*
Whole Industry	FL and size	-0.104	16.03	Significant*
	FL and profit	-0.737	9.28	Significant*
	FL and ol	0.221	4.30	Significant*
	FL and ef	-0.295	4.89	Significant*
	FL and ig	0.869	0.33	Not Significant

FL - Financial Leverage, profit – profitability, ol - operating leverage, ef - external financing, ig - income gearing * - Significant of at 0.05 level

Source: Computed

TABLE 4: FACTORS DETERMINING THE FINANCIAL STRUCTURE OF INDIAN CEMENT INDUSTRY – REGRESSION ANALYSIS

[Dependent variable- Financial Leverage (FL)] (FL $=b_0 + b_1PR + b_2OL + b_3S + b_4$ PROFIT $+ b_5EF + b_6IG$)

Independent variables	Regression Co-efficients	t-value	Significant / Not significant
Payout Ratio (PR)	-0.02	3.56	Significant*
Operating Leverage (OL)	0.18	3.82	Significant*
Size (S)	-0.02	2.42	Significant*
Profitability (PROFIT)	-0.02	3.91	Significant*
External Financing (EF)	-2E-06	1.08	Not Significant
Income Gearing (IG)	0.17	6.43	Significant*
Constant = 0.90			
R^2 = 0.89			
Adj R^2 = 0.81			

TABLE 5: FACTORS DETERMINING THE FINANCIAL STRUCTURE OFASSOCIATED CEMENT COMPANIES LIMITED – REGRESSION ANALYSIS

[Dependent variable- Financial Leverage (FL)] (FL $=b_0 + b_1PR + b_2OL + b_3S + b_4$ PROFIT + $b_5EF + b_6IG$)

Independent variables	Regression Co-efficients	t-value	Significant / Not significant
Payout Ratio (PR)	-0.01	4.83	Significant*
Operating Leverage (OL)	-0.10	3.28	Significant*
Size (S)	-0.78	3.28	Significant*
Profitability (PROFIT)	-0.03	8.82	Significant*
External Financing (EF)	-3.6E-05	0.31	Not Significant
Income Gearing (IG)	0.68	4.44	Significant*
Constant = 19.14 **R^2 = 0.99** **Adj R^2 = 0.98**			

TABLE 6: FACTORS DETERMINING THE FINANCIAL STRUCTURE OF BIRLA CORPORATION LIMITED – REGRESSION ANALYSIS

[Dependent variable- Financial Leverage (FL)] (FL $=b_0 + b_1PR + b_2OL + b_3S + b_4$ PROFIT + $b_5EF + b_6IG$)

Independent variables	Regression Co-efficients	t-value	Significant /Not significant
Payout Ratio (PR)	0.01	4.08	Significant*
Operating Leverage (OL)	1.08	4.49	Significant*
Size (S)	-0.78	5.89	Significant*
Profitability (PROFIT)	-0.02	8.94	Significant*
External Financing (EF)	-0.001	2.87	Significant*
Income Gearing (IG)	0.20	4.69	Significant*
Constant = 6.38 **R^2 = 0.97** **Adj R^2 = 0.95**			

TABLE 7: FACTORS DETERMINING THE FINANCIAL STRUCTURE OF CHETTINAD CEMENT CORPORATION LIMITED – REGRESSION ANALYSIS

[Dependent variable- Financial Leverage (FL)] (FL $=b_0 + b_1PR + b_2OL + b_3S + b_4$ PROFIT + $b_5EF + b_6IG$)

Independent variables	Regression Co-efficients	t-value	Significant / Not significant
Payout Ratio (PR)	-0.02	2.86	Significant*
Operating Leverage (OL)	0.09	1.89	Significant*
Size (S)	0.15	4.66	Significant*
Profitability (PROFIT)	-0.0003	2.46	Significant*
External Financing (EF)	0.0001	3.64	Significant*
Income Gearing (IG)	-0.0003	2.54	Significant*
Constant = 1.04 **R^2 = 0.76** **Adj R^2 = 0.72**			

TABLE 8: FACTORS DETERMINING THE FINANCIAL STRUCTURE OF DALMIA CEMENT LIMITED – REGRESSION ANALYSIS

[Dependent variable- Financial Leverage (FL)] (FL $=b_0 + b_1PR + b_2OL + b_3S + b_4$ PROFIT + $b_5EF + b_6IG$)

Independent variables	Regression Co-efficients	t-value	Significant / Not significant
Payout Ratio (PR)	-0.34	3.39	Significant*
Operating Leverage (OL)	-0.42	4.65	Significant*
Size (S)	0.15	4.07	Significant*
Profitability (PROFIT)	0.003	1.95	Significant*
External Financing (EF)	6.04E-05	3.87	Significant*
Income Gearing (IG)	-0.25	1.35	Significant**
Constant = -0.99 **R^2 = 0.82** **Adj R^2 = 0.79**			

TABLE 9: FACTORS DETERMINING THE FINANCIAL STRUCTURE OF GRASIM INDUSTRIES LIMITED – REGRESSION ANALYSIS

[Dependent variable- Financial Leverage (FL)] (FL $=b_0 + b_1PR + b_2OL + b_3S + b_4$ PROFIT + $b_5EF + b_6IG$)

Independent variables	Regression Co-efficients	t-value	Significant / Not significant
Payout Ratio (PR)	0.41	2.91	Significant*
Operating Leverage (OL)	0.41	1.79	Significant*
Size (S)	-0.47	7.46	Significant*
Profitability (PROFIT)	-0.01	3.36	Significant*
External Financing (EF)	-7.5E-05	4.42	Significant*
Income Gearing (IG)	0.57	7.20	Significant*
Constant = 9.81 **R^2** = 0.98 **Adj R^2** = 0.97			

TABLE 10: FACTORS DETERMINING THE FINANCIAL STRUCTURE OF INDIA CEMENTS LIMITED – REGRESSION ANALYSIS

[Dependent variable- Financial Leverage (FL)] (FL $= b_0 + b_1PR + b_2OL + b_3S + b_4$ PROFIT $+ b_5EF + b_6IG$)

Independent variables	Regression Co-efficients	t-value	Significant /Not significant
Payout Ratio (PR)	0.16	2.84	Significant*
Operating Leverage (OL)	-1.56	3.87	Significant*
Size (S)	0.01	0.04	Not Significant
Profitability (PROFIT)	-0.01	3.66	Significant*
External Financing (EF)	1.06E-05	2.86	Significant*
Income Gearing (IG)	0.04	2.27	Significant*
Constant = -4.97 **R^2** = 0.76 **Adj R^2** = 0.69			

TABLE 11: FACTORS DETERMINING THE FINANCIAL STRUCTURE OF MADRAS CEMENTS LIMITED – REGRESSION ANALYSIS

[Dependent variable- Financial Leverage (FL)] (FL $= b_0 + b_1PR + b_2OL + b_3S + b_4$ PROFIT $+ b_5EF + b_6IG$)

Independent variables	Regression Co-efficients	t-value	Significant / Not significant
Payout Ratio (PR)	0.49	3.55	Significant*
Operating Leverage (OL)	0.46	2.63	Significant*
Size (S)	0.16	2.21	Significant*
Profitability (PROFIT)	-0.01	3.17	Significant*
External Financing (EF)	4.92E-05	1.59	Significant**
Income Gearing (IG)	0.24	1.79	Significant*
Constant = -0.43 **R^2 = 0.85** **Adj R^2 = 0.74**			

TABLE 12: FACTORS DETERMINING THE FINANCIAL STRUCTURE OF SHREE CEMENT LIMITED – REGRESSION ANALYSIS

[Dependent variable- Financial Leverage (FL)] (FL $= b_0 + b_1PR + b_2OL + b_3S + b_4$ PROFIT $+ b_5EF + b_6IG$)

Independent variables	Regression Co-efficients	t-value	Significant / Not significant
Payout Ratio (PR)	-0.03	3.48	Significant*
Operating Leverage (OL)	-0.02	1.14	Not Significant
Size (S)	0.21	3.19	Significant*
Profitability (PROFIT)	0.01	2.52	Significant*
External Financing (EF)	0.0001	2.77	Significant*
Income Gearing (IG)	-0.02	3.17	Significant*
Constant = 0.29 **R^2 = 0.74** **Adj R^2 = 0.69**			

A STUDY ON FINANCIAL HEALTH OF THE SELECTED CEMENT COMPANIES IN INDIA

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ABSTRACT
Cement industry forms an indispensable part of the large scale industrial sector of India. It contributes to 1.3% of GDP and employs over 0.15 million people. It is amongst the largest contributor of central excise. India's rapid economic growth and soaring demand by sectors like real estate, steel industry automobiles at home and abroad has put cement industry on the global map. The objective of this paper is to analyse the financial health of the selected cement companies in India and offer conclusion for the improvement of financial health of the cement companies.

KEYWORDS
Financial Health - 'Z' Score, 'Grey Zone', Financial Distress, Discriminant Function, Retained Earnings.

INTRODUCTION
In India, Industrial economy is dominated by various industries like iron and steel, automobile, real estate, cement, textile, medical, electronics, hardware and power industry. Of them, Cement Industry is one of the fastest growing sectors. It forms the base for all developmental activities. The Indian cement industry plays a key role in the national economy generating substantial revenue for state and central government through excise and sales taxes. It contributes substantially to India's industrial and economic development. To every development activity, from the construction of a small factory to the structuring of multi-purpose projects, cement is an important ingredient. The Indian cement industry accounts for approximately 1.3% of GDP and employs over 0.15 million people.

FINANCIAL HEALTH ANALYSIS
The survival of the company depends on its performance in the past years. The company having a sound financial position and proper utilization of resources alone will survive and perform well. Today's good performer can become sick tomorrow, if proper care is not exercised to evaluate its performance. The quantitative and qualitative financial performance should be closely monitored to avoid industrial sickness and to ensure consistent growth. The ability to discriminate either the weak or the strong or in between these two that will fail or prosper is critical to successful economic development, bankers, suppliers, stockholders and government regulatory bodies etc., It is because, they have all vested interest in appraising the strength of both emerging and established companies. To properly assess the financial health of the companies, the popular model, the Altman 'Z score' model can be used.

STATEMENT OF THE PROBLEM
The Indian Cement Industry is facing many financial problems. Most of the cement companies are operationally viable but suffering from financial distress. Hence, it is the need to evaluate the financial health of cement companies and improve its financial efficiency to stay in the stiff competitive market in future. By keeping this mind, it was decided to examine the financial health of the selected Indian Cement Companies. The required data were collected from the Prowess Data Base and they were analysed with the Altman 'Z' Score Model.

OBJECTIVES OF THE STUDY
The following is the objectives of the study:
To analyse the financial health of selected Indian cement companies.

HYPOTHESIS OF THE STUDY
The null hypothesis was framed on the basis of the objectives of the study.
Ho : There is no significant difference between the size of the companies and financial health.

METHODOLOGY OF THE STUDY
SAMPLE SELECTION
The present study was purely based on secondary data. The required data were collected from the Prowess Data Base of CMIE (Centre for Monitoring Indian Economy). Several variable can be used as the measure of the firm's size. Some of them are net profit, total assets, total share capital and net sales. Out of which, total assets represent the exact overall size of the firm compare to other variables. Based on this, the size has been determined on the basis of the investment in total assets of a company. Those companies which have invested more than Rs.1000 crores in total assets during the last year of the study period have been selected for the present study.
In India, only 10 companies have invested more than Rs.1000 crores in total assets. Out of which five companies have been selected and the remaining were excluded from the study due to non-availability of data for the continuous period of 10 years.
Accordingly, the following five companies constitute the sample set for the study.

Name of the Company	Total Assets as on 31.3.2013 (Rs.in Crores)
Associated Cement Company Ltd (ACCL)	7824.84
Chettinad Cement Company Ltd (CCCL)	2079.66
India Cement Ltd (ICL)	6843.64
Ramco Cement Ltd (RCL)	4351.90
Ultra Tech Cement Company Ltd (UTCL)	19697.50

PERIOD OF STUDY

The study covers a period of 10 years from 2003-04 to 2012-13.

TOOLS FOR ANALYSIS

Altman introduced the 'Z' Score Model, a technique designed to predict corporate bankruptcy. Over the past 40 years, many academics and practitioners have used the 'Z' score to test under a wide range of industries and economic environments. It is an internationally recognized method frequently used by investors, lenders and analysts. The model uses common financial information such as sales revenue and total assets to derive five basic financial ratios. Each ratio is assigned a weight and summed together to produce the 'Z' Score. Based on the Multi Discriminant Analysis (MDA), the model predicts a company's financial health based on a discriminant function of the firm.

Further, the difference between the size of the companies and 'Z' Score was also examined by framing null hypothesis and the same was tested with ANOVA at 1% level of significance. To analyse the financial health, tools like Mean, Standard Deviation, Co-efficient of Variation (CV), Compound Growth Rate (CGR), and 't' test were used.

The formula to calculate the Z Score Model is as follows:

$$\mathbf{Z = 1.2\, X_1 + 1.4\, X_2 + 3.3\, X_3 + 0.6\, X_4 + 1.0\, X_5}$$

Z = Discriminant function score of a firm

X_1 = Working capital / Total assets

X_2 = Retained Earnings/ Total assets

X_3 = EBIT / Total assets

X_4 = Market value of 'Equity / Book value of Debt

X_5 = Sales / Total assets

GUIDELINES

With the help of Altman guidelines, the overall financial healths of cement companies are measured during the study period.

Situation	Z Score	Zone	Comments
I	Below 1.8	Distress Zone	Future failure or bankrupt
II	Between 1.8 and 2.99	Grey Zone	Unpredictable future status
II	3.0 and above	Safe Zone	Future Success or Non-bankrupt

RESULTS AND ANALYSIS WITH ALTMAN'S Z SCORE MODEL

TABLE – 1: FINANCIAL HEALTH OF SELECTED CEMENT COMPANIES

Years	ACCL	CCCL	ICL	RCL	UTCL
2003-04	2.41	1.47	0.42	1.35	1.35
2004-05	2.43	1.73	0.56	1.36	1.46
2005-06	3.94	2.01	0.99	1.88	2.13
2006-07	4.25	3.36	1.53	2.92	3.22
2007-08	3.62	2.81	1.80	2.00	3.05
2008-09	3.52	1.43	1.63	1.70	2.66
2009-10	2.96	2.15	1.61	1.64	2.91
2010-11	3.22	1.92	1.26	1.40	2.31
2011-12	3.43	2.34	1.68	1.80	2.71
2012-13	3.19	2.49	1.59	1.96	2.59
MEAN	**3.30**	**2.17**	**1.31**	**1.80**	**2.44**
SD	**0.59**	**0.60**	**0.49**	**0.46**	**0.63**
CV	**18.03**	**27.84**	**37.52**	**25.65**	**25.89**
CGR	**1.73**	**2.83**	**13.58**	**1.18**	**6.33**
t Value	**17.59**	**11.38**	**8.47**	**12.06**	**12.18**

Source : Computed from Secondary Data

The Altman's Z Score Model mentioned above for the selected cement companies are presented in the table -1. From the year-wise observation, it is understood that ACCL was in the Grey Zone for 3 years (2003-2005, 2009-10) while it was in the safe zone for 7 years (2005-2009 and 2010-2013).The ACCL was good financial health whereas ICL was in financially distress during the study period. It was in the Distress Zone for all the years except for the year 2007-08. The RCL was neither in Distress nor healthy because it was in the Distress Zone for 5 years (2003-2005, 2008-2011) and the Grey Zone for 5 years (2005-2008 and 2011-2013).

The financial Health of CCCL was in the Distress Zone for 3 years (2003-2005 and 2008-09) while it was in the Grey zone for 7 years (2005-06, 2007-08 and 2009-2013). It was in the Safe Zone for one year (2006-07) whereas the financial health of UTCL was in the Distress Zone for 2 years (2003-2005) and the Grey Zone for 6 years (2005-2006 and 2008-2013). It was in the Safe Zone for two years (2006-2008). It shows that CCCL and UTCL were financially average but it becomes unpredictable during the study period.

The compounded growth rates were positive for all the companies and the 't' value is significant at 1% level because the calculated 't' value is higher than the table value (2.82).

As financially health position varied to size of the companies, it was decided to examine the difference between these two with the help of framed null hypothesis. The details of the findings are shown in the table -2.

ANOVA

TABLE – 2: SIZE OF SELECTED CEMENT COMPANIES & FINANCIAL HEALTH

Source of Variation	SS	df	MS	F
Between Groups	22.53508	4	5.63377	17.92962
Within Groups	14.13971	45	0.314216	
Total	**36.67479**	**49**		

Source : Computed from Secondary Data

Ho : There is no significant difference between the size of the companies and financial health.

With a view to test the significant difference between the size of the companies and the financial health, the F test has been applied. According to the Table -2, the calculated value (17.92) of F is higher than the table value (3.72). Hence, the null hypothesis is rejected and it can be concluded that there is a significant difference between the size of the companies and the financial health.

Finally, it is identified that the financial health of ACCL was good on an average over the period (Mean Z Score 3.30, in between 3 and above) whereas CCCL and UTCL were financially unpredictable over the period (Mean Z Score 2.70 and 2.44, in between 1.8 and 2.99), while ICL was in financially distress during the study period (Mean Z Score 1.30 i.e. below 1.80). But the financial health of RCL was neither in distress nor healthy on an average over the period (Mean Z Score 1.80)

CONCLUSION

On the basis of above analysis, it is clear that the efficiency of the working capital Management should be strengthened by the selected units which would help them to maintain the financial health. The Earnings before Interest and Taxes (EBIT) will adversely affect the financial health of the company. Hence, the companies can convert the EBIT into capital or reduce the fixed assets. It is suggested that the companies need to put in efforts to increase Z Score. This will help them to avoid any damage to its liquidity and solvency position, thereby avoiding financial distress and enhancing their overall financial health.

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GREEN MARKETING

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ABSTRACT

The term Green Marketing is the buzzword used in industry which is used to describe business activities which attempt to reduce the negative effect of the products/services offered by the company to make it environmentally friendly. The development of Green marketing has opened the door of opportunity for companies to co-brand their products into separate line, lauding the green-friendliness of some while ignoring that of others. Green marketing manipulates the four elements of the marketing mix to sell products and services offering superior environmental benefits in the form of reduced waste and decreased release of toxic emissions. As society becomes more concerned with the natural environment, businesses have begun to modify their process in an attempt to address society's new issues. For a company to be successful in implementing green marketing strategy, it should not forget attitude of consumers towards green marketing. The outcome of this paper may trigger the minds of marketer to give a thought for adopting the suitable strategies which will give them a way to overcome major problems associated with regular marketing techniques and make a shift to green marketing. This paper is an attempt to understand awareness of consumers' towards green marketing As resources are limited and human wants are unlimited, it is important for the marketers to utilize the resources efficiently without waste as well as to achieve the organization's objective.

KEYWORDS

Green Marketing, consumer behavior, environmentally friendly product, eco-friendly product, eco – logical marketing.

INTRODUCTION

Green marketing is the marketing of products that are presumed to be environmentally safe. Thus green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. Yet defining green marketing is not a simple task where several meanings intersect and contradict each other; an example of this will be the existence of varying social, environmental and retail definitions attached to this term. Green, environmental and eco-marketing are part of the new marketing approaches which do not just refocus, adjust or enhance existing marketing thinking and practice, but seek to challenge those approaches and provide a substantially different perspective. In more detail green, environmental and eco-marketing belong to the group of approaches which seek to address the lack of fit between marketing as it is currently practiced and the ecological and social realities of the wider marketing environment.

Although environmental issues influence all human activities, few academic disciplines have integrated green issues into their literature. This is especially true of marketing. As society becomes more concerned with the natural environment, businesses have begun to modify their behavior in an attempt to address society's "new" concerns. Some businesses have been quick to accept concepts like environmental management systems and waste minimization, and have integrated environmental issues into all organizational activities. Some evidence of this is the development of journals such as "Business Strategy and the Environment" and "Greener Management International," which are specifically designed to disseminate research relating to business' environmental behavior.

RESEARCH METHODOLOGY

The study is based on secondary sources of data. The main source of data are various Economic Surveys of India and Ministry of Commerce and Industry data, RBI bulletin, online data base of Indian Economy, journals, articles, news papers, etc.

EVOLUTION OF GREEN MARKETING

Green Marketing concept has been evolved over a period of time. According to Peattie (2001), the evolution of green marketing has *three phases*.

- **First phase**: "*Ecological*" green marketing and during this period all marketing activities were concerned to address environment problems and provide remedies for environmental problems.
- **Second phase**: "*Environmental*" green marketing and the focus shifted on clean technology that involved designing of innovative new products, which take care of pollution and waste issues.
- **Third phase**: "*Sustainable*" green marketing. It came into prominence in the late 1990s and early 2000

WHY GREEN MARKETING?

"Resources are Limited and Human Wants are Unlimited", it is important for the marketers to utilize the resources efficiently without any wastage as well as to achieve the organization's objective. There is growing interest among the consumers all over the world regarding protection of environment. Worldwide evidence indicates people are concerned about the environment and are changing their behavior. As a result of this, green marketing has emerged which speaks for growing market for sustainable and socially responsible products and services. Since early 1990s, a major concern on ecological impact of industrial house on environment has been surfaced on marketplace. Not only the relation between human organization and natural environment being redefined, but the implication thereof are being interpreted, because of these new perceptions are being formed or revaluated on issues like environmental friendly products, recycle- ability, waste reduction, the cost associated with pollution and price value relationship of environmentalism. Pressure from various stakeholders, government, environmentalist, NGOs, consumers in placed on business, which in turn keeps them under constant and relentless watch in their daily operations. A direct result can be seen in developed and developing countries where government become more strict in imposing regulations to protect environment; at the same time the customers of these countries are being more and more outspoken regarding their needs for environmentally friendly products, even though questions remain on their willingness to pay a higher premium for such products. So, in this era where consumers determine the fate of a company, green marketing imparts a proactive strategy for these companies to cater the market by imparting nature friendly products/ services which otherwise reduce or minimize any detrimental impact on environment.

GREEN CONSUMER

The green consumer is generally defined as one who adopts environmentally friendly behaviors and/or who purchases green products over the standard alternatives. Green consumers are more internally-controlled as they believe that an individual consumer can be effective in environmental protection. Thus, they feel that the job of environmental protection should not be left to the government, business, environmentalists and scientists only; they as consumers can also play a part. They are also less dogmatic and more open-minded or tolerant toward new products and ideas. Their open-mindedness helps them to accept green products and behaviors, more readily. According to the consumption report of the EU (Consumers in Europe), it is found that ten percent of the consumers recognize the ecological product labels or green energy labels on the products sold in the supermarkets. Although the companies in our country progress with significant speed in terms of the environment, it is not possible yet for us to say that they have reached the same level regarding consumer sensitivity. In Western implementations, environmental awareness and the “green policy” in business organizations are reflected in the business as result of the environmental awareness of the consumers. The most recent and classical example regarding this subject is airline transportation industry. In airline transportation, large amount of carbon emission released by the planes into the environment is a matter in question. British Airway offers the following “relieving” solution to people who have to travel by plane but feel disturbed due to the carbon emission: to give financial support to a fund providing researches intended to reduce carbon emission. The carbon emission, released during the distance covered is calculated and a contribution of 12.08 Euro per ton can be paid per person. Carbon dioxide emission per one passenger during an Istanbul-London flight reaches 29 kilograms, and with this fund, which was established on a voluntary basis, environmentally conscious passengers can donate 3.25 Euro and feel relaxed. On the other hand, Turkish Airlines has stated “we achieved fuel savings and this saving reduced carbon emission” in a statement they made in October, demonstrating that the firm has a more low profile “temporary” approach (Naturalhaber, 2010).

GREEN PRODUCTS AND ITS CHARACTERISTICS

The products those are manufactured through green technology and that caused no environmental hazards are called green products. Promotion of green technology and green products is necessary for conservation of natural resources and sustainable development. We can define green products by following measures:

1. Products those are originally grown,
2. Products those are recyclable, reusable and biodegradable,
3. Products with natural ingredients,
4. Products containing recycled contents, non-toxic chemical,
5. Products contents under approved chemical,
6. Products that do not harm or pollute the environment,
7. Products that will not be tested on animals,
8. Products that have eco-friendly packaging i.e. reusable, refillable containers etc.

GREEN MARKETING MIX (INNOVATIVE STRATEGY FOR CORPORATE)

Every Organization has its own favorite marketing mix. Some have 4 Ps and some have 7 Ps of Marketing Mix. The 4 Ps of green marketing are that of a conventional marketing but the challenge before marketers is to use 4 Ps in an innovative manner.

PRODUCT

Attributes such as energy saving, organic etc. that leads to reduction in resource consumption and pollution. The ecological objectives in planning products are to reduce resource consumption and pollution and to increase conservation of scarce resources (Keller man, 1978). The products have to be developed depending on the needs of the customers who prefer environment friendly products. Products can be made from recycled materials or from used goods. Efficient products not only save water, energy and money, but also reduce harmful effects on the environment. Green chemistry forms the growing focus of product development. The marketer's role in product management includes providing product designers with market-driven trends and customer requests for green product attributes such as energy saving, organic, green chemicals, local sourcing, etc., For example, Nike is the first among the shoe companies to market itself as green. It is marketing its Air Jordan shoes as environment-friendly, as it has significantly reduced the usage of harmful glue adhesives. It has designed this variety of shoes to emphasize that it has reduced wastage and used environment-friendly materials.

PRICE

Price is a critical and important factor of green marketing mix. Most consumers will only be prepared to pay additional value if there is a perception of extra product value. This value may be improved performance, function, design, visual appeal, or taste. Green marketing should take all these facts into consideration while charging a premium price. Green pricing takes into consideration the people, planet and profit in a way that takes care of the health of employees and communities and ensures efficient productivity. Value can be added to it by changing its appearance, functionality and through customization, etc. Wal Mart unveiled its first recyclable cloth shopping bag. IKEA started charging consumers when they opted for plastic.

PROMOTION

Green promotion involves configuring the tools of promotion, such as advertising, marketing materials, signage, white papers, web sites, videos and presentations by keeping people, planet and profits in mind. To address the relationship between a product and the environment, to promote green life style, and to present a corporate image of environmental responsibility.

British petroleum (BP) displays gas station which its sunflower motif and boasts of putting money into solar power. Indian Tobacco Company has introduced environmental-friendly papers and boards, which are free of elemental chlorine. Toyota is trying to push gas/electric hybrid technology into much of its product line. It is also making the single largest R&D investment in the every-elusive hydrogen car and promoting itself as the first eco-friendly car company. International business machines Corporation (IBM) has revealed a portfolio of green retail store technologies and services to help retailers improve energy efficiency in their IT operations. The center piece of this portfolio is the IBM Sure POS 700, a point-of-sale system that, according to IBM, reduces power consumption by 36% or more. We even see the names of retail outlets like "Reliance Fresh", Fresh [at] Namdhari Fresh and Desi, which while selling fresh vegetables and fruits, transmit an innate communication of green marketing. Green marketer can attract customers on the basis of performance, money savings, health and convenience, or just plain environmental friendliness, so as to target a wide range of green consumers. Consumer awareness can be created by spreading the message among consumers about the benefits of environmental-friendly products. Positing of profiles related to green marketing on social networks creates awareness within and across online peer groups. Marketing can also directly target the consumers through advertisements for product such as energy saving compact fluorescent lamps, the battery –powered Reva car, etc.

PLACE

The choice of where and when to make a product available will have significant impact on the customers. Aiming to reduce carbon footprint by way of managing logistics to cut down transport emanations. Very few customers will go out of their way to buy green products. Green place is about managing logistics to cut down on transportation emissions, thereby in effect aiming at reducing the carbon footprint. For example, instead of marketing an imported mango juice in India it can be licensed for local production. This avoids shipping of the product from far away, thus reducing shipping cost and more importantly, the consequent carbon emission by the ships and other modes of transport.

CHALLENGES IN GREEN MARKETING

NEED FOR STANDARDIZATION

It is found that only 5% of the marketing messages from “Green” campaigns are entirely true and there is a lack of standardization to authenticate these claims. There is no standardization to authenticate these claims. There is no standardization currently in place to certify a product as organic. Unless some regulatory bodies are involved in providing the certifications there will not be any verifiable means. A standard quality control board needs to be in place for such labeling and licensing.

NEW CONCEPT

Indian literate and urban consumer is getting more aware about the merits of Green products. But it is still a new concept for the masses. The consumer needs to be educated and made aware of the environmental threats. The new green movements need to reach the masses and that will take a lot of time and effort. By India's ayurvedic heritage, Indian consumers do appreciate the importance of using natural and herbal beauty products. Indian consumer is exposed to healthy living lifestyles such as yoga and natural food consumption. In those aspects the consumer is already aware and will be inclined to accept the green products.

PATIENCE AND PERSEVERANCE

The investors and corporate need to view the environment as a major long-term investment opportunity, the marketers need to look at the long-term benefits from this new green movement. It will require a lot of patience and no immediate results. Since it is a new concept and idea, it will have its own acceptance period.

AVOIDING GREEN MYOPIA

The first rule of green marketing is focusing on customer benefits i.e. the primary reason why consumers buy certain products in the first place. Do this right, and motivate consumers to switch brands or even pay a premium for the greener alternative. It is not going to help if a product is developed which is absolutely green in various aspects but does not pass the customer satisfaction criteria. This will lead to green myopia. Also if the green products are priced very high then again it will lose its market acceptability.

GOLDEN RULES OF GREEN MARKETING

1. Know you're Customer: Make sure that the consumer is aware of and concerned about the issues that your product attempts to address, (Whirlpool learned the hard way that consumers wouldn't pay a premium for a CFC-free refrigerator because consumers dint know what CFCs.

2. Educating your Customers*:* isn't just a matter of letting know why it matters. Otherwise, for a significant portion of your target market, it's a case of "So what?" and your green marketing campaign goes nowhere. people know you're doing whatever you're doing to protect the environment, but also a matter of letting them.

3. Being Genuine & Transparent: means that **a)** you are actually doing what you claim to be doing in your green marketing campaign and **b)** the rest of your business policies are consistent with whatever you are doing that's environmentally friendly.

4. Reassure the Buyer: Consumers must be made to believe that the product performs the job it's supposed to do-they won't forego product quality in the name of the environment.

5. Consider Your Pricing: If you're charging a premium for your product-and many environmentally preferable products cost more due to economies of scale and use of higher-quality ingredients-make sure those consumers can afford the premium and feel it's worth it.

6. Thus leading brands should recognize that consumer expectations have changed: It is not enough for a company to green its products; consumers expect the products that they purchase pocket friendly and also to help reduce the environmental impact in their own lives too.

PRESENT TRENDS IN GREEN MARKETING IN INDIA

Organizations are Perceive Environmental marketing as an Opportunity to achieve its objectives. Firms have realized that consumers prefer products that do not harm the natural environment as also the human health. Firms marketing such green products are preferred over the others not doing so and thus develop a competitive advantage, simultaneously meeting their business objectives. Organizations believe they have a moral obligation to be more socially responsible. This is in keeping with the philosophy of CSR which has been successfully adopted by many business houses to improve their corporate image. Firms in this situation can take two approaches:

- Use the fact that they are environmentally responsible as a marketing tool.
- Become responsible without prompting this fact.

Governmental Bodies are forcing Firms to Become More Responsible. In most cases the government forces the firm to adopt policy which protects the interests of the consumers. It does so in following ways:

- Reduce production of harmful goods or by products
- Modify consumer and industry's use and /or consumption of harmful goods; or
- Ensure that all types of consumers have the ability to evaluate the environmental composition of goods.

Cost Factors Associated With Waste Disposal or Reductions in Material Usage Forces Firms to Modify their Behavior. With cost cutting becoming part of the strategy of the firms it adopts green marketing in relation to these activities. It may pursue these as follows:

- A Firm develops a technology for reducing waste and sells it to other firms.
- A waste recycling or removal industry develops.

WHAT ARE THE EXAMPLES OF GREEN MARKETING?

Marketing cotton bags instead of polythene bags comes under green marketing.

EXAMPLE 1: Eco-friendly Rickshaws before CWG

Chief minister Shiela Dikshit launched on Tuesday a battery operated rickshaw, “E-rick”, sponsored by a cellular services provider, to promote eco-friendly transportation in the city ahead of the Commonwealth Games.

EXAMPLE 2 : Wipro Green It.

Wipro can do for you in your quest for a sustainable tomorrow - reduce costs, reduce your carbon footprints and become more efficient - all while saving the environment.

Wipro's Green Machines (In India Only)

Wipro Infotech was India's first company to launch environment friendly computer peripherals. For the Indian market, Wipro has launched a new range of desktops and laptops called Wipro Greenware. These products are RoHS (Restriction of Hazardous Substances) compliant thus reducing e-waste in the environment.

EXAMPLE 3 : Agartala to be India's first Green City

Tripura Sunday announced plans to make all public and private vehicles in Agartala run on compressed natural gas (CNG) by 2013, thus making the capital “India's first green city”. Tripura Natural Gas Co Ltd (TNGCL), a joint venture of the Gas Authority of India Ltd (GAIL) and the Tripura and Assam governments, has undertaken a project to supply CNG to all private and government vehicles.CNG will also be available to those now using electricity, petrol and diesel to run various machineries. TNGCL chairman Pabitra Kar told reporters. He said: “The company will soon provide PNG connections to 10,000 new domestic consumers in the city and outskirts. Agartala will be the first city in India within the next three years to become a green city.

THE FUTURE OF GREEN MARKETING

There are many lessons to be learned to be learned to avoid green marketing myopia, the short version of all this is that effective green marketing requires applying good marketing principles to make green products desirable for consumers. The question that remains, however, is, what is green marketing's future? Business scholars have viewed it as a “fringe” topic, given that environmentalism's acceptance of limits and conservation does not mesh well with marketing's traditional axioms of “give customer what they want” and “sell as much as you can”. Evidence indicates that successful green products have avoided green marketing myopia by Following three important principles:

CONSUMER VALUE POSITIONING

1) Design environmental products to perform as well as (or better than) alternatives.
2) Promote and deliver the consumer desired value of environmental products and target relevant consumer market segments.
3) Broaden mainstream appeal by bundling consumer desired value into environmental products.

CALIBRATION OF CONSUMER KNOWLEDGE

1) Educate consumers with marketing messages that connect environmental attributes with desired consumer value.

2) Frame environmental product attributes as “solutions” for consumer needs.
3) Create engaging and educational internet sites about environmental products desired consumer value.

CREDIBILITY OF PRODUCT CLAIM

1) Employ environmental product and consumer benefit claims that are specific and meaningful.
2) Procure product endorsements or eco-certifications from trustworthy third parties and educate consumers about the meaning behind those endorsements and eco certifications.
3) Encourage consumer evangelism via consumers social and internet communication network with compelling, interesting and entertaining information about environmental products.

CONCLUSION

Now this is the right time to select “Green Marketing” globally. It will come with drastic change in the world of business if all nations will make strict roles because green marketing is essential to save world from pollution. From the business point of view because a clever marketer is one who not only convinces the consumer, but also involves the consumer in marketing his product. Green marketing should not be considered as just one more approach to marketing, but has to be pursued with much greater vigor, as it has an environmental and social dimension to it. With the threat of global warming looming large, it is extremely important that green marketing becomes the norm rather than an exception or just a fad. Recycling of paper, metals, plastics, etc., in a safe and environmentally harmless manner should become much more systematized and universal. It has to become the general norm to use energy-efficient lamps and other electrical goods. Marketers also have the responsibility to make the consumers understand the need for and benefits of green products as compared to non-green ones. In green marketing, consumers are willing to pay more to maintain a cleaner and greener environment. Finally, consumers, industrial buyers and suppliers need to pressurize effects on minimize the negative effects on the environment-friendly. Green marketing assumes even more importance and relevance in developing countries like India.

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EXPLORING THE INFLUENCE OF INFORMATION SOURCES OF APPAREL SHOPPERS IN COIMBATORE CITY

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ABSTRACT

The main motive to conduct this research is to explore the various sources of information which facilitates customers in the buying process of apparels.Since India is witnessing a strong Retail Revolution in the past few years, this paper might be useful and may contribute to retail managers in devising an effective marketing strategy to increase sales and in turn profit.This empirical research uses both primary and secondary data and the data collected using structured questionnaire were analysed using SPSS statistical package.Responses were obtained from a total sample of 126 respondents using store intercept technique. Twelve variables identified through this study is compressed and reduced to four latent factors namely Fashion Source, Professional Advice ,Media source and Personal Source by using Factor Analysis with Varimax rotation method. The result indicated that the customers are more fashion –oriented keeping in tune with the latest trends and styles. The survey finds its applicability and implications to retailers store managers.

KEYWORDS
Apparel,Fashion Source , GDP, Information Sources, Professional Advice.

INTRODUCTION

The textile and apparel industry is one of the largest and the most important sectors in the Indian economy in terms of output , foreign exchange earnings and employment. It contributes approximately 14% to India's industrial production , 4% to the country's GDP and 17% to the country's export earnings.It provides direct employment to over 35 million people and is the second largest provider of employment after the agricultural sector. Thus the development of this sector has an overall impact on the economy.The Indian textile and apparel industry contributes approximately 4% to the global textile and apparel market. Since the textile industry has such economic importance , it has always attracted the Government's attention. Therefore, the Government has introduced policies such as the " Technology Upgradation Fund Scheme"(TUFS), "Scheme for Integrated Textile Parks"(SITP), low excise duty,high import duty to discourage imports and " National Textile Policy" to develop the textile sector(Aniruddha Akarte , Bharat Meghe & Amishi Arora,2012 pp 1-2).For many years fashion has been an area of interest in consumer research.Fashion is a driving force that shapes the way we live – it influences apparel, hairstyles, art, food, cosmetics, cars, music, toys, furniture and many other aspects of our daily lives that we often take for granted(Solomon Michael R.,Rabolt Nancy J., 2002).
Shopping for clothes is one of the popular past times among people from all ages, different genders and cultural backgrounds.According to the proliferation of design and image in the clothing sector, conumers need to take serious consideration during the buying processes(Apawan Lerkpollakarn & Ardiporn Khemarangsan,2012).Moreover Understanding the sources of influence that drives this lucrative target segment to adopt fashion products, therefore, turned out to be an important area for marketing researchers in order to trace the possibilities of using the major sources of influence as a tool for better marketing management(Priyanka Pega & Brajesh Kumar, 2013 pp 33).Hence this research was carried out to explore the various sources of seeking information about the purchase of apparels.

LITERATURE REVIEW

In the consumer behaviour literature(Safeik 2006), consumer information sources are generally discussed within the context of consumer search behaviour (Loudon and Della Bitta 1993; Mowen and Minor 1998). The literature suggests that information which consumers need in order to assess the alternatives that are available in the market can be obtained on two levels, namely internal and external search. The former involves the initial search being carried out by the individual, often subconsciously, drawing on past experiences and learning structures. Depending upon the type of problem encountered, the degree of internal search may vary (Mowen and Minor 1998). If the purchase process involves extensive problem solving, consumers may actively search in the long-term memory for information on brand or store alternatives. For low-involvement purchase processes, internal search tends to be highly limited. If the result of internal search is not sufficient for decision-making purposes, then the consumer moves onto the second level, making use of external information sources.
External sources refer to the acquisition of information from outside sources, such as advertisements, sales personnel and retail displays. When the need for information arises, consumers can gain information from three major areas: marketing sources, personal sources and neutral sources. Marketing sources are the entire package of marketing tools that a marketer uses to communicate product information. These sources include the product itself, packaging, salespeople, display, promotion, advertising and other sources under the control of the marketers (Hawkins, Best and Coney 2001). Personal sources include all forms of interpersonal communication covering products not under the control of marketers. These sources include family influence, friend's recommendation, word-of-mouth communication and personal observation (Tan and Dolich 1983). Neutral sources include a portion of the mass media, government reports, consumer oriented reports and publication from independent product-testing agencies. These sources are typically not directly influenced by either marketers or buyers (Loudon and Della Bitta 1993). Many researches of patronage study proved that Shopping orientations and importance of store attributes were influenced by information sources(Safeik Mokhlis 2006; Kelly S. Welker 2004; Shim and Kotsiopulos 1992b etc.).
Shim & Kotsiopulos(1992a) in their study reported that those customers who were single and participated in community events prefered to use personal information sources. Moschis (1976) identified the various information sources such as advertisements, friends or neighbors, salespersons, and free samples and found that these information sources differed among shopping orientations of cosmetic users.Bellenger and Korgaonkar (1980) found that recreational shoppers considered newspapers and women's magazines as their important information sources than the non-recreational shoppers.Consumers use fashion products to manage their public image and sense of affiliation or autonomy(Banister and Hogg, 2004).In this process, consumers acquire knowledge and perception towards an object from various sources of influence. Some of the important sources of influence that have a strong influence on consumers' attitude formation and change are personal experience, the influence of family and friends, direct marketing, mass media and the Internet(Schiffmn & Kanuk, 2007;Loudon & Della, 1993; Robertson et al.,1984;Solomon,2002).According to Hovard & Gengler(2001), family plays a vital source of information since it provides basic values and builds up the essential convictions.Family, peer group and culture are also important sources of influence in attitude formation and change(Robertson et al.,1984).Research also indicates that Internet advertising, which gives new dimension and unique charm to the product is a vital source in influencing consumer's attitude(Srivastava & Mishra, 2012).

RESEARCH METHODOLOGY

The empirical study attempted to investigate the important sources of information pertaining to purchasing behaviour of apparel products. The study is based on both primary and secondary data. The population comprises of all the apparel retail customers across different retail formats in Coimbatore city, popularly known as the "Manchester of South India". Primary data was collected through structured questionnaire using store intercept technique. A total of 150 questionnaires were distributed randomly to the customers exiting the store in order to capture the regency effect of purchase. Out of 150 respondents, only 126 respondents completed and returned the questionnaire with a response rate of 84%.

Before drafting the final questionnaire, a pilot survey was conducted from 25 respondents to understand the clarity and legibility of the questionnaire. The variables related to information sources were extracted from extensive literature. The final questionnaire consists of two sections. First section contains the demographic profile of the respondents like age, gender, marital status, education and occupation. The second section comprises of 12 sources of information. The responses were elicited from the respondents on a 5 point likert scale (5=Always , 4= Quite Often, 3= Sometimes , 2= Rarely, 1=Never). Reliability analysis were also performed using Cronbach Alpha coefficient method with a value of 0 .788 indicating this is reliable for further data analysis. Further , in order to address the objectives of the study, exploratory factor analysis was employed and was considered to be appropriate.

DATA ANALYSIS

TABLE NO. 1: DEMOGRAPHIC PROFILE OF THE RESPONDENTS (N = 126)

Characteristics	Category	Frequency	Percentage
1.Gender	Male	52	41.3
	Female	74	58.7
2.Age	Below 20	8	6.3
	21 - 30	36	28.6
	31 – 40	46	36.5
	41 – 50	13	10.3
	Above 50	23	18.3
3.Marital Status	Married	101	80.2
	Single	25	19.8
4.Educational Qualification	No formal Education	1	0.8
	Primary School	15	11.9
	Certificate/ Diploma	15	11.9
	Under graduate	39	31.0
	Post graduate	30	23.8
	Professional Degree	19	15.1
	Others	7	5.6
5.Occupation	Private sector	35	27.8
	Public Sector	4	3.2
	Self employed	12	9.5
	Professional	14	11.1
	Retired	10	7.9
	Homemaker	34	27.0
	Students	16	12.7
	Others	1	0.8

Source : Primary Data

INTERPRETATION

Before analysing the data provided by the samples, it is advisable to obtain some insights into the demographic characteristics of respondents participating in this study since it provides a background for the analysis that follows. Only a few demographic characteristics such as gender, age, marital status, education and occupation are studied, all of which were expected to be important in the interpretation of the results. Demographic variables such as gender, age, income and education attainment are frequently used for market segmentation purposes, primarily because these data are the most readily available and easy to measure among individual consumers (Pol 1991).

The sample consisted of slightly more female respondents (58.7%) as compared to male respondents (41.3%). Respondents spanned the range of age categories from 18 to 51 or over, with the majority (36.5%) of the respondents included in the survey sample being between the ages of 31-40, followed by the 21-30 group at 28.6%. The next largest age group was found to be age above 50 constituting 18.3% followed by 41-50 group at 10.3%. The least age group was below 20 years of age with 6.3%.

Respondents were also asked to provide information regarding their marital status. The analysis revealed that majority of the total sample, or 80.2% of the 126 respondents included were married while 19.8% were single. Statistics on occupation showed that a large proportion of the respondents (27.8%) were employees working in the private sector while 27.0% of the respondents were homemakers. Students and Professional (e.g. doctors,teachers,engineers etc.,) respondents constituted 12.7% and 11.1% of the sample respectively. The remaining sample constituted 21.4% consisting of self-employed (9.5%), retired (7.9%), public sector employees (3.2%) and others (0.8%).

As far as the educational level was concerned, the largest percentage of respondents(31%) possessed under graduation degree while 23.8% earned a postgraduate degree.15.1% had obtained professional degree.11.9% of the total respondents had attained some Certificate or diploma while the same 11.9% had completed primary school education. The remaining sample had no formal education(6.4%). The high proportion of respondents having a high education level was due to the urban nature of the sample. Education was found to be a component of patronage in some studies (Crask and Reynolds, 1978; Shim & Bickle, 1994; Kopp, et al, 1989).

Table 1 presents the key demographic characteristics of the sample in the study. In summary, the sample included in this study appeared to be elders aged between 31 and 40, more educated and includes more females, who proved that they are the one who often does shopping. This finding replicated the finding of O'Cass(2004) which stated that female consumers are more involved with fashions than male consumers. The research by Hsiao,C., & Dickerson, K.,1995 indicated that as education levels increase, consumers are more discerning in their apparel purchases.

FACTOR ANALYSIS ON INFORMATION SOURCES

The Kaiser-Meyer-Olkin measure of sampling adequacy test of sample adequacy was 0.707 and the Bartlett's test of sphericity was significant at $p < 0.05$ proving that the data were therefore deemed appropriate for factor analysis. Principal components factor analysis with a Varimax rotation was used to factor the various twelve information sources which are grouped into four factors explaining 62 percent of the total variance. Each one of these factors had an eigenvalue which was greater than one.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.707
Bartlett's Test of Sphericity	Approx. Chi-Square	498.056
	df	66
	Sig.	.000

TABLE NO. 2: KMO AND BARTLETT'S TEST FOR INFORMATION SOURCES

Factor and Variables	Factor loadings	Alpha	% of Variance
Factor 1 :Fashion source			
1.Fashion Catalogs	0.882		
2.Fashion Magazine	0.856	0.866	23.765
3.Fashion Shows	0.848		
Factor 2 :Professional advice			
4.Sales persons advice	0.799		
5.Personal opinion from shoppers	0.793	0.664	16.561
6.Store displays/Demonstration	0.496		
7.Posters and Banners	0.445		
Factor 3 :Media Source			
8.Radio/Television	0.824		
9.Magazines/Newspaper	0.793	0.614	15.613
10.Internet	0.546		
Factor 4 :Personal Source			
11. Friends/ Family / Relatives	0.842	0.366	11.118
12.Notices/ Pamphlets	0.604		

Extraction Method: Principle Components Analysis, $p < 0.05$; variance explained 62%

The first factor explains 23.77 percent of the total variance and has three items namely Fashion Catalogs, Fashion Magazine and Fashion Shows.Thus this factor was labelled as "**Fashion source**" with a cronbach's alpha value of 0.866 indicating high internal consistency. The second factor contains four variables viz. Sales persons advice,Personal opinion from shoppers,Store displays/Demonstration,Posters and Banners explaining 16.56 percent of the total variance with an alpha coefficient of 0.664.This factor was named as " **Professional advice"** which is corrabated with the findings of Kelly.S.Welker (2004 pp 40-41).

The third factor comprises of three variables (i.e Radio/Television ,Magazines/Newspaper and Internet) which have a Cronbach's alpha of 0.61 explaining 15.6 percent of variance.Since all the variables is related to the media, this factor was conceptually labelled as " **Media Source**" .This is reminiscent of an Information Sources identified by Kelly.S.Welker (2004 pp 40 – 41), Shim and Kotsiopulos(1992a) and Mohammed Safeik (2006).

Finally the last factor which was coined as "**Personal Source**" consists of two items namely Friends/ Family / Relatives and Notices/Pamphlets explaining 11.12 percent of the variance.The Cronbach's alpha for this construct was 0.37 and the relatively low coefficient alpha rating of this factor can be attributed to the small number of items. This factor is consistent with the findings of Kelly.S.Welker (2004 pp 40 – 41), Shim and Kotsiopulos(1992a) and Mohammed Safeik (2006).

DISCUSSION AND MANAGERIAL IMPLICATIONS

It is evident from the results of this study that among the different sources of information available(viz Fashion Source, Professional Advice, Media source and Personal Source) , Fashion sources like Catalogs , Magazine and Fashion Shows contribute more in influencing the apparel shoppers of Coimbatore city. This is because of the urban nature and people have easy access to a wide variety of fashion related resources.This shows that the customers are more fashion – oriented keeping in tune with the latest trends and styles.This finding is coherent with the findings of Workman and Studak(2006) which stated the female consumers invest time and energy in learning from fashion magazines,TV programs, relatives and peer.In addition to fashion Source, the other factors like Professional Advice, Media source and Personal Source must also be taken into consideration at the time of purchasing apparels.Among the Professional advice factors, 'Sales Persons Advice'(0.79) and 'Personal opinion from shoppers'(0.793) influences consumer to a larger extent.Hence the retail manager should seriously concentrate more in this aspect and provide proper training, motivation and guidance to their sales personnel to have up-to-date current fashion and styles. Since most of the customers are attracted by the display of the store, retailers must be innovative in enhancing the display in terms of product variety, color combination, lighting and the place of display.The result proved that customers are not much interested in posters and banners to know their trendy fashion.

Under Media Source, the components that were found important in influencing customers are Radio/Television(0.824),Magazines/Newspaper(0.793) and Internet(0.546).These mass-media communications provide an important sources of information that influences the formation of consumer attitude(Shiffman and Kanuk, 2007).Therefore it is recommended to all the apparel retailers to place their advertisement in an appropriate media like Radio,TV, magazines to reach their targeted customers. From a managerial perspective, knowledge of consumers' usage of informational sources enables the marketer to target the prospective consumer and to predict media usage (Visser and Du Preez 1998).

On a final note to conclude ,utmost due importance should be given to personal sources like friends, family, relatives etc., which is considered to be an effective marketing strategy to improve crowd traffic and sales.

RECOMMENDATIONS FOR FURTHER RESEARCH

Like every other research studies, this study also has certain limitations.This study is limited to urban apparel customers with a small sample size.This can be extended to another product category with large sample size.Further studies could focus on investigating the various sources of information related to rural consumers. This research uses only external sources for acquiring information about the product.Future research could be focused on including internal sources of information like past shopping experience.Another area for future research could be the impact of the Internet on the patterns of Information search behavior.

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ONLINE TRAINING: ADVANTAGES–DISADVANTAGES AND KEY CONSIDERATION FACTORS FOR IMPLEMENTING ONLINE TRAINING IN THE ORGANIZATIONS

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ABSTRACT

The present paper signifies the increasing impact of Online training as a valuable and cost-effective method for continuous education and overall productivity enhancement that provides employees with well-rounded individuals and motivated employees dedicated to building the business. Nowadays learning with technology has been realized by organizations as an innovative form of training. Comprehensively training the employees gives the company an edge in today's competitive market. Online training and e-learning are providing more and more companies with the opportunity to train their employees more effectively and efficiently. Online training allows companies to thoroughly train their employees in engaging and interactive manner, and provides the flexibility that is needed in today's rapidly growing workforce. Online training ensures that all employees will have the in-depth knowledge of the programs they are using, maximizing productivity and improving the quality of their work and also keeps employees well updated with new programs and software. Online training allows employees to learn at their own pace and at a time that's convenient for them ,it helps in tracking result easier, an employer is better able to see who has completed training and review their scores. Online training comes with certain limitations; there are issues and challenges related with this form of training. The main barriers to successful e-Learning are the lack of learning culture in the organization, lack of knowledge about e- learning and the perception that online training will not add value to the organization.

KEYWORDS
Online Training, Importance of Online Training, Advantages –Disadvantages of Online Training, key consideration factors for implementing Online Training.

INTRODUCTION

An increasing number of employers are turning to Online Employee Training for interactive learning as Internet technology has improved and Web access has become omnipresent. This form of training is more economical both in time and money than conventional training. In recent years, there has been a rapid development of computer networks, improvement in the processing power and advances in storage technology. These developments have made computer a dynamic force in training, learning and development, providing a new interactive means of overcoming time or distance barriers.

Online training is a software-based teaching program installed on a computer or a computer network. These programs feature a section for teaching, informal quizzes and tests and/or a final exam. Depending on the software, tests may be multiple choice, true/false, fill-in-the-blanks, and sometimes even essay. Some online training is text-only, but programs that are more sophisticated have video, flash animations, audio content, or a combination of all three. Online Training, web-based training is sub-set of broader framework of E-learning. Online training can be used as:-

- A sole source of learning
- As a supplement to traditional training
- As a follow-up to traditional training
- As an alternative to traditional training

Online training can be synchronous or asynchronous. Synchronous means at the same time. In training, it is Instruction delivered via a network that requires learners and an instructor to be online at the same time to participate in learning interactions. This type of delivery is live and is place independent, but time dependent. For example, a web broadcast seminar that is sent on a certain date and time is an example of synchronous Delivery. Although the participants in the web seminar do not have to be physically present at the date and time of the scheduled delivery to participate. Conversely, asynchronous delivery is both time and place independent .A training course available at the convenience of the individual end user 24 hours a day, 7 days a week is an example of asynchronous delivery.

Online training programs are also extremely beneficial to the company. Online training provides consistency in the quality of training; it signifies more people working rather than training. It allows for flexibility in a training schedule. An employee can take his/her online computer training course during down time at work or at home. E learning allows for more energy to be focused on the day to day operations of the company, while still providing exceptional training. Training not only develops people's technical understanding, but it also helps to build employee confidence, interpersonal skills, communication skills, quality management and team work skills – all things any company should view as crucially important for organizational and professional growth.

OBJECTIVE/NEED OF THE STUDY

1. To study the importance of Online Training.
2. To identify the Advantages and Disadvantages of Online Training.
3. To explore issues which need to be addressed when implementing Online Training program in the organization.

RESEARCH METHODOLOGY

Research methodology is the process of systematically solving the research problem. It may be understood as a science of study how research is done scientifically. Data collection is done from secondary sources such as books, periodicals research review, and website. This is an exploratory research based solely on insights drawn from the analysis of the existing literature of different studies, reports, periodicals and books related to the topic of study in order to investigate the impact and importance of Online Training. This research work will serves as a means to help acquire useful information or Knowledge about the subject area.

IMPORTANCE OF ONLINE TRAINING

Training is essential to the continuing success of a business – both in terms of practicalities, and employee satisfaction and retention. Training refers to bridging the gap between the current performance and the standard desired performance. Training programs not only develops employees but also help an organization to make best use of their human resources in favor of gaining competitive advantage. For employees, training is often now a natural expectation at interview stage – it's in an individual's interest to continuously learn and develop professionally in an environment that fosters growth .For employers, training increases employee retention rates, because employees are more loyal to companies that value individual growth and provide conditions to cultivate it.

Online Training apparently offers training and development professionals a tool for crafting the flexible and high-quality learning programs that their organizations need to meet strategic objectives and succeed in today's fast-paced global marketplace. Online Training courses are available anytime, anywhere and employees can access knowledge and expert systems on an as-needed basis. Employees can gain control over when and where they receive training, similarly they can choose the type of media (print, sound, video) they want to use in training program. Course enrollment, testing, and training records can be handled electronically, reducing the paperwork and time needed for administrative activities. Employees' accomplishments during training can be monitored. Online Training allows learners to collaborate or interact with other trainees and experts and they may link to other learning resources such as reference materials, company Web sites and other training programs.

E-learning supports company initiatives such as expanding the number of customers, initiating new ways to carry out business such as e-business, and speeding the development of new products or services. The audience can include employees and managers as well as vendors, customers, and clients, training can be delivered to geographically dispersed employees. Training can be delivered faster and to more employees in a shorter period of time. The employees can create action plans at the end of each segment in their training that they complete and make efforts to reinforce what they've learnt. By doing so, they can then be held accountable by a company to implement the things they've learnt in a working environment. There are no practical costs involved in online learning, such as travel costs or accommodation, which might be involved for someone attending a course and this makes it cost –efficient.

Online Training is effective for a wide range of outcomes including knowledge, skills, and behaviors. It is the most effective for training that emphasizes cognitive outcomes such as Declarative and procedural knowledge and facilitates greater social interaction between trainees than face-to-face learning methods because other trainees are equally accessible or more accessible than the instructor and there are more methods available that allow learners to interact, such as e-mail, group projects, whiteboards, wiki documents and chat rooms.

ONLINE TRAINING ADVANTAGES

1. **Extendibility, Accessibility, and Suitability –**Employees can proceed through a training Program at their own pace and at their own place. They can also access the training at any time, receiving only as much as they need. In other words, "just in time and just enough."
2. **More Flexible and Lower cost** – E-Learning can be done in short chunks of time that can fit around daily schedule. Instead, employees have a set amount of learning, normally divided into modules, with a deadline .Online Training tends to be much cheaper option because trainer's time or any room or equipment is not being used.
3. **Convenient and Relevant**- As employees struggle to balance the demands of work and home; e-Learning allows them to learn from work, home and on the road. Since course content includes the most current topics, e-Learning ensures training is applicable to a person's career path.
4. **Immediate and Fun**- Delivery over the Internet enables on line Training to begin with just a few mouse clicks. By providing a captivating interactive environment with dynamic content, e-Learning not only effectively keeps people up-to-date, but interested as well**.**
5. **Inexpensive worldwide distribution** - No separate or distinct distribution mechanism is needed (i.e., distributing CD-ROMs for CBT training). WBT can be accessed from any computer anywhere in the world while at the same time keeping delivery costs down. It can be accessed by web browsing software on any platform: windows, MAC, UNIX, etc.Training course can be delivered to any machine over the Internet or company intranet without having to develop a different course for each unique platform.
6. **Travel cost and time savings** – Training is delivered directly to the learner instead of the other way around, it can be done wherever you have a device capable of doing so. Therefore again employees can fit it in to their schedule. So employees can save time and save money on the costs of travel.
7. **Self Directed, Convenient and easy to use**- Employees can learn at their own pace and maintain control of learning "where, when and how" with unlimited access 24/7. Employee has to open an Internet browser and they are up and can run quickly training program.
8. **Direct access to many other training resources** - The Internet gives access to the largest library in the world. Employees have to capitalize on the offerings that have already been created, and use them to enhance the training.
9. **Mobile** – As eLearning can be done on laptops, tablets and phones – it is a very mobile method. Learning can be done on the train, on a plane or any other time that could normally be wasted; the whole world can now is a classroom.
10. **Technological Possibilities** – Online Training is rapidly becoming more and more popular method; new technology is being introduced all the time to help with the learning. Different apps help to further reinforce the learning whilst forums can be used to greatly increase the amount of interaction and engagement between learners.
11. **Global** – The untapped WBT market is still large, with very few restrictions companies can be confident that their staff can receive the same content regardless of their location, and in many cases, their nationality. Therefore Online Training is a useful way of ensuring this happens with ease and reduced cost.

ONLINE TRAINING DISADVANTAGES

1. **Lack of Control**– If the training is being conducted by an outside company and material being used for conducting Online Training is not what's needed for proper training, then the expense of that employee training is wasted. Similarly employees with low motivation did not show enthusiasm for training and they tend to fall behind or do not match with the pace of active learners. A lack of routine or fixed schedule will result complicated Online Training program.
2. **Learning Approach** – It doesn't appeal to all learning styles, a major point of consideration is that all people are different and feel happier learning in different ways. In this respect, some people will prefer to be taught in a classroom environment with other delegates, some may prefer images, another group of employees will be attracted by just reading words and some prefer to talk about or actually do a task in order to learn. It is still a challenge to make Online Training appeal fully to different style of learners.
3. **Isolated** – Online courses are solitary, with no human interaction; the employees do not have a trainer to ask for help or question if there is something they do not understand. Employees may prefer to do their training out of working hours; while trainers often prefer to answer numerous questions only doing it within working hours. This may create feeling of isolation among employees and they often get demotivated when they feel they don't have the support and reassurance that the physical presence of a trainer provides.
4. **Technology Issues-** Slow Internet connections or older computers and unavoidable general random faults may make accessing course materials frustrating. Employers have to ensure that all the trainees have a device that is able to support the training modules.
5. **Newness** - Information changes and whatever you learn today will probably change by next month or next week. Since recent emergence to the training arena, new technologies are taking place frequently. Time, experience, and money are required to take full advantage of its capabilities.
6. **Feedback limitation** - The Internet provides a brilliant means to get all kinds of information back and forth to employees, but it also makes it harder to assess some types of feedback and information. Online Training restricts the idea of discussing training contents with the trainers to some extent, it depersonalizes the process. New employees rather prefer to learn from someone face-to-face training with someone who can answer the questions and makes the training session energetic.
7. **Computer Competency** – In organization some employees might not be too comfortable using computers, especially if their jobs don't require them to, even if the software is user friendly, the thought of using the software can be discouraging and demotivating. Therefore these employees are likely to learn a lot less than they would from a physical course. Managing computer files and online learning software can sometimes seem complex for employees with beginner-level.
8. **Time Constraint -** If the time allotted for training is insufficient for the amount of information in the training program, then the trainer either needs more time than the allotted time for training schedule or less training content will be presented. In both the situation employees will be adversely affected. Again if too many employees are attending Online Training Program at one time than time scheduling with quick, adequate and right training becomes a major issue. It does not make any sense as sufficient time is not allowed for covering all training material and more questions are left unanswered.
9. **Trainer Quality**- It takes a special person to be a trainer for conducting Online Training; they have to have a passion for training and they have to know what they're talking about. Employees being trained can quickly ascertain if the person doing the training is knowledgeable, competent, and approachable. The wrong trainer can do more harm than good.

KEY CONSIDERATION FACTORS FOR IMPLEMENTING ONLINE TRAINING

In the direction of implementing successful Online; Training course needs good quality, well delivered material supported by tutorials, advice and Counseling and an overall support system which will effectively manage the program. The trainer should devise ways to capture and hold learner's attention and also needs to organize or deliver the training courses in ways different from traditional lecture formats. The key consideration quality initiatives points that should be taken care of while implementing Online Training in the organization are as below:

1. Adequate infrastructure and technical support.
2. Adequate development and preparation time for designing training material.
3. Clearly articulated directives for structure learning activities such as assignments, cases, discussions specifically for the online motivational learning environment.
4. Trainer must understand the very need of training, they should get specific with the content and must do research.
5. Capture and hold the learners' interest and engage the employee with positive attitude towards training.
6. Select the right delivery and tracking system .Present materials graphically and provide relevant examples in a situational context.
7. Consent to flexibility across technology formats so that employees can learn at home, on the job, or anywhere they can use their Smartphone and watch presentations again and again if needed.
8. Prompt feedback by the trainer and satisfied answers to be given to the queries of learners.

CONCLUSION

Embracing Online Training by organizations is a good initiative as they cannot use traditional training methods if they want to stay in today's competitive market. In fact, some companies have also begun to utilize this to equip their employees with additional skills and knowledge in order to improve the quality of service that they provide to their customers and clients as well as increase in product output. Online Training delivers content through electronic information and communication technologies (ICT's) and has potential to transform how and when employees learn.

Convenience and flexibility are the number one advantages provided by Online Training. Some more benefits which are included in its sphere are; it eliminates geographic barriers and reduces travel time. Provides a format for self-paced and is also preferred because of its cost-effectiveness .Organizations can enhance the probability of getting a solid return on their training investment by including several elements of an Online Training model design. Although there is no doubt that this method has proven to be beneficial to many individuals and companies in all part of the world, there are also a number of disadvantages credited to it.

A major barrier to Online training is the challenge of changing mind –set of the employers and employees as to some extent both are still locked into the traditional models of training delivery and have an opinion that Online Training does not add any significance worth to organization and are unwilling to change. Managers and training departments need to determine when online training is a feasible strategy. There are two main groups whose cooperation and support are critical for the development and implementation of Online Training, the management of the organization and the employees themselves.

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SOLVENCY POSITION OF SELECT INDIAN BULK DRUGS AND FORMULATIONS PHARMACEUTICALS COMPANIES IN INDIA

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ABSTRACT
Solvency or Financial ratio includes all ratio which express financial position of the concern. Financial Ratio are calculated on the basis of items of the Balance Sheet. The term financial position generally refers to short-term and long-term solvency of the business concern. The researcher has applied the solvency ratio on the sample selected among Indian bulk drugs and formulation pharmaceuticals companies.[1] It is concluded that Solvency position in Aurobindo Pharma is good among the other pharmaceutical companies in India followed by Cipla, Cadila Healthcare, Ipca, Dr.Reddy's, Ranbaxy and Sunpharma

KEYWORDS
Current Ratio, Liquid Ratio, Debt Equity Ratio, Fixed Assets Ratio and Proprietary Ratio.

INTRODUCTION
Financial performance analysis is the process of determining the operating and financial characteristics of a firm from accounting and financial statements. The goal of such analysis is to determine the efficiency and performance of firm's management, as reflected in the financial records and reports. The analyst attempts to measure the firm's liquidity, profitability and other indicators that the business is conducted in a rational and normal way; ensuring enough returns to the shareholders to maintain at least its market value.

Indian pharmaceutical industry has played a key role in promoting and sustaining development in the vital field of medicines. It boasts of quality producers and many units have been approved by regulatory authorities in USA and U.K. International companies associated with this sector have stimulated, assisted and spearheaded this dynamic development in the past 58 years and helped to put India on the pharmaceutical map of the world. The public sector has been the backbone of the Indian economy, as it has acted as a strategic partner in the nation's economic growth and development. Public sector enterprises possess strong prospects for growth because they harness new business opportunities, and at the same time expanding the scope of their current business.

Solvency generally refers to the capacity or ability of the business to meet its short-term and long-term obligations. If a company is in a position to pay its long-term liabilities easily, it is said to possess long term solvency. If a company's financial position is strong to pay current liabilities, it is regarded as short term solvency. Higher the ratio, the greater amount of firm's creditors' money that is used to generate profits for the firm's owners.

The ability of an organization to analyze its financial position is essential for improving its competitive position in the marketplace. Through a careful analysis of its financial performance, the organization can identify opportunities to improve performance of the department, unit or organizational level. In this context researcher has undertaken an analysis of solvency position of pharmaceutical companies to understand how management of finance plays a crucial role in the growth.[2]

LITERATURE REVIEW
Mohamed Ibrahim (1991)[3] in his study analysed the Financial Performance of Kalesswarar Mills on different heads in the following way of ratio analysis. (i) Fixed Assets Turnover Ratio (ii) Current Ratio (iii) Working Capital Turnover Ratio in Current Assets Turnover Ratio (v) Inventory Turnover Ratio (vi) Receivable Turnover Ratio (vii) Profitability Trend Analysis.

Reddy et al. (1996) [4] have made an attempt to study the working capital management of the Hindustan Computer Limited (HCL). They found that liquidity position of the HCL was satisfactory. The turnover ratio of HCL revealed that company's ability in managing the current assts period on the whole, it was concluded that working capital management was not up to expected level. They have suggested measures for the effective utilization and control of current assets.

Vijayakumar (1996) [5] has made an attempt to assess the corporate liquidity with the help of discriminate analysis. He found out that industries with lower current and liquid ratios are in the high–risk group and the industries with higher current and liquid ratio are in the low risk group where the standard current and liquid ratios are 2:1and 1:1 respectively. He found out that the private sector sugar mills have maintained a better liquidity position than the co–operative sector sugar mills.

Dheenadhayalan (2008)[6] had made an attempt to analyse the efficiency in the liquidity management of Steel Authority of India Limited. In his article he described Liquidity is the most important term in business and the management of liquidity is most essential component of financial management. It plays a crucial role in the success of business firm. The liquid assets may be defined as the money and assets that are readily convertible into money without any loss. Different assets may be said to exhibit different degree of liquidity. Money itself is, by definition, the most liquid assets; other assets have varying degrees of liquidity, depending on the case with which they can be turned into cash. In this study the main focus is on the most liquid assets of the company's cash, stock, receivables and marketable securities. Liquidity management involves determining the total amount of these assets the company will hold. The day to day

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[1] Reddy T.S. Hari Prasad Reddy, Management Accounting Margham Publication Page No.3.19
[2] Amalendu Bhunia, Srii Gautam Roy 2011. Finacial performance Analysis-A Case Study. Current Research Journal of Social Sciences. Pp 269-270.
[3] Mohamed Ibrahim M., 1991. Financial Performance of Kaleeswarar Mills. Unpublished M.Phil. Dissertation, Department of Commerce, Annamalai University.
[4] Indrasena Reddy P. and Someshwar Rao K. Working Capital Management in Public Sector Undertakings-A Case Study, The Management Accountant, Vol. 31(9), September 1996, Pp. 643-645.
[5] Vijaakumar A., Assessment of Corporate Liquidity- A Discriminant Analysis Approach, The Management Accountant Vol. 31 No.8, Pp.589-593.
[6] Dheenadhayalan V. 2008, "Liquidity Management of SAIL: An Empirical Study", Southern Economist, Vol-14, No-11, Pp 26-28,

problems of liquidity management consists of highly important task of finding sufficient cash to meet current obligations. If company does not have sufficient liquidity, it may not be in a position to meet its commitments and thereby may lose its creditworthiness. In this context, excessive liquidity is harmful, excess cash cannot be justified for any company.

Dheenadhayalan et al. (2009)[7] financial ratios are most frequently and widely used in practice to assess the firm's financial performance. Use of ratio not only helps the company but also gives a clear picture about the status of business. Therefore, it is much important and useful in taking future decisions. In this context, an attempt has been made to study the financial performance of steel giant in Indian Public Sector Enterprises namely Steel Authority of India Limited.

OBJECTIVES OF THE STUDY

To analyze the solvency position of select Indian Bulk Drugs and Formulations Pharmaceutical Companies in India.

RESEARCH METHODOLOGY

Research is a process of systematically obtaining accurate answers to significant and pertinent questions by the use of scientific method of gathering and interpreting information. This study is based on the secondary data i;e financial information from the company's annual reports. The study is focus on solvency position of the companies. To achieve the objective of the study the financial analysis technique is applied on the company's financial statements for the period of 2001-2012 to analyze the solvency position of the companies. [8]

SOURCES OF DATA

This study is based on the secondary data from published annual reports of companies. The information related to pharmaceutical companies have been collected from various websites, magazines and from the government of India publication.

STUDY PERIOD

The period of the present study is from 2000-01 to 2011-12.

SAMPLE DESIGN

There are 70 Pharmaceutical companies in India as on 2009 out of these 14 are Indian Bulk Drugs companies, 21 are Indian Formulations companies, 10 are MNC and 26 are Indian BD & F companies, out of these companies the researcher has selected Top 10 Indian Pharmaceutical companies on the basis of Turnover[9] and out of which the researcher has chosen only Indian BD & F companies as a the sample companies for the study. The sample size of the present study is '07' Indian BD& F pharmaceuticals Companies.

The samples for the study are as under:

1.Aurobindo Pharma, 2.Cadila Healthcare, 3.Cipla, 4.Cipla, 5. Dr.Reddys Laboratories, 6.Ranbaxy and 7.Sunpharma

DATA ANALYSIS AND INTERPRETATION

1. CURRENT RATIO

Current ratio indicates the ability of a concern to meet its current obligations as and when they are due for payment. This ratio is the most common ratio for measuring liquidity. It expresses the relationship between current assets and current liabilities. This ratio must be regarded as a crude measure of liquidity however, because it does not take into account the liquidity of the individual components of the current assets. Normally a current ratio of 2:1 is considered satisfactory.[10]

TABLE 1: CURRENT RATIO

Year	Aurobindo	Cadila	Cipla	Ipca	Dr.Reddys	Ranbaxy	Sunpharma
2001	3.25	2.13	1.14	4.04	4.18	2.27	3.07
2002	3.72	2.05	1.16	1.94	6.26	2.19	2.64
2003	3.35	0.57	1.16	2.33	5.69	2.22	2.13
2004	5.15	0.44	1.11	2.03	3.78	1.7	1.17
2005	4.81	0.51	1.25	1.85	4.15	1.98	6.54
2006	4.84	0.92	1.52	1.25	3.86	2.01	6.5
2007	6.41	0.54	2.01	1.91	5.03	1.8	7.69
2008	5.06	1.25	2	2.42	3.85	1.21	1.82
2009	5.01	1.19	2.15	2.12	3.25	1.36	1.86
2010	4.19	0.98	2.57	2.9	1.04	2.04	1.59
2011	4.1	1	2.99	2.92	1.61	1.09	2.82
2012	1.14	0.69	2.88	1.16	1.06	0.86	2.79
Mean	**6.69**	**1.02**	**1.83**	**2.24**	**3.65**	**1.73**	**3.39**
S.D	**8.22**	**0.57**	**0.7**	**0.78**	**1.69**	**0.48**	**2.21**
C.V	**123**	**55.4**	**38.5**	**35**	**46.3**	**28**	**65.4**
C.A.G.R	**-24.4**	**-9**	**7.99**	**-9.87**	**-10.8**	**-7.81**	**-0.8**
Maximum	**32.5**	**2.13**	**2.99**	**4.04**	**6.26**	**2.27**	**7.69**
Minimum	**1.14**	**0.44**	**1.11**	**1.16**	**1.04**	**0.86**	**1.17**

Source: Compiled and Calculated from Annual Reports of Respective Pharmaceutical Companies

It was found and concluded that the average Current Ratio ranged from 6.69 times in Aurobindo Pharma and 0.81 times in Cadila Healthcare. Further Standard Deviation of current ratio is 8.22 times in Aurobindo Pharma and 0.3 times in Cadila Healthcare, the Co-efficient of Variation of current ratio is 123 per cent in Aurobindo Pharma and 28.00 per cent in Ranbaxy and the Compound Annual Growth Rate of current ratio is 7.99 per cent in Cipla and -24.4 per cent in Aurobindo Pharma of Indian Bulk Drugs and Formulations Companies in India respectively.

To find the significant differences between the companies with respect to current ratio during the study period Anova Test was further used and presented in the following Table 2:

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[7] Dheenadhayalan. V and Kandasamy.S, 2009, "Financial Performance of Steel Authority of India Limited: An Empirical Study", The Accounting world, Vol-IX issue – II.

[8] Sudesh Kumar, Bimal Anjum and Suman Nayyar. 2012,"Financing Decisions: A Study of Pharmaceutical Companies in India. International Journal of Marketing. Vol.1No.1

[9] Corporate India (2009) November
http://www.maheshsundar.com/Home/top-india-pharma-companies-by-revenue

[10] Reddy T.S. Hari Prasad Reddy, Management Accounting Margham Publication Page No. 3.20

TABLE 2: ANOVA FOR CURRENT RATIO

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	100.897	6	16.816	10.543	.000
Within Groups	122.812	77	1.595		
Total	223.709	83			

Source: Computed by the Researcher using table 1

It was found from the Table 2 that the "F"- value of Current Ratio of sample units showed 10.543 and the significant 5 per cent level is "0.000". It was found that the significant value is less than 0.05; hence it was concluded that there is significant differences between the sample units with respect to current ratio. Therefore to find the significant sample unit with respect to current ratio the Duncan Analysis is applied on the sample units to identified the mean difference microscopically.

TABLE 3: DUNCAN ANALYSIS FOR CURRENT RATIO

Companies	N	Subset for alpha = .05		
		1	2	3
Cadila Health Care	12	1.0224		
Ranbaxy	12	1.7266	1.7266	
Cipla	12	1.8303	1.8303	
IPCA	12		2.2387	
Sunpharma	12			3.3856
Dr.Reddy's Lab	12			3.6469
Aurobindo Pharma	12			4.2497
Significance		.143	.354	.117
Means are displayed a Uses Harmonic Mean Sample Size = 12.000				

Source: Computed by the Researcher using table 1

It was found from the Duncan analysis that the Aurobindo Pharma is the major company has significant difference with respect to current ratio among the sample units select for the study. With respect Current Ratio it was found that among Indian Bulk Drugs and Formulations Companies in India the Current Ratio position for Aurobindo Pharma is good compare to other Indian Bulk Drugs and Formulations Companies in India.

A high current ratio of Aurobindo Pharma is an assurance that the firm will have adequate funds to pay current liabilities and other current payments.

2. LIQUID RATIO

Liquid ratio is also known as Quick ratio. It is calculated by comparing the quick assets with current liabilities. Quick or liquid assets refer to assets which are quickly convertible into cash. Current assets other than stock and prepaid expenses are considered as quick assets.

Thus, less the quick ratio, higher the incidence of inventory in inflating the current ratio. The higher the quick ratio, lower the incidence of inventory in inflating the current ratio. [11]

TABLE 4: LIQUID ASSETS RATIO

Year	Aurobindo	Cadila	Cipla	Ipca	Dr.Reddys	Ranbaxy	Sunpharma
2001	1.95	0.99	0.21	1.99	3.01	1.49	1.35
2002	2.91	1.18	0.28	0.74	5.31	1.43	1.06
2003	2.45	-0.3	0.18	1.03	4.81	1.58	1.07
2004	3.67	-0.2	0.28	0.64	3.04	1.04	0.31
2005	3.24	-0.3	0.29	0.42	3.46	1.2	5.69
2006	3.55	0.1	0.47	0.07	3.13	1.25	5.58
2007	4.83	-0.2	0.97	0.26	4.37	1.18	6.29
2008	3.6	0.37	1.1	0.8	3.02	0.92	1.43
2009	3.59	0.31	2.05	0.71	2.63	1	1.33
2010	2.71	0.27	1.33	1.12	0.51	1.6	0.65
2011	2.59	0.32	1.36	1.06	0.99	0.89	1.99
2012	0.68	0.3	1.33	0.12	0.62	0.63	2.16
Mean	2.98	0.23	0.82	0.75	2.91	1.18	2.41
S.D	1.04	0.48	0.62	0.53	1.56	0.3	2.14
C.V	34.9	203	75.2	70.5	53.5	25.5	89
C.A.G.R	-8.5	-9.4	16.5	-20.6	-12	-6.9	4.02
Maximum	4.83	1.18	2.05	1.99	5.31	1.6	6.29
Minimum	0.68	-0.3	0.18	0.07	0.51	0.63	0.31

Source: Compiled and Calculated from Annual Reports of Respective Pharmaceutical Companies

It was found and concluded that the average of liquid assets ratio is 2.98 times in Aurobindo Pharma and 0.23 times in Cadila Healthcare. Further the Standard Deviation liquid assets ratio is 2.14 times Sunpharma and 0.3 times in Ranbaxy, the Co-efficient of Variation of liquid assets ratio is 203.00 times in Cadila Healthcare and 25.5 times in Ranbaxy and the Compound Annual Growth Rate of liquid assets ratio is 16.5 times in Cipla and -20.6 times in Ipca of Indian Bulk Drugs and Formulations Companies in India.

To find the significant differences between the companies with respect to liquid assets ratio during the study period Anova Test was further used and presented in the following Table 4.1:

TABLE 4.1: ANOVA FOR LIQUID ASSETS RATIO

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	91.798	6	15.300	11.794	.000
Within Groups	99.885	77	1.297		
Total	191.682	83			

Source: Computed by the Researcher using table 4

It found from the Table 4 that the F-value of Liquid Assets Ratio of sample units showed 11.794 and the significant at 5 per cent level is 0.000. It was found that the significant value is less than 0.05; hence it was concluded that there is a significant differences between the sample units with respect to liquid assets ratio. Therefore to find the significant sample unit with respect to liquid assets ratio the Duncan Analysis is applied on the sample units to identify the mean difference microscopically.

[11] Pillai R.S.N. and Bagavathi, Management Accounting, S.Chand Page No.59.

TABLE 5: DUNCAN ANALYSIS FOR LIQUID ASSETS RATIO

Companies	N	Subset for alpha = .05	
		1	2
Cadila Healthcare	12	.2345	
Ipca Laboratiories	12	.7463	
Cipla	12	.8212	
Ranbaxy	12	1.1839	
Sunpharma	12		2.4100
Dr.Reddys	12		2.9090
Aurobindo pharma	12		2.9814
Significance		.065	.252
Means are displayed a Uses Harmonic Mean Sample Size = 12.000			

Source: Computed by the Researcher using table 4

It was found from the Duncan analysis that the Aurobindo Pharma is the major company has significant difference with respect to liquid assets ratio among the sample units select for the study. With respect to Liquid Assets Ratio it found that among Indian Bulk Drugs and Formulations Companies in India the liquid ratio position for Aurobindo Pharma found to good compare to other Indian Bulk Drugs and Formulations Companies in India.

Higher ratio of Aurobindo Pharma indicates sound financial position of the company. Lower ratio of Cadila Healthcare indicates financial difficulty of the company.

3. DEBT EQUITY RATIO

The financing of total assets of a business concern is done by owner's equity (also known as internal equity) as well as outside debts (known as external equity). This ratio is ascertained to determine long-term solvency position of a company. [12]

TABLE 6: DEBT EQUITY RATIO

Year	Aurobindo	Cadila	Cipla	Ipca	Dr.Reddys	Ranbaxy	Sunpharma
2001	25.1	18.78	12.5	26.1	29.3	14.9	6.3
2002	33.7	27.58	15.4	24.1	38.5	10.1	11.7
2003	45.5	30.29	19.4	27.3	48	12.7	11.4
2004	54.2	30.1	24.6	17.7	55	14.2	19
2005	63.7	31.4	29.2	22.3	61.4	18.3	13.8
2006	79.3	37.25	40.9	23.3	83.1	29.7	34.1
2007	109	21.18	21.6	29	56	37.2	35.9
2008	111	28.55	27.9	38.3	62.7	34.6	41.6
2009	128	30.1	34	43.6	70.1	34.8	50
2010	139	32.5	36.9	53	76.8	44.6	55.5
2011	168	250.2	43.9	63	88.2	29.7	65
2012	170	347.7	47.1	71.1	97.3	31.6	78.7
Mean	93.7	73.8	29.4	36.6	63.9	26	35.2
S.D	50.7	107.3	11.3	17.5	20.3	11.4	23.6
C.V	54	145.4	38.3	47.8	31.7	43.8	67
C.A.G.R	17.2	27.53	11.7	8.7	10.5	6.46	23.4
Maximum	170	347.7	47.1	71.1	97.3	44.6	78.7
Minimum	25.1	18.78	12.5	17.7	29.3	10.1	6.3

Source: Compiled and Calculated from Annual Reports of Respective Pharmaceutical Companies

It was found and concluded that the Average of debt equity ratio is 93.7 times in Aurobindo Pharma to 26.00 times in Ranbaxy. Further the Standard Deviation of debt equity ratio is 107.3 times in Cadila Healthcare to 11.3 times in Cipla, the Co-efficient of Variation of debt equity ratio is 145.4 times in Cadila Healthcare to 31.7 times in Dr.Reddy's Laboratories and the Compound Annual Growth Rate of debt equity ratio is 27.53 times in Cadila Healthcare to 6.46 times in Ranbaxy.

To find the significant differences between the companies with respect to debt equity ratio during the study period Anova Test was further used and presented in the following Table:

TABLE 7: ANOVA FOR DEBT EQUITY RATIO

	Sum of Squares	Df	Mean Square	F	Significance
Between Groups	48683.650	6	8113.942	3.638	.003
Within Groups	171752.734	77	2230.555		
Total	220436.384	83			

Source: Computed by the Researcher using table 6

It found from the Table 7 that the F-value of Debt Equity Ratio of sample units showed 3.638 and the significant at 5 per cent level is ".003". It was found that the significant value is less than 0.05; hence it was concluded that there is a significant differences between the sample units with respect to debt equity ratio. Therefore to find the significant sample unit with respect to debt equity ratio the Duncan Analysis is applied on the sample units to identify the mean difference microscopically.

TABLE 8: DUNCAN ANALYSIS FOR DEBT EQUITY RATIO

Companies	N	Subset for alpha = .05		
		1	2	3
Ranbaxy	12	26.0264		
Cipla	12	29.4481		
Sunpharma	12	35.2385	35.2385	
Ipca	12	36.5722	36.5722	
Dr.Reddys	12	63.8631	63.8631	63.8631
Cadila Healthcare	12		73.8011	73.8011
Aurobindo Pharma	12			93.7467
Significance		.083	.071	.148
Means are displayed a Uses Harmonic Mean Sample Size = 12.000				

Source: Computed by the Researcher using table 6

[12] Pillai R.S.N. and Bagavathi, Management Accounting, S.Chand Page No.64.

It was found from the Duncan analysis that the Aurobindo Pharma is the major company has significant difference with respect to debt equity ratio among the sample units select for the study. With respect Debt Equity Ratio it found that among Indian Bulk Drugs and Formulations Companies in India the debt equity ratio position for Aurobindo Pharma found to good compare to other Indian Bulk Drugs and Formulations Companies in India.

4. FIXED ASSETS RATIO

The ratio establishes the relationship between fixed assets and long-term funds. The objective of calculating this ratio is to ascertain the proportion of long-term funds invested in fixed assets.

TABLE 9: FIXED ASSETS RATIO

Year	Aurobindo	Cadila	Cipla	Ipca	Dr.Reddys	Ranbaxy	Sunpharma
2001	0.38	0.4	0.25	0.45	0.32	0.35	0.38
2002	0.3	0.41	0.32	0.47	0.24	0.35	0.38
2003	0.22	0.72	0.32	0.42	0.21	0.3	0.33
2004	0.27	0.69	0.37	0.41	0.22	0.33	0.31
2005	0.27	0.69	0.42	0.53	0.24	0.35	0.34
2006	0.25	0.59	0.43	0.59	0.18	0.26	0.17
2007	0.2	0.56	0.41	0.52	0.15	0.61	0.17
2008	0.21	0.44	0.38	0.43	0.19	0.2	0.15
2009	0.2	0.41	0.38	0.52	0.21	0.22	0.14
2010	0.19	0.43	0.34	0.48	0.2	0.18	0.13
2011	0.16	0.4	0.41	0.44	0.23	0.3	0.12
2012	0.2	0.34	0.4	0.51	0.23	0.3	0.12
Mean	0.24	0.51	0.37	0.48	0.22	0.31	0.23
S.D	0.06	0.13	0.05	0.05	0.04	0.11	0.11
C.V	24.5	26.6	14.6	11.2	19.6	35.1	48
C.A.G.R	-5	-1.3	4.08	1.08	-2.7	-1.3	-8.91
Maximum	0.38	0.72	0.43	0.59	0.32	0.61	0.38
Minimum	0.16	0.34	0.25	0.41	0.15	0.18	0.12

Source: Compiled and Calculated from Annual Reports of Respective Pharmaceutical Companies

It was found and concluded that the Average of fixed assets ratio ranged from 0.51 times in Cadila Healthcare to 0.22 times in Dr.Reddy's Laboratories. Further the Standard Deviation of fixed assets ratio is 0.13 times in Cadila Healthcare to 0.04 times in Dr.Reddy's Laboratories, the Co-efficient of Variation of fixed assets ratio is 48.00 per cent in Sunpharma to 11.2 per cent in Ipca and the Compound Annual Growth Rate of fixed assets ratio is 4.08 per cent in Cipla to -1.3 per cent in Ranbaxy and Cadila Healthcare.

To find the significant differences between the companies with respect to fixed assets ratio during the study period Anova Test was further used and presented in the following Table 10.

TABLE 10: ANOVA FOR FIXED ASSETS RATIO

	Sum of Squares	Df	Mean Square	F	Significance
Between Groups	1.045	6	.174	22.977	.000
Within Groups	.584	77	.008		
Total	1.629	83			

Source: Computed by the Researcher using table 9

It found from the Table 10 that the F-value of Fixed Assets Ratio of sample units showed 22.977 and the significant at 5 per cent level is ".000". It was found that the significant value is less than 0.05; hence it was concluded that there is a significant differences between the sample units with respect to fixed assets ratio. Therefore to find the significant sample unit with respect to fixed assets ratio the Duncan Analysis is applied on the sample units to identify the mean difference microscopically.

TABLE 11: DUNCAN ANALYSIS FOR FIXED ASSETS RATIO

Companies	N	Subset for alpha = .05		
		1	2	3
Dr.Reddys	12	.2164		
Sunpharma	12	.2269		
Aurobindo Pharma	12	.2386		
Ranbaxy	12		.3123	
Cipla	12		.3689	
Ipca	12			.4803
Cadila Healthcare	12			.5061
Significance		.562	.115	.471
Means are displayed a Uses Harmonic Mean Sample Size = 12.000				

Source: Computed by the Researcher using table 9

It was found from the Duncan analysis that the Cadila Healthcare is the major company has significant difference with respect to fixed assets ratio among the sample units select for the study. With respect fixed assets ratio it found that among Indian Bulk Drugs and Formulations Companies in India the fixed assets ratio position for Cadila Healthcare found to good compare to other Indian Bulk Drugs and Formulations Companies in India.

5. PROPRIETARY RATIO

This ratio compares the shareholders funds or owner's funds and total tangible assets. In other words this ratio expresses the relationship between the proprietor's funds and the total tangible assets.

TABLE 12: PROPRIETARY RATIO

Year	Aurobindo	Cadila	Cipla	Ipca	Dr.Reddys	Ranbaxy	Sunpharma
2001	0.06	0.95	0.97	0.51	0.59	0.7	0.95
2002	0.44	0.71	0.93	0.52	0.87	0.68	1.05
2003	0.44	0.54	0.9	0.63	0.86	0.67	1.11
2004	0.5	0.61	0.85	0.69	0.86	0.65	0.75
2005	0.45	0.65	0.9	0.64	0.75	0.56	0.38
2006	0.39	0.66	0.81	0.7	0.62	0.35	0.46
2007	0.3	0.69	0.95	0.73	0.84	0.39	0.7
2008	0.36	0.62	0.88	0.73	0.82	0.35	0.98
2009	0.35	0.65	0.85	0.6	0.78	0.39	1.01
2010	0.47	0.78	1.09	0.68	1.05	0.41	2.73
2011	0.49	0.83	0.96	0.72	0.87	0.14	1.03
2012	0.47	0.74	1.02	0.74	0.88	0.16	1.03
Mean	0.39	0.7	0.93	0.66	0.82	0.45	1.01
S.D	0.12	0.11	0.08	0.08	0.12	0.2	0.59
C.V	31	15.8	8.56	11.9	14.9	43.3	58.1
C.A.G.R	18.8	-2.1	0.36	3.08	3.41	-11	0.68
Maximum	0.5	0.95	1.09	0.74	1.05	0.7	2.73
Minimum	0.06	0.54	0.81	0.51	0.59	0.14	0.38

Source: Compiled and Calculated from Annual Reports of Respective Pharmaceutical Companies

It was found and concluded that the Average of Proprietary Ratio ranged from 1.01 times in Sunpharma to 0.39 times in Aurobindo Pharma. Further the Standard Deviation of proprietary ratio is 0.59 times in Sunpharma to 0.08 times in Cipla and Ipca, the Co-efficient of Variation of proprietary ratio is 58.1 times in Sunpharma to 8.56 times in Cipla and the Compound Annual Growth Rate of proprietary ratio is 18.8 times in Aurobindo Pharma to -11.00 times in Ranbaxy.

To find the significant differences between the companies with respect to proprietary ratio during the study period Anova Test was further used and presented in the following Table 13:

TABLE 13: ANOVA FOR PROPRIETARY RATIO

	Sum of Squares	Df	Mean Square	F	Significance
Between Groups	3.833	6	.639	10.146	.000
Within Groups	4.848	77	.063		
Total	8.680	83			

Source: Computed by the Researcher using table 12

It found from the Table 13 that the F-value of Proprietary Ratio of sample units showed 10.146 and the significant at 5 per cent level is ".000". It was found that the significant value is less than 0.05; hence it was concluded that there is a significant differences between the sample units with respect to proprietary ratio. Therefore to find the significant sample unit with respect to proprietary ratio the Duncan Analysis is applied on the sample units to identify the mean difference microscopically.

TABLE : 14 DUNCAN ANALYSIS FOR PROPRIETARY RATIO

Companies	N	Subset for alpha = .05			
		1	2	3	4
Aurobindo pharma	12	.3932			
Ranbaxy	12	.4540	.4540		
Ipca	12		.6572	.6572	
Cadila Healthcare	12			.7033	
Dr.Reddys	12			.8163	.8163
Cipla	12				.9257
Sunpharma	12				1.0147
Significance		.554	.051	.147	.070

Means are displayed a Uses Harmonic Mean Sample Size = 12.000 Source: Computed by the Researcher using table 12

It was found from the Duncan analysis that the Sunpharma is the major company has significant difference with respect to proprietary ratio among the sample units select for the study. With respect proprietary ratio it found that among Indian Bulk Drugs and Formulations Companies in India the proprietary ratio position for Sunpharma found to good compare to other Indian Bulk Drugs and Formulations Companies in India.

CONCLUSION

Analyzing solvency ratio namely; Current Ratio, Liquid Ratio, Debt Equity Ratio, Fixed Assets Ratio and Proprietary Ratio of select Indian Bulk Drugs and Formulations Pharmaceutical Companies in India from the year 2000-2001 to 2011-2012, it is concluded that Aurobindo Pharma is perform well among the other Indian Bulk Drugs and Formulation pharmaceutical companies in India with respect to solvency. It is followed by Cadila Healthcare, Cipla, Ipca, Dr.Reddy's, Ranbaxy Laboratories and Sunpharma.

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INSTITUTIONAL CREDIT AND RURAL DEVELOPMENT: A CASE STUDY OF DASARATHPUR BLOCK OF JAJPUR DISTRICT (ORISSA)

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ABSTRACT

This paper is an attempt for illuminating an unexplored area in the field of institutional credit by different Banking and Non-Banking sector. This study highlighted the credit system of rural development; requirement of credit in rural India also the author highlighted the agricultural development after independence. After nationalization of commercial Banks in 1969 how commercial Banks endeavored to increase direct investment, how the new strategy called service area approach was introduced to increase productivity and income levels of rural people. The primary aim of this study are(I) To examine the credit performances of co-operatives ,commercial Banks and RRB's in meeting the credit requirement. (II) To investigate the amount of loans sanctioned for disbursement purpose.(III) To find out the repayment and over dues of Bank credit. In this study the author have tested the following hypothesis (I) That credit requirement of borrower households positively related to size of land holdings and inversely related to size of household income and it has no significant with household size. (II) That more number of willful defaulters belong to higher income group. This study is aimed at examining the current scenario of rural credit system in Dasarathpur Block of Jajpur District of the state of Odisha . It approaches to set forth the impacts and achievements of the selected credit agencies in the agricultural sector. It is an effort to assess the deficiencies of past studies if any and to carry on a comprehensive in-depth study of different issues not yet studied. The study also investigates and evaluates the capabilities and impact on the beneficiary household in generating income and employment. The study has used both inter-Temporal and cross sectional approaches in evaluating and justifying the impact of institutional financing for agricultural and rural economy. In methodological framework multistage sample design has been used to select the study area. At its micro level this study describes the important aspect of peoples participation in development oriented programmes. Therefore, the study founds the following remarks (I) Share of informal agencies in the rural credit has significantly declined but not completely eliminated(II) Inter-regional disparities in the flow of agricultural credit depends upon the infrastructural facilities ,approaches and attitudes of financing institutions towards less development regions.

KEYWORDS
rural development, institutional credit.

INTRODUCTION

Particularly it is found that the rural segment of our country constitutes 74% of population and it supplies the food grains for human existence. A large proportion of rural population is socio-economically backward who wants to take productive activities. Our present economic aliments are associated with directly and indirectly with the problems of economic growth. Due to large size of Indian population and vast natural resources India occupies a strategic position in the world in 21st century . After almost four decades of planned economic development India continues to have pre-dominantly rural economy. Through the study it has seen that agriculture is the main stay of Indian economy which is modernized and mechanized after introduction of " new agricultural technology" . It contributes 22% share in India's total export revenue which comprises 70% of our export goods. The purpose of financing agriculture through institutions is not just putting out money but to enable agriculture and the farmers to move in to a level of technology that would create a sustained basis for increase agricultural output. The case study found that several measures were taken to accelerate the pace agricultural credit and thereby ensuring that maximum advantages of institutional credit reach to the needy and poor , which in turn help to raise their income pattern and living standard. So keeping in view the most burning problem of agricultural backwardness, poor productivity due to lack of adequate investible resources. It is an attempt to have an in depth study of the institutional credit on rural development in Dasarathpur Block of Jajpur District of the state of Odisha(India).The present study is thus intended to through light on the performances of co-operatives, commercial banks and regional rural Banks in this district in advancing credit to the sample borrower households .

Large flow of credit on one hand and said discrepancies on the other raises the following issues .
1. Whether the approach adopted for rural development from time to time was appropriate and in the desired direction .
2. Whether the assistance rendered was quietly oriented .
3. To what extent regional disparities could minimized.
4. What should be the future shape and direction of Institutional credit in the rural sector.

OBJECTIVES OF THE STUDY

The present study seeks to examine the institutional credit on rural development. The specific objectives of the studies are-
1) To provide an insight into the current scenario of agricultural development and agricultural credit system of India in the light of economic liberalization measures.
2) To assess the magnitude of credit requirements of different categories of a sample borrowers household belonging of Dasarathpur block.
3) To examine the credit performance of cooperatives, commercial banks and RRBs in meeting the credit requirements.
4) To assess the share of non-institutional credit agencies in providing loans to sample borrowers.
5) To examine the credit utilization pattern of the sample borrowers and to investigate the extent in direction of credit diversion by them.
6) To analyse the borrower classwise demand for credit.
7) To find out the repayment and over- due of Bank credit.
8) To find out the credit deposit ratio.

HYPOTHESES OF THE STUDY

The present study is designed to test the following hypotheses-
1) The credit requirements of the borrower households is positively related to size of land holding.
2) That credit institutions are biased in supplying higher amount of credit to the non-farm sectors than the farm sectors.
3) That the non-institutional credit agencies plays a dominant role in providing credit to the sample borrowers.
4) That higher is the amount of average credit supply, higher is the percentage of default and defaulters.
5) That more number of willful defaulters belongs to higher income group.
6) That institutional credit influences the borrowers to change their occupation from non-farm activities to farm activities.

REVIEW OF LITERATURE

The study of literature and research on agricultural credit are very vast. The impact of credit on agriculture production, employment generation of rural people , use of agricultural inputs, increase in income of the household beneficiaries changes in the firm technology and occupational pattern, position of over-dues etc. have always remained in serious debate among the researchers across the country.

The topic “Institutional Credit and Rural development “ has been regarded as the hunting ground of the many research scholars, study groups, export committees and agricultural economist as agriculture occupies the pride place in the Indian context .A sincere attempt has been made in this study to have a brief review of the estimation of credit requirement in agriculture sector.

Therefore, the availability of literature relating to the present study is too vast and it is impossible on the part of the researcher to make an exhaustive study. Hence the literature under review have been based on few dominant points i.e. a) The reflection of Union Budget of 2001-02 made by G. Srinivasan (a senior journalist based in Delhi). b) A case study made by Singh Gurmeet 2007 an importance of rural credit in Indian agriculture. c) A case study B.S. Meenakshi 2007 on micro credit to nobel on Prof. md. Yunus.

COLLECTION OF DATA

Collection of data is the process of enumeration together with the proper recording of results .Thus, collection of data which constitutes the raw materials of the statistical enquiry handled carefully to meet the purpose for which the enquiry is planned. Collection of data are two types:

1. Internal and External
2. Primary and Secondary.

Table No 1: FLOW OF INSTITUTIONAL CREDIT TO AGRICULTURAL

Institutions	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Co-operative Banks	23604	23716	26959	31424	39404	33147
Percent Share	38	34	31	25.1	21.8	22.2
Regional Rural Banks	4854	6070	7581	12404	15223	15170
Percentage Share	8	9	9	9.9	8.4	10.8
Commercial Banks	33587	39774	52441	81481	125859	100999
Percentage Share	54	57	60	68	69.8	67.6
Total	62045	69560	86981	125309	180486	149343

From the above table it is revealed that the flow of institutional credit to agriculture is highest by the commercial banks i.e. 69.8 % in the year of 2005-06 which declined to 67.6 % in the year of 2006-07.

Table No. 2: SAMPLE BORROWER HOUSEHOLDS

Borrowers Category	Small & Marginal farmers	Medium & Large farmers	All farmers	Businessman & Traders	Transport Operator	**Total**
Total no. of borrowers	232	1287	359	63	48	470
Number of borrowers selected	150	80	230	40	30	300
Percentage of no. selected to total	--	--	---	--	--	--

Sources – Record of the concerned credit institutions

TABLE NO. 3: REPAYMENT POSITION OF COMMERCIAL BANKS

Borrowers category / Repayment position	No. of full Re-payers	No. of partial re-payers	No. of full defaulters	Total no of defaulters	Total nos. of borrowers
Small & marginal farmers	**18**	**43**	**92**	**135**	**153**
Medium & large farmers	**11**	**28**	**39**	**67**	**78**
All farmers	29	71	131	202	**231**
Businessman & Traders	14	21	4	25	**39**
Transport Operators	13	17	0	17	**30**
All Borrowers	56	109	135	244	**300**

Source – Record of financial institutions

The table reveals that there are 153 small & marginal farmers out of which 18 are only full re-payers, 43 are partial defaulters but 92 are full defaulters and 60.13 % are full defaulters, 28.11% are partial defaulters. So the small and marginal farmers are very low repayment capacity and the default is maximum among them.

TABLE NO. 4: REQUIREMENTS OF CREDIT

Borrowers category / Average credit requirement	Small & marginal farmer	Medium & large farmers	All farmers	Businessman & Traders	Transport Operators	**All Borrowers**
Number of households	153	78	23	39	30	**300**
Amount of credit requirements	470900	894900	1365300	999900	5197600	**7562800**
Average amount of credit	3077.77	11473.07	5910.38	25638.46	173253.46	**25209.33**

Credit requirements of the agricultural sectors are not easy to be determine. A farmers needs loans for diverse purpose which include both production and consumption. It is difficult to classify this loan as production loan or consumption loan. The average credit requirement is calculated by dividing the total credit requirements with the number of borrowers through the following table-

The table reveals that the average credit requirement of all categories of borrowers in case of small and marginal farmers annual credit requirement is Rs. 3077.77. Since small & marginal farmers use less fertilizer and other agricultural inputs the credit requirement is also relatively low.

FINDINGS

1. **Prerequisite for an ideal agricultural credit system-**
    a. That credit if granted at low of interest.
    b. That covers a long period commensurate with the length of the operation which it is supposed to solve.
    c. That should be adequately secure and more particularly to avoid any abuse of credit facilities but security should not necessarily be material, it should if necessary in form of personal credit secure mainly by the borrowers moral standing and family ability.
    d. That should be granted more particularly during the period of economic depression.
2. **Principles of agricultural credit system-**
    a. Credit must be used in accordance with the most suitable methods of science & technology.
    b. The terms and conditions of credit must be fully respected.
    c. Work must be done with skill as to increase the productivity and income.
    d. A part of the additional income created by credit must be saved.
    e. Loan installments must be repaid in time and regularly so as to recycle the credit.
3. **Suitability and validity of rural credit system**-
    a. All credit needs (short, medium and long) of the farmers should be meet.
    b. Credit is made available at near to his door-step as possible and when needed by the farmers.
    c. It should generate savings and accelerate economy growth at the socially desired growth rate.
    d. Supply and other services should be made available to the farmers.
    e. The borrowers should be encouraged to adapt new technologies without which sufficient capital can not be generated to repay loans.
4. **Problems of rural credit**-
    a. Lack of adequate, cheap and timely credit.
    b. Finance for special agricultural needs.
    c. Diversion of credit money.
    d. Lack of information.
    e. The problem of over dues.
    f. Weak legal enforcement of contracts.
    g. Mismanagement, corruption and lack of supervision.

CONCLUSIONS

After careful review of literature it is forth while to note the following remarks

1) Share of informal agencies in the rural credit has significantly declined but not completely eliminated.
2) The small and marginal farmers have limited access to institutional credit.
3) the economically well to-do borrowers use the borrowed fund in productive ways where they get assured income.
4) Mounting overdue and deterioration in recovery of loans have vitiated the whole atmosphere of lending in rural areas.
5) Due to lack of adequate staff, the field officers do not find time to make proper assessment of credit needs of rural people.

SUGGESTIONS

After careful study and considering several factors few important suggestions relating to the credit system of the financial institutions for rural people are as stated below –

a) Introduction of prudential norms with time bound framework.
b) Commercial banks should delink them from the sponsored RRBs by transferring their rural branches to the RRBs completely.
c) The pre-lending appraisal like evaluation of agricultural product, assessment of external forces, availability of inputs are to be taken in to active consideration before lending the credit.
d) Post-lending supervision and approaching the borrower in right time for proper utilization of credits may help in preventing credit diversion.
e) The employees of the credit institutions are required to develop a positive attitude in creating friendly relation with the borrowers.
f) Debt waiving awareness among the borrowers is harmful in respect of development.
g) Creation of awareness among the borrowers households regarding the proper use of credit, increase of production is necessary.

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SOCIAL MEDIA MARKETING OF HIGHER EDUCATION INSTITUTIONS: A STUDY ON KARUNYA UNIVERSITY'S SOCIAL MEDIA PROMOTIONS

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ABSTRACT

Social Media is entering college campuses not just as a networking tool for student but also as a marketing and academic tool for college administrators. (Himmelspach, 2009). The ever growing technology of internet connectivity and the nature of the targeted audiences make sure that this move by the universities has a greater outcome than any other marketing medium. But as adoption of this technology by colleges has been slow and given the lack of generality in practice when it comes to social media, educational sector lags behind in reaping the benefits of adopting efficient social media marketing. In addition to marketing to prospects, colleges also need to connect positively with the students and alumni of their institution. Except for a few good social media successes across the globe, universities and colleges seem to be having lacklustre performances. In this light, this paper will assess the possibilities that Social Media offers Universities through the example of Karunya University and its social media promotion. The paper will also contain suggestions on how Karunya can carry out better Higher education marketing through social media.

KEYWORDS

Social Media Marketing, Higher Education Marketing.

INTRODUCTION

The landscape of higher education market is changing with new educational institutions on the rise and competition among existing deep rooted universities and colleges growing. The 656 recognized universities in the country (University Grants Commission, 2013) have to constantly compete to recruit new students into their various programs every year. With this in mind it is no more enough to rely on public knowledge about the college nor on some form of traditional advertisement, be it print, outdoors or any other traditional form of marketing a college or university to get a positive word out to the general public and thus generate enough prospects for successful commencement of next academic year. Added to this, well established colleges and universities such as Karunya University (the private institution under study for this paper) which have years behind them and a strong backing in the form of infrastructure, curriculum and Academicians face the challenge of marketing to their target audiences who extend beyond larger geographical boundaries. This translates into much effort that is to be enlisted in overcoming boundaries and covering vast audiences who have varying perspectives and needs when it comes to forming a consideration pool of prospective universities of their choice.

In light of this, the latest technology as always comes in to save the day in the form of social media. There are live examples of how recruitment of students for various programs have been positively enhanced to provide better experience for the students while providing better returns on investment for the institutions. (Nora Ganim Barnes & Mattson, 2008)

This paper is designed to provide a framework for promotion of Universities (Karunya University in particular) to the target audiences who include students, alumni and prospects through various content such as videos, photos, written content, etc. propagated through social media sites.

STATEMENT OF THE PROBLEM

Harnessing a powerful tool such as the social media by educational institutions has been very slow. (Silverman, 2012) This is especially so in the case of Indian Institutions. As a part of India's Educational institution fraternity, Karunya University has kept in step with the rest in adopting social media as part of maintaining an online presence. It is though not reached its full potential and its social media plans need to match the growth the university has seen in recent years. The problem is for Karunya University to understand the scope of social media that can aid in its quest to increase potential for better relations with parents, alumni, enrolled students and potential enrollers.

SCOPE OF THE STUDY

The scope of this study is limited to Karunya university's promotional ambitions that target prospects, students and alumni. The study was conducted with participants from and within India. The scope of the study can extend to a suggestion to other similar institutions with similar functioning and target audiences.

OBJECTIVES OF THE STUDY

The following are the primary objectives that this study is designed to fulfill

1. To assess the marketing potential that social media offers Karunya University.
2. To assess marketing measures already employed by Karunya University through social media.

By delivering upon the above mentioned objectives, we aim to accomplish the following secondary objective

1. bring out measures that can contribute successfully to Karunya University's social media campaigns.

LIMITATIONS OF THE STUDY

The scope of the study is limited to Karunya university's promotional ambitions that target students, alumni and prospects of Karunya University. A key member of the target audience namely parents are not brought under this study though they are the major decision makers in the process of student enrollment. Also the discussions in this paper are suggestions only. The result of implementation of these suggestions and the success of such an implementation will be subject to content posted and various other factors that affect social media content reach.

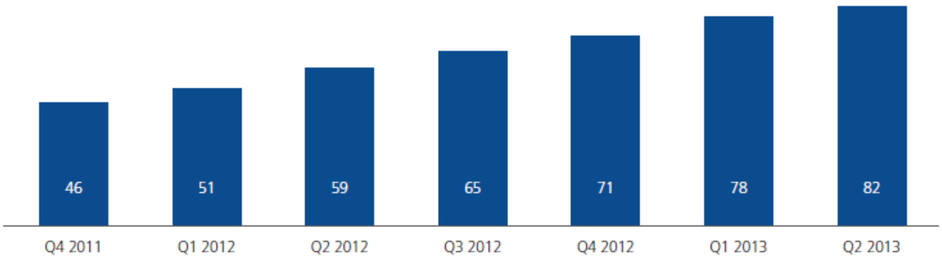
LITERATURE REVIEW

There have been similar studies across the globe about the usage of social media marketing for higher educational institutions. One such is a Senior Honours Thesis titled 'The effectiveness of social Media marketing in Higher Education: State University of New York, the College of Brockport' by Megan Mahaney. In this thesis, Mahaney talks about how the college at Brockport planned its marketing strategy and implemented it. She analyses the impact of the strategy. The thesis shows how the Brockport differentiated itself from the other colleges in the area through its Social media marketing practices. By analysing the implemented social media campaign plans, the following deduction is mentioned in the thesis.

The number of social media followers has shown an increasing trend over the past several years. College Communications launched their Facebook page on December 3rd, 2010 with zero fans. From February 2012 to April 2012, the number of Facebook fans increased from 903 to 1,204, an increase of 300 fans in just

two months. The number of Twitter followers has nearly doubled from 770 in September 2011 to 1,483 in April 2012, demonstrating the growth that College Communications has taken in delivering content via this platform. (Mahaney, 2012)
For the year 2014, Deloitte predicts that social media would be favoured for targeted advertising as its adoption increases owing to surge in mobile usage, higher penetration of Smartphone and a young population. (Social Media: The urge to connect, 2014) All three factors are especially true in the case of India. Facebook India has an ever increasing user base that has increased 54 percent year on year between 2011 and 2012. The lure of social media is heightened due to a high user engagement rate.

FIG. 1: FACEBOOK INDIA ACTIVE MONTHLY USER BASE (in millions)



Source: Deloitte

India is a rather young country with a median age of 24, and 31 percent of population its population is in the 0-14 age group. This population is highly active over social media websites. They form the chunk of their users. They also serve as target audiences for educational institutions. This presents a significant opportunity for these institutions with a platform to attract additional prospects into their recruitment pool.
Some of published literature that provides input of this research include

1. Davis, Deil-Amen, Rios-Aguilar, Gonzalez Canche (2012)-This paper provides a review of existing literature on the use of social media technology in higher education in the United States. For instance, the paper reviews how some admissions offices have begun to use student blogs to showcase current student experiences as a recruitment tool for prospective students (Harris, 2008; Mattson & Barnes, 2009; Rudolph, 2007; Tucciarone, 2009; Wandel, 2008; Violino, 2009). According to this report, institutions hire current students or student volunteers as virtual ambassadors to share their day-to-day lives and answer questions in efforts to introduce and personalize the student experience on campus for potential students.
2. S.B.Thorat, S.B.Kishor and Bharat Meghe(2013)-The authors believes that the social media surely will be the better for marketing of education in India through an investigation of the suitability of 8 P's framework of Marketing to the social media to support such a choice. The authors feel that the use of latest technologies especially social media, in marketing is always desired because of the greater impact on target market that it provides as compared to traditional marketing strategies.
3. Nora Ganim Barn, Eric Mattson(2008)-This study is one of the first statistically significant, longitudinal studies on the usage of social media by college admissions offices. By compared the adoption of social media between 2007 and 2008 by the admissions offices of all the four-year accredited institutions in the United States, the researchers concluded that the perceived importance of social media to the school does translate into monitoring behaviour and that they are gathering critical strategic information by listening to what is being said about their institutions and their competitors in the social media world.
4. Sisira Neti (2011)-This paper provides insight into best social media tools that can be employed to recruit new students into college programs. It also highlights possible areas of concern and divulges information into best practices adopted by the world's and America's top universities. Some of the areas of concern listed are loss of control and time and commitment spent. The paper talks about colleges' loss of control over negative commentary in engagement over social media especially in the comments section of the blog or post. The paper talks about enlisting positive tools that can be resourceful in tactically handling such negative commentary and provide a solution to clear misunderstanding. The paper shares success stories of prominent colleges including Ohio State University. The paper however cautions against over divulgence into social media based promotions without strengthening the official website first.
5. Rahul Chodada (2013)-In this paper titled "Social Media in International Student Recruitment", the author talks about how the students are the centre of activity for higher education institutions, and how an effective communication with prospective students will certainly contribute to resource efficiency. He asserts that the process of decision making for these prospects involves higher utilisation of resources (time and money) and that the process becomes even more complex for prospective international students, who are unlikely to visit a campus before deciding whether to attend. From the students' perspective, social media provides a communication platform built on honest opinions and experiences of students and alumni. The paper also talks about how in this context, social media can present an ideal opportunity where a balance between institutional control of the communication and admissions process and adaption to the changing engagement patterns of prospective students can be maintained.

Apart from the above mentioned papers, other articles and websites also provide suggestions on techniques that can be employed in creating a successful social media presence for the university. For example, in a post named Social Media and Higher Education – Tips for Success and Who's Doing It Right, the author Clayton Dean talks about the social media strategy. He gives the following outline that any university must have for social media

1) Overview
   a) Target Market [define who the target audience is, and any segments of that audience]
   b) Marketing Goals [increased program awareness? lead flow? website traffic?]
   c) Current Use of Social Media
2) Strategy
   a) SWOT Analysis
   b) Social Media Goals
   c) Social Media Strategies
3) Tactics
   a) Overview of Tactics
   b) Description of Tactics
4) Measurement
   a) Key Performance Indicators [what are the metrics that will define success or failure]
   b) Measurement Tools, Metrics
   c) Analysis Approach
   d) Communication Process [how often? who will results be communicated to?]
5) Implementation
   a) Resource requirements

b) Financial considerations
c) Timing considerations
d) Risks + mitigation

6) Conclusion
a) Summary
b) Next steps (Dean, 2013)

These above steps though generic can be put to use by Karunya University and its social media team in increasing its online performance. One of the key points to note is that it is not just important to have a social strategy that governs implementation but to actually have a social media strategy that will also govern measurement of such an implementation. Measurement can be through many ways. Measurement can be done through the use of social media metrics that are inbuilt into the social media sites e.g. Facebook Insights or it can be through tools like Hootsuite, Followerwonk, etc. Measurement can be done on various KPIs. KPIs are Key Performance Indicators. They give a picture of if and how the KPIs are working. These can include various metrics which are quite genetic but varied when it comes to purpose of the social media campaign and its target audience. Before analysing the KPIs it is important to understand that the social media is part of the discovery phase of marketing higher education. Hence, it is not accurate to measure the performance of the campaign with number of admissions generated, but with metrics that include,

1. The number of leads generated- how many people have visited your landing page from these social media channels?
2. Fan (follower) count-Number of page likes or followers or subscribers on these channels
3. The content reach- How far has the content reach on the social graph
4. Favour generated- How many likes, mentions, shares, retweets or favorites have your content generated.

RESEARCH DESIGN

The nature of the problem stated necessitated collection of both primary and secondary data. For collection of primary data the target population was identified as current, former and potentially future students of Karunya University. The target population was subdivided into two populations, one of which contained fifty students and alumni of Karunya University and another contained fifty students of colleges and schools who could be potentially future students of Karunya University. Since the recipients of the questionnaire were in geographically different locations, the questionnaire was designed using Google Forms to be answered online. The recipients were sent url links which directed them to the questionnaires and were asked to fill them. The questions were designed to be easy to understand and to answer with more freedom. Secondary data included literature that explains social media marketing and its impact on higher education.

FINDINGS

The inferences mentioned above drawn from the survey conducted among the sample population, leads us to the following findings

Among Karunyans,

- Facebook and YouTube membership is high with 98% of the respondents using Facebook.
- Daily activity is highest on Facebook and YouTube. Twitter and Google+ activities are less frequent than YouTube. With very less activity in LinkedIn, LinkedIn, Flickr and Instagram are found to be the least used networking sites
- Consumer opinions seem to be influenced though content found on social media for half of the Karunyan population
- It is important to note that 18% of the Karunyans claim that they have never seen content by Karunya online.
- Among those who did claim to see content posted by Karunya, Facebook is most claimed source followed by YouTube.
- While content engagement was satisfactory for most Karunyans the motivational effect of the content was denied by many.
- A huge majority felt that Karunya should use social media to promote itself.
- Majority supported online marketing over offline marketing.
- When asked about their participation, response for online events was welcoming while response for offline events was lukewarm. However when asked if they would share content about Karunya online enthusiastic response was got.

Among the Prospects,

- Facebook and YouTube had higher memberships and higher usage frequencies.
- Usage of twitter and Google+ was also considerably frequent.
- 40% of the respondents feel that they would be influenced in their decisions about prospective colleges based on content they found on social media sites. An equal majority neither agreed nor disagreed.
- Majority of the students felt that the content provided by the universities do not reflect the true scenario inside the college.
- A higher percent of people did not come across Karunya University's social media content and only a few people among those who did come across the content found the content to be engaging and even fewer people felt it motivated them in favor of choosing the university
- Among those who came across content, all cited Facebook as their source, YouTube was also mentioned.
- Photos, Videos and campus notifications were named engaging.
- There is an overwhelming support among prospects for Karunya University regarding its usage of social media to promote itself in the future
- Among content that they would wish to see Karunya University promote in the future, photos were highly favoured.
- When asked if content posted by Karunya University will make them favour Karunya University majority of the prospects agreed and also said that their opinion would change if the content comes from the students.

SUGGESTIONS

From the above findings we see that Facebook and YouTube are undeniably the best platforms to promote the university while Twitter must also be used since prospects seem to be fairly active in this social media site as well.

Apart from the content generated to attract prospects, universities need to include content that is aimed at their other target audience segments including alumni and students. It is vital to create a spirit of pride within its alumni and student groups because it not only allows for much collaboration with the students over social medias but also can pave way for student generated content that speaks in favour of the university which will be more helpful to accomplish the social media goals of the university because of the authenticity value attached to such a content. (Bednar, 2013) Universities need to understand the value of these contents and take effective measures to ensure that the students voluntarily become brand ambassadors of the institution. Moreover such an act ensures that the prospects engage in a two way communication with the students and alumni to know more about the university. Although this may mean that negative content is sometimes generated, it is important to refrain from policing too much since some level of negative content increases the authenticity and allows for loyalists to respond and create a vibrant conversation. The best method of handling such negative activity is to respond immediately to complaints and negativity and keep the situation under control. Universities must let the students be honest which would ensure that they stay engaged with them.

Another important area that the universities need to focus on is the need for centralising engagement. This calls for a person to be the "hub" and an organizational structure that works like a wheel. (Social Media Marketing in Education, 2011)This person has to set rules, act as a guide to the social media team and monitor the activities. The spokes of the wheel of the organisational structure are the social media ambassadors in all the specialized areas of the institution. They will be authorized to engage and post in the online communities as content creators and content managers. Generating activity on social media sites require internal activity before external engagement takes place.

CONCLUSION

Study of previous literature shows high promise of efficient return on investment for educational institutions investing in social media. Also best practices highlighted in these papers have shown just how promising these returns seem. By adopting the suggestions made in this paper, and by investing time and expertise into social media campaigns Karunya University can gain immensely.

However, it is to be noted that the returns are not immediate and sometimes not visible. But with effective and efficient planning and implementation social media campaigns will be the best medium for establishing a brand identity for the institution. Further research could follow implementation of the given suggestions and the live measurement of the returns that such an implementation which in turn could be used to define new and better methods of Karunya University promotion through social media.

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