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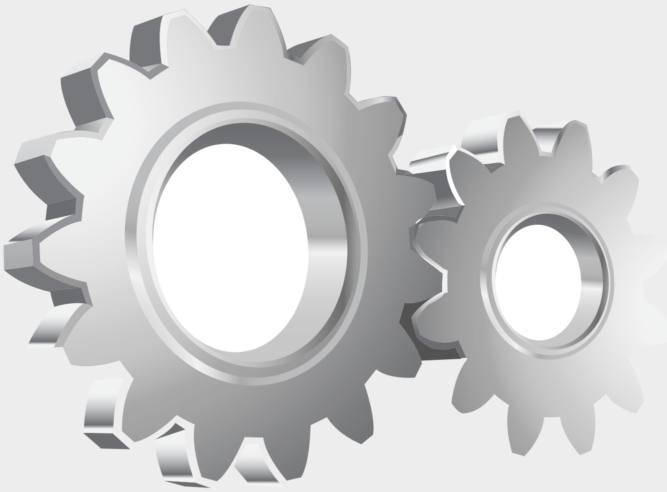

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Editorial

Research Statistics: Quantity also matters!!

Rabinarayan Subudhi

Lot of academic debate takes place, almost regularly, on the quality of research papers and also their practical usefulness and acceptability. The last editorial of our journal (Parikalpana, Vol.9.1) was also devoted on that. Despite skepticism and all those counter-arguments, research lives, because of its usefulness and academic charm. Academicians are now categorically asked and expected to have publications in standard journals, at least recorded (and cited) in respected global journal databases/ aggregators. One such 'good' database is SCOPUS. Many Institutes now link their academic-incentive plans to 'Scopus-visibility' of their scholars and faculty members. This in turn speaks about the 'institute-aggregate', how much, quantitatively, an organisation/ institute has contributed to the academic research world.

Many academicians feel that, Scopus, as of date, has not given enough coverage on the research articles in the areas of 'Management' (particularly since many important Management journals have not been included so far). But, surely, it is a very good (huge) data-base of scientific research articles. The author wanted to find the trend of research publication and searched Scopus-database for all statistics, (from user access, on 16.01.14). It is really a very commendable academic effort to store/ aggregate extensively so many research articles, in such a very systematic way (ready for statistical analysis). Articles from 1827, till date; from all most all fields; having now (as on 16.1.14) information of over 35 lakh articles!! Huge, really!! It is quite obvious that most of the listed articles are of relatively recent past. As we find, for the period from 1827-1950, there are hardly 3000 articles found in the data-base. So, as we see the real trend, post 1960s, contributors from USA (37.5%) and UK (11.5%) form almost half of the data-base. India is of course in race, eleventh in the country list with a contribution of 3%.

As we are in the field of management research, so our interest is on to find the management related research work. As we see from the self explanatory tables and graphs, given below, scopus database has got higher coverage/ concentration of articles from Medical Sciences (39%), Engineering- Computers (20%) and Pure-sciences (15.5%). The percentage calculation has ignored the articles 'categorized' as 'un-defined' and 'multi-disciplinary'. As we club 'management/ business' category with arts, humanities, social sciences, decision sciences, then all together, they contribute only 12.5%. And when we take only 'Business, Management and Accounting', the entire world (of Scopus) contributes only 4%. If we take that 4% of 'our' area, country-wise distribution is almost similar to that of 'all-areas', as given in Figure-1. Again, when we search for 'Indian' contribution in that 'Management-area', total articles count is only 2901 (as on 16.01.14), in Scopus. Out of that it is worth noting, who in India are the leading Institutes, contributing to this magical figure.

As the statistical figures tell the story, we all expect these numbers to grow much faster in the days to come, both by original research contribution and of course by expanding the data-base to cover more sources, where some useful research publications are recorded. One can search and find many important research journals missing (yet to be covered) from this data base. The story or experience would perhaps be similar, when we analyse other reputed databases also.

Fig.-1: Research Contribution in all areas: Leading countries

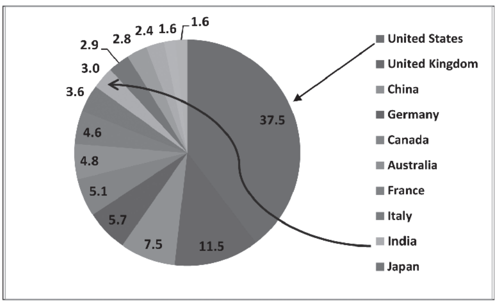

Fig.-2: Year-wise publications of Scopus-listed all articles:

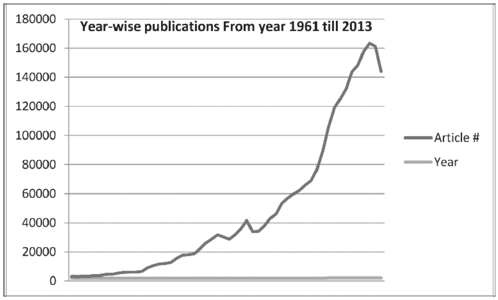

Table-1: Articles by Subject area:

Medicine	1059232
Engineering	411344
Environmental Science	246894
Computer Science	235404
Social Sciences	186302
Agricultural and Biological Sciences	176425
Business, Management & Accounting	144108
Nursing	121754
Earth and Planetary Sciences	100570
Biochemistry, Genetics & Molecular Biology	100081
Undefined	96531
Energy	56837
Mathematics	56397
Health Professions	56311
Pharmacology, Toxicology & Pharmaceutics	56245
Decision Sciences	55329
Chemical Engineering	53047
Economics, Econometrics & Finance	40134
Materials Science	39695
Psychology	35936
Immunology & Microbiology	32897
Physics and Astronomy	31415
Neuroscience	26393
Veterinary	22062
Chemistry	20569
Dentistry	18776
Multidisciplinary	15386
Arts & Humanities	13044
Grand TOTAL=	**3509118**

Table-2 (Management & Soc. Sc.)

Arts, Social Sciences & Management Area	
Social Sciences	186302
Business, Management and Accounting	144108
Decision Sciences	55329
Economics, Econometrics and Finance	40134
Arts and Humanities	13044
TOTAL	438917
Grand Total (all subjects) =	3509118
Percentage to Grand Total =	12.51

Table-3 (Other areas)

Engineering & Comp. Sc. Area	
Engineering	411344
Computer Science	235404
Chemical Engineering	53047
TOTAL	699795
Percentage to Grand Total =	19.94
Medical Sciences Area	
Medicine	1059232
Nursing	121754
Health Professions	56311
Pharmacology, Toxicology and Pharmaceutics	56245
Immunology and Microbiology	32897
Veterinary	22062
Dentistry	18776
TOTAL	1367277
Percentage to Grand Total =	38.96
Pure Sciences (excluding Math)	
Environmental Science	246894
Earth and Planetary Sciences	100570
Biochemistry, Genetics & Mol. Biology	100081
Materials Science	39695
Physics and Astronomy	31415
Neuroscience	26393
TOTAL	545048
Percentage to Grand Total =	15.53

Table-4 Leading contributors of Management research articles from India

Indian Institute of Technology, Delhi	202
PSG College of Technology	83
Indian Institute of Technology Roorkee	78
Anna University	60
Indian Institute of Technology, Madras	58
Indian Institute of Technology, Bombay	57
Institute of Management Technology, Ghaziabad	54
Indian Institute of Management Bangalore	53
Indian Institute of Technology, Kharagpur	52
National Institute of Technology Tiruchirappalli	51
Indian Institute of Management Ahmedabad	51
Central Sericultural Research and Training Institute	47
Indian Institute of Science	46
Indian Institute of Management Calcutta	38
International Business Machines (IBM)	36
Birla Institute of Technology and Science Pilani	35
Aligarh Muslim University	34
National Institute of Industrial Engineering India	32
University of Delhi	30
Indian Institute of Technology, Kanpur	29

Note: All data taken from SCOPUS data-base, using our institutional user-access-id, on 16.01.2014.

Link/ source: http://www.scopus.com/term/analyzer.url;jsessionid=...PARM_EXPIRATION_DATE=1389861987876

Variations in Flue Cured Virginia Tobacco Export Performance of Different Regions of World : An Empirical Study

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Abstract

Tobacco has been a prime source of livelihood for millions of people and the tobacco industry is providing employment to 36 million people including 6 million farmers, engaged directly or indirectly in tobacco cultivation, processing, manufacturing grading, marketing and other allied activities. Indian tobacco industry is in a prominent place over the past six decades. India is world's second largest exporter of Flue cured Virginia (FCV) tobacco. The sustainability of Indian tobacco industry, especially FCV tobacco, mainly depends on exports. India is now facing stiff competition from many developing countries. The global exports of FCV tobacco fluctuated during the period under study. In the study period, India's FCV exports has wide fluctuations over the years. In unmanufactured tobacco exports the share of FCV tobacco constituted about 80 per cent. In the study period, there are wide fluctuations in India's FCV tobacco exports to all regions and within the regions except South and South East Asia. This region has some growth in exports.

Key words : *Flue cured Virginia; FCV*

Introduction

Tobacco is one of the economically and commercially significant agriculture crops in the world. FCV Tobacco was introduced in India by one of the peripatetic teams that visited South America and India. When the Britishers settled in the Virginia Coast in North America in early 17th century, the type of tobacco was cultivated by the natives of that area was *Nicotiana rustica*. *Nicotiana tabacum* was brought by them from the West Indies, which later on came to be known as Virginia tobacco. By modification of cultivation practices and through selection process, the milder and smoother type of tobacco was developed by the settlers. It acquired a bright co lour and sweet aroma after the invention of flue-curing during 1860s. The flue-cured Virginia tobacco is now an essential ingredient of cigarettes all over the world.

Relevant studies

The effects in Tobacco consumption, in its different forms, have been well documented in scientific literature. The information thus published have led to the adoption several smoking led to the adoption several smoking regulations around the world. Smoking is regulated through different cost and non- cost oriented measures, which have significant effects on the production and consumption of tobacco, which affect of the economy of a country. Although, these regulations have significantly reduced health care cost especially in developed countries, they significantly improved the health and welfare of consumers (Sntto-1998). These positive affects one evident mainly evident industrialized economies. This effect also significantly reduced world tobacco consumption, by 2.7 percent between 1996 and 1999 and for the decline have after until 2002 (FAO: 2004).

Most of the literature on tobacco focused mainly on the effectiveness price measures especially in the form of taxes, in reducing tobacco consumption. It has been clearly shown that increased excise taxes considerably reduced cigarette smoking around the world especially among youth (Evance and Farrely ;1998: Sungetal;1994: Keelev etal: 1993) Most of the studies, on the micro effects of tobacco consumption are concerned with consumers economies, and very few on net tobacco producing economies. The focus of this study is on the variations in the tobacco production, that many have been effected by anti tobacco regulations in different regions of the world.

Tobacco is crop that is relatively less labour intensive and cost intensive that requires much less fertile soils than other additional crops (Maraveanyika, 1998). In addition production cost of tobacco where land and labour are relatively abundant, as available in developing countries. This advantage of the developing countries help them enjoys a comparative advantage in the production of tobacco. (Smith and Maccarthy 1998) quoted record to show that an economy enjoy a competitive advantage in tobacco production if it uses the available abundant factors.

According Heckschers Ohlin theory as cited by (yoffie and Gomes- casspres 1994) relatively has abundant factors of produce tobacco at low cost. However this theory has been challenged by empirical findings which showed a bias, when dealing with outlines and also because of the fact that inferences of relative factor abundance depend on stringent assumptions (Bolossa and Bauweness, 1985). Because of these limitations, estimation based on revealed comparative advantage is considered more reliable (Matemba Edward 2005).

India as a comparative in a tobacco production, it exports, like many other tobacco producing countries, more than 75% of its tobacco production mainly because of comparative advantage. More over its economy is still mainly agrarian and other crops are not as economically viable as tobacco, despite the facts that industrial structure is rapidly growing.

Statement of the Problem

There have been several regulations in different countries to come smoking. These regulations have caused the reduction tobacco production. This results welfare loses in tobacco exporting countries, as a result of decrease tobacco production. Welfare losses include a decrease foreign revenue, incase unemployment unfavorable terms of trade and loss of revenue to the Government. In addition, this situation increases poverty levels among most tobacco exporting countries, and a reduction in social welfare services, which may calls unrest among they people, it is therefore very necessary to know the trends in the production of tobacco in different parts of the world that can help in understanding the kind of impact it will have and its social political consequences, this study therefore attempted to find out the trends in export performance of FCV tobacco different regions of the world from 1989-90 to 2008-09.

Objective

The main purpose of the study is to find out whether they have been an increase or decrease in the export of tobacco in different regions of the world. The second purpose is to inter possible causes for variations in tobacco exports from 1989-90 to 2008-09.

Performance Evaluation

To analyse the Export performance of Indian FCV tobacco has to collect the secondary data from the Tobacco Board, Annual Reports from 1998-99 to 2008-09. In this section we consider the following objectives:

- To examine the region wise average growth of the quantity of FCV tobacco,
- To find out the region wise average growth of the value of FCV tobacco,
- To determine the functional relationship between the value and quantity of exports of FCV tobacco,
- To study the relationship between; Time and quantity, Time and value, Quantity and value

Hypotheses

In view of the proposed objectives, the researcher has formulated the following hypothesis for the study:

There is no variation in the export performance (Viz., Average Quantity and value) in different regions of the world namely, West Europe, East Europe, Middle East, South and South East Asia, Africa, North and South America, Australasia.

Research Methodology

In this study descriptive and analytic research design has been found to be most suitable type of research design. In this way, the trends in Export performance of FCV tobacco are described with the help of statistical tools.

The data used for present data is based on secondary sources. The secondary data have been collected from the publications of Indian Tobacco Board Ministry of Commerce Government of India viz, Annual reports Brochures and annual reports.

Data Analysis Technique

Descriptive statistics and inferential statistics were used selectively for the testing of hypotheses. Descriptive statistics like frequency, mean, standard deviation for all the study variables were computed. The researcher has used the statistical tools like ordinary least squares (OLS) Regression analysis to find out the region wise growth notes, and worked out find the behavior of the trade variables under the study.

To achieve the above objectives, the following statistical techniques have been used:

- To determine the growth rates of the quantity of exports, value of exports of FCV tobacco, with respect time fitted the following linear regression model by using OLS (Ordinary Least Square) method.

  a, Quantity = A+B (Year)

  b, Value = á + â (year)

- To establish the functional relationship value and quantity of the exports of FCV tobacco, here fitted a linear function = A+B (quantity and Value of FCV tobacco exports).as shown below table-1 and 2

TABLE -1
Descriptive statistics of quantity and value of exports; Time trend and estimates of growth rates

Region	Average Exporter (Quantity in tonnes)	Std. Deviation of Exports in Tonnes	Parameter of linear fit B value	R square	Adjusted R square	F Value	P value
West Europe							
Q	29114.55	11971.23	1661.31	0.674	0.656	37.22	0.000
V	27178.54	19672.53	2636.28	0.629	0.608	30.45	0.000
East Europe							
Q	23259.41	7042.34	523.91	0.194	0.149	4.32	0.052
V	14914.37	6751.68	868.33	0.579	0.556	24.74	0.000
Middle East							
Q	2487.70	1840.76	169.52	0.297	0.258	7.59	0.013
V	2059.53	1922.79	210.38	0.419	0.387	12.98	0.002

South & South East Asia							
Q	14982.35	11413.70	609.76	0.696	0.679	41.25	0.000
V	12610.91	13888.11	821.31	0.602	0.580	27.21	0.000
Africa							
Q	6558.45	5112.42	679.49	0.618	0.597	29.15	0.000
V	5474.15	5496.19	753.15	0.657	0.638	34.51	0.000
North & South America							
Q	1818.47	1361.42	65.70	0.74	0.019	1.35	0.260
V	1480.40	1580.05	126.01	0.201	0.154	4.28	0.054
Australiasia							
Q	897.30	928.55	134.07	0.730	0.715	48.59	0.000
V	1131.83	1293.79	185.27	0.718	0.700	45.77	0.000

Source: computed from data on Region wise destinations of India FCV exports from 1989-90 to 2008-09.
Note : Q = Quantity in tonnes, V= value in lakhs
To analyse the above data, descriptive statistical measures like Mean, Standard Deviation (SD) have been used.

Analysis of growth rates

In order to assess trend of the export performance of FCV tobacco has linear function growth rates by using OLS method for the period 1989-90 to 2008-09. Here presented descriptive statistics for the quantity exported and for the value of exports in the study period.

In this regard here identify the linear function : Y = A + Bt + Ut

Where Y is the dependent variable which represents the value, t is the independent variable it represents the quantity A and B are the parameters and Ut is the error term with the usual classical properties. An overview of the data presented that Western Europe is the major market for Indian tobacco followed by East Europe, South East Asian region and Africa.

The linear growth of FCV tobacco exports in terms of quantity and value in the study period. It can be understood that in quantity terms South and South East Asia is having the highest growth rate than other regions. As regards to value terms this occupies second place. But in value terms the highest growth rate is occupied by West Europe when compared to other regions. In quantity terms this regions stands at second place. Growth rate of African Region stands third in terms of quantity and value of exports. While growth rate of Middle East region occupies the least position in both quantity and value terms. North and South America, Australasia regions even though growth rates are high at the same time, quantity and value of exports are insignificant comparatively remaining regions.

Hypothesis Testing

The hypothesis that is there is no variation of Export Performance among the different regions of the world was tested using Time Trend analysis and results presented as under.

As can be understood from the Time and Trend growth rates table at pre page, it noticed that there are significant variations of Export Performance among different regions of the world according to the average exports in terms of Quantity and Value. Among the others, West Europe market (29114.55 tonnes) (27178.54 lakhs) has shown high levels of variation of Export Performance followed by East Europe (23259.41 tonnes), (Rs.1419.37 lakhs) South and South East Asia (14982.35 tonnes) (Rs.12610 lakhs) and Africa (6558.45 tonnes) (Rs.5474.15 lakhs)

It is surprising to note that the growth rates in the table appeared to be quite interesting because of the business fluctuations modus operandi of the business, geographical Conditions of different regions and other intangible aspects. The detailed descriptions with regard to the variables "growth rate according to the linear function" are presented as under.

As regards to quantity is concerned it is noticed that west Europe remained as highest in quantity with (1661.31 tonnes) followed by Africa (679.49 tonnes), south and South East Asia (609.76 tonnes), East Europe (523.91 tonnes), Middle East (169.52 tonnes), Australasia (134.07 tonnes) North and South America(65.70 tonnes).

As regards to the variable value is cons and the result appeared differently it is noticed that west Europe continued its trend with higher value (Rs 2636.238 lakhs) followed by East Europe (Rs 868.33 lakhs) South and South. East Asia (821.31 lakhs), Africa (Rs 753.15 lakhs) Middle East (Rs 210.38 lakhs) Australasia (134.07 lakhs) North & South America (65.70) the reasons for such dissimilarities / fluctuations / differences already explained in this chapter.

Since the researcher has found variations in export performance among the different regions of the world. Hence, the proposed hypothesis H_{10} stands rejected.

TABLE-2

Correlation and regression analysis of the Relation between value and quantity of exports to various regions

Region	R Value	R square	Adjusted R square	b (Beta value)	F-Value	P-Value
West Europe	0.920	0.846	0.838	1.512	98.93	0.000
East Europe	0.722	0.521	0.494	0.692	19.54	0.000
Middle East	0.877	0.769	0.756	0.916	60.01	0.000
South And South East Asia	0.940	0.883	0.877	1.14	136.33	0.000
Africa	0.943	0.890	0.884	1.101	[145.15	0.0000
North And South America	0.899	0.809	0.797	1.04	71.86	0.0000
Australasia	0.987	0.974	0.972	1.37	664.69	0.0000

Source: *Computed from data on Region wise destinations of India FCV exports from 19898-90 to 2008-09.*
Q= quantity in tonnes, V= value in lakhs

From the table-2, it can be understood that there is positive relation between the quantity of exports and value of exports different regions. During the study period, Except East Europe region all the regions in the study period quantity of exports are increased at the same time value of exports is also increased. But the East Europe region is not having a significant relation between the quantity of exports and value of exports. In this Region is that these markets are extremely price sensitive and import low cost-low-end tobaccos required by these markets at to their prices become a problem. So there is significant decline in exports both in supply high grades at most competitive prices is able to capture this market share as per information provided by trade.

Results and Discussion

Trading economies improve the quantity of trade through specialization, which contribute the welfare of the people. However the gains made for trade made be reverse by exogenous Negative demand shocks on small open economies. In addition, the relatively high demand elasticity cigarettes contributes negatively to down turns in developing economies that depend mainly on tobacco production. On the other hand, increased production of tobacco leads to the price of tobacco, and to the detoriation of terms of trade (Black, 2002) Decrease cigarette consumption, contributes to decrease demand for tobacco and thus to a decrease in the production of tobacco (Van Lient 2002) this has several negative impacts on the economies of tobacco producing countries which include high unemployment and unfavorable terms of trade and loss of revenue to the Government (World Bank 1999: Matas et al 1999: Vanlient 2002.)

Conclusion

In many ways, the findings of this study extend the knowledge gained from earlier research. It extends knowledge by demonstrating that, despite the universality of export determinants between India and advanced countries, the relative importance of the factors appears different. Although not studied explicitly, it seems that, contrary to observations from advanced countries, various factors appear to play a larger role in determining performance than strategy that is subject to managerial control. Specifically, in advanced countries the influence of environmental factors, such as infrastructure that is well developed, is taken for granted. In India these factors, among others, pose critical bottlenecks to the export performance of many firms. It follows that export performance takes the environment for granted (i.e., omits the environment), may be misleading, because of under-specification of the causal factors. Hence some of the following theoretical underpinnings need to be keeping in mind while evolving the strategy.

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Managing Talent for Sustainable Competitive Differentiation

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Abstract

Effective Talent Management is a matter of survival in today's hyper competitive world. Organizations compete by differentiating their products and services, from other organizations; and the approach to managing talent cannot be any different. This article explores why talent has come to be a strategic differentiator and how leading organizations have adopted a differentiated approach to attracting, developing and retaining talent.

The article delves into the interrelationship between talent management, leadership ability and emotional maturity and ends with a case study of how a leading multinational company has honed its differentiated approach to managing talent in a fiercely competitive business environment.

Introduction:

Talent – The Strategic Differentiator

It is now universally recognized that People are the most critical resource that an organization has. Whatever an organization achieves is ultimately through people. In the words of Herman Lay (founder of Frito Lay Inc.), "Like everyone else, I've got the same trucks. Like everyone else, I have the same potatoes. Like everyone else, I have the same machinery. The only thing I can have different is better people."

What Herman Lay probably meant but left unsaid was that it is possible to have better trucks, better potatoes and better machinery if one had better people who could better produce all these. Then he could use all these better products to produce better chips and sell them better if he had better people who could then go and better communicate why you should buy and eat Lay's chips.

What we are really talking about is competing through differentiation. Since differentiation originates at the level of thought, and human beings are the only species endowed with this faculty, it is a natural corollary that people who can differentiate through thought and action are the ones who can help organizations succeed.

Similar sentiments have been expressed by Conaty & Charan (2011) when they say - Create a new product and it can easily be copied. Lower your prices and competitors will follow. Go after a new market and someone will be right after you, being careful to avoid your initial mistakes. But talent is the differentiator between organizations that grow and those that don't- because replicating a high- quality, highly engaged workforce is nearly impossible.

The fact that there is a scramble for people with talent who can help to compete better is not surprising. In 1997, McKinsey & Company released a report summarizing a one year study titled "The War for Talent". The report stated that the ultimate corporate resource for the next few decades would be "talent", and that "battling for talent" would be more critical for an organization than managing capital, R&D initiatives, and corporate strategy (Axelrod *et al*., 2001). In 2001 McKinsey consultants produced a book by the same name which stated that talent is now a critical driver of corporate performance and that a company's ability to attract, develop, and retain talent will be a major source of competitive advantage into the future.

Defining Talent – An Organizational Perspective

People in the context of an organization have been referred to in different terms over the years - personnel, human resource and now talent. There is no uniform definition of Talent either, and authors provide their own shades and colors when talking of talent.

According to Michaels, Jones & Axelrod (2001), talent is some combination of a sharp strategic mind, leadership ability, emotional maturity, communication skills, ability to attract and inspire other talented people, entrepreneurial instincts, functional skills, and the ability to deliver results. Williams (2000) refers to talent as people who regularly demonstrate exceptional ability and achievement either over a range of activities and situations, or within a specialized and narrow field of expertise; and consistently indicate high competence. Still others, define Talent as "a special aptitude or faculty" or "a high mental ability" (Davis *et al.*, 2007). According to them, talented people have the ability to deliver superior results in any allocated role; handle change, and consider change as a source of a new challenge. They also have the ability to learn. Talented people are inherently curious and seek to expand their knowledge and skill sets. They learn quickly and apply what they have learned in an effective manner. They have high degree of self- confidence, good communication skills and focus. They are problem- solvers rather than just problem-identifiers. They know how to bounce back from failures.

According to the *differentiated approach* (Stahl *et al*., 2012); talent refers to those employees who have more value or potential than others. In other words talent in the organization is the high-potential employees. The other is the *inclusive approach* (Stahl *et al*., 2012);

according to which all individuals employed at all levels have the potential to be considered talent and focus is on leveraging their value for the company's benefit.

So how would we like to think of talent in the context of organizations that strive to differentiate and compete better - qualities that can help organizations succeed and thrive? Successful organizations don't just compete with others, they compete with themselves. They are incessantly trying to out do their previous performance, and continuously innovating to bring better products and services to their customers. And it is people who do that - people driven by passion and values (Stahl, 2012; Conaty & Charan, 2011; Ready *et al*., 2008); people who learn continuously, and people who are not afraid to develop other people (Martin & Schmidt, 2010; Ready *et al*., 2008; Cappelli, 2008; Kotter, 1990; Conaty & Charan, 2011).

From our purpose, therefore, if talent is to be the strategic differentiator for business, we would like to look at talent as people who have the ability and potential to drive differentiation. It cannot be an *inclusive* definition as referred to by some. That is not to say, that people not considered under our definition of talent do not contribute; but given the magnitude of the task of managing talent, a differentiated approach to defining and identifying talent is likely to be more effective.

The Importance of Managing Talent

Organizations have always known that they must have the best talent to succeed. However, few understand the intricacies of managing talent. These are the organizations that don't know where to start from when they need a replacement (Conaty & Charan, 2011). In times of hurry they might end up putting people into wrong jobs, wasting both human and financial capital.

Talent that can help differentiate and compete is critical in today's increasingly complex global economy. Organizations cannot afford to assume that they will always have talent they need to execute business strategy. Talent has become a resource that must be managed because it is the leading indicator of whether a business is headed up or down (Conaty & Charan, 2011) and it is becoming increasingly scarce. In essence, the ability to effectively hire, deploy, engage and retain talent (at all levels) is really the only true competitive advantage an organization has.

Talent Management is one of the buzzwords thrown about in HR fraternity today, but what does it really mean to the organizations? There are varied definitions of talent management. That is to be expected, given that authors define talent differently. However, all refer in some sense, and in varying levels of detail, to a company's human resource supply chain management (Axelrod, Jones & Welsh, 2001). The various facets of the human supply chain management could mean the identification, nurture, progress, reward, and retention of key individuals who can aid the development of organizational sustainability (Marchington & Wilkinson, 2012) – the aim being to get the right people in the right jobs so that the organization as able to meet its objectives.

Depending on how competitive an organization is in the market place, the importance it places on talent management strategies may vary. Accordingly some organizations manage talent that is an exclusive and elite batch of employees - the best and brightest, high potentials, top performers, or "A" players. For other companies," talent refers to all employees of the company (Stahl *et al*., 2012). The latter is a more democratic vision as it assumes that every employee has talent and that all employees have the right to develop their abilities. Organizations that adopt a differentiated approach, hone their talent management strategy to include activities and processes that involve the systematic identification of key positions (Collings & Mellahi, 2009) which *differentially* contribute to the organization's sustainable competitive advantage and the development of differentiated human resource architecture to facilitate filling these positions with competent incumbents.

Whether organizations adopt a selective or a democratic approach to managing talent, all agree that managing talent has assumed strategic significance. CEOs and the senior leadership of organizations now spend considerable portion of their time in identifying and managing talent for their organizations (Martin & Schmidt, 2010; Stahl, 2012; Conaty & Charan, 2011). They systematically identify key positions which differentially contribute to the organization's sustainable competitive advantage, engage in developing a talent pool of high potential and high performing incumbents to fill these roles, and ensure their continued commitment to the organization (Collings & Mellahi, 2009). All this, because they believe that the key factor in determining the success of any organization is its ability to use human talent- to discover it, develop it, deploy it, motivate and energize it. Talent, after all, is the combined capacity and will of people to achieve an organization's goal (Cheese *et al.,* 2008).

Managing talent has assumed such huge importance that in the quest for identifying, developing and retaining talent, several successful organizations have embedded in their culture the habits of observing talent and making judgments about it (Conaty & Charan, 2011). Their rigorous, repetitive processes and intimacy convert subjective judgment about a person's talent into an objective set of observations that are specific, verifiable, and just as concrete as the analysis of a financial statement.

The importance of managing talent means that finding and nurturing talent is now highest on the agenda of leaders in successful companies who believe that holistic talent management is key to developing effective leaders. For this reason it is considered critical enough for CEOs and other top leadership to earmark a considerable amount of their time finding and developing talent. They devise ways and means to provide identified talent with experiential learning (Conaty & Charan, 2011; Martin & Schmidt, 2010; Ready *et al*., 2008; Cappelli, 2008; Kotter, 1990) through challenging stretch assignments that provide depth and breadth of experience and reveal the ones having CEO potential. While good performance and results are expected as a matter of course, they focus on values and culture as well (Stahl, 2012; Conaty & Charan, 2011; Ready *et al*., 2008). The strategic significance of talent management (Collings & Mellahi, 2009) has led to the process being driven top down with leaders emphasizing values such as integrity, character, and self-awareness as essential requirements that will determine whether a person will rise in the organization or not (Conaty & Charan, 2011).

Since talent management has assumed such importance due to talent being a strategic differentiator, we explored what successful organizations focus on while developing talent. We found that the development of leadership ability was central to talent management practices. We also found that most theorists and authors talk about emotional maturity when talking about leadership ability, but not much direct reference to talent management. Also, there is a fair diversity of views on both subjects. In the following sections we have captured the diversity of views on leadership ability and emotional maturity.

Talent Management and Leadership Ability

No two situations are the same. It is possible that what works in one set of circumstances may fail miserably in different circumstances. The business and economic environment is dynamic, people come with varying aspirations, skills and prejudices, and the competitive environment is ever changing (Schneider, 2002). The leader is surely to be called upon to adopt different leadership styles in different situations, with different people to achieve different objectives at different times during the professional life cycle. There is, therefore, an increased need for leadership development to respond to changing environmental conditions.

Goleman (2000) has articulated six different styles of leadership - coercive leaders demand immediate compliance, authoritative leaders mobilize people towards a vision, affiliative leaders create emotional bonds and harmony, democratic leaders build consensus through participation, pacesetting leaders expect excellence and self- direction and coaching leaders develop people for the future. Studies have shown that the more styles a leader exhibits, the better. Leaders who have mastered four or more- especially the authoritative, democratic, affiliative, and coaching styles- have the very best climate and business performance.

Talent management practices lay a great deal of emphasis on developing leadership ability. To become a leader, one needs the potential and a strong desire (motivation) to be a leader (Avolio & Gibbons, 1988). Organizations, therefore, assess leadership qualities before developing mentoring programs for their employees (Stahl *et al*., 2012). This is natural since good leaders can be expected to keep the organization running effectively by finding, developing and keeping other good leaders for the future. McKinsey & Company 2000 survey provides with various elements of a Successful Talent Management Formula; one of them being "growing great leaders" (Axelrod, Jones & Welsh, 2001). Ready, Hill & Conger (2008) talk of leadership development as a cultural element that can influence talent retention. It is therefore important that we understand how authors and theorist view leadership ability as a competency.

Kotter (1990) defines leadership as the ability to cope with change, by moving people in the right direction through motivation and appealing to basic but often untapped human needs, values, and emotions. Katz & Kahn (1966) expresses similar sentiments by defining it as influential increment over and above mechanical compliance with routine direction of the organization.

Senge (1990) looks at leaders as designers, teachers, and stewards. Hooper (2006) refers to leadership as the activities of individuals and their relationships with particular situations and contexts, which, when aligned, can help achieve business objectives and deliver improved organizational performance. Grint (2000) considers leadership to be a social phenomenon, in which there cannot be a leader if there are no followers – the job of the leader is to construct an imaginary community that followers can feel a part of.

There are others who feel that leadership is about driving innovation (Adair, 2007), and those who emphasize that leaders must be inspirational (Goffee & Jones, 2000). They assert that innovation entails an element of risk in even the best prepared and planned innovation. There is plenty of room for uncertainty and fear. Leaders of innovation need to show moral courage, commitment and enthusiasm if they are to keep people moving on the path of progress. They should share their courage and conceal their fear. Inspirational leaders share four qualities - they selectively show their weaknesses, they rely heavily on intuition to gauge the appropriate timing and course of their actions, they manage employees with tough empathy and they reveal their differences (that is, they capitalize on what is unique about themselves).

It is obvious that different authors and theorists look at leadership from different perspectives. While some focus on the qualities of the leader, others view their styles, and still others on what leaders do. In more recent times considerable interest has been generated on the relationship element of leadership, as opposed to its purely transactional nature (Burns, 1978). Transactional leadership takes place when "one person takes the initiative in making contact with others for the purpose of an exchange of valued things." This type of leadership is best described as the politics of exchange. Transactional leadership describes more of a "give and take" working relationship – rapport between leader and follower is established through exchange, such as a rewards system for meeting particular objectives.

In contrast to the calculated instrumental nature of transactional leadership, the other form of leadership – based on emotions - is referred to as Transformational leadership (Avolio & Gibbons, 1988; Carless, Wearing & Mann, 2000; Bass, 1990; Bass, 1997; Bar-On, 1997; Burns, 1978). "Charismatic leadership" (Conger & Kanungo, 1987; House, 1977; Shamir, 1991) is the most frequent name given to the emotional bonds between followers and leaders. Transforming leadership also has a moral dimension. It may be said to occur when "one or more persons engage with each other in such a way that leaders and followers raise one another to higher levels of motivation and morality." (Burns, 1978) The transforming leader is one who, though initially impelled by the quest for individual recognition, ultimately advances collective purpose by being attuned to the aspirations of his or her followers. Transformational leaders exhibit charisma and shared vision with their followers, stimulating others to produce exceptional work (Lai, 2011).

Pless (2006, 2007) & Maak (2006) have focused on the moral dimension of transformational leadership and called it Responsible leadership. It is espoused as a 'values-based and through ethical principles' driven relationship between leaders and stakeholders who are connected through a shared sense of meaning and purpose through which they raise one another to higher levels of motivation and commitment for achieving sustainable values creation and social change.

Talent Management and Emotional Maturity

The link between talent management and emotional maturity may not be apparent to start with. We will, therefore, first explore aspects of emotional maturity in isolation. Emotional maturity is referred to differently by different authors and theorists. Terms like emotional intelligence, social intelligence and emotional maturity are often used interchangeably. Emotional intelligence has turned out to be a very emotive subject and theorists explain it differently. The fact that the same theorists have refined their understanding of the term over subsequent years also indicates that we are still trying to come to terms with the subject. However, the ultimate sense and import of all these definitions and explanations is essentially the same – the sensitivity to respond to different situations and people in a manner that creates positive vibes and a desire among people to work happily together to deliver results.

Social intelligence comprises interpersonal and intrapersonal intelligences (Gardner, 1993 and Thorndike, 1920). Interpersonal intelligence is the ability to understand other people: what motivates them, how they work, how to work cooperatively with them. Intrapersonal intelligence is the capacity to form an accurate, authentic model of the self and to be able to use that model to operate effectively in life. Since emotional intelligence also consists of these two elements (Salovey & Mayer, 1990), it is possible to suggest that social and emotional intelligences are the same. Emotional intelligence encompasses self-awareness, self-management, social awareness or empathy and social skills (Goleman, 2000), each of which comprise several competencies.

Salovey & Mayer (1990) were among the earliest to propose the name "emotional intelligence" to represent the ability of people to deal with their emotions. They defined it as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions". They conceptualized emotional intelligence as composed of four distinct dimensions: appraisal and expression of emotion in the self, appraisal and recognition of emotion in others, regulation of emotion in the self, and use of emotion to facilitate performance.

Goleman (1995) adopted Salovey and Mayer's definition, and proposed that emotional intelligence involves abilities that can be categorized as self-awareness, managing emotions, motivating oneself, empathy, and handling relationships. He included abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and to hope. He went on to assert that emotional intelligence is a set of traits that can help in understanding why one person thrives in life while another, of equal intellect, dead-ends. It determines how well one can use whatever other skills one has, including raw intellect.

Mayer & Salovey (1997) further refined the definition of emotional intelligence to include a set of interrelated skills concerning the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; the ability to regulate emotions to promote emotional and intellectual growth. They asserted that before people can regulate their emotions, they should have a good understanding of these emotions. As many of our emotional responses are stimulated by emotions of other individuals, our understanding of our own emotions is related to our ability to understand the emotions of others.

Hughes & Terrell (2007) stated that the seven skills needed for emotional and social intelligence are: team identity, motivation, emotional awareness, communication, stress tolerance, conflict resolution, and positive mood. A leader can use these to generate the four collaborative results- empathy, trust, loyalty, and better decisions.

Emotional intelligence accounts for more than 85% of exceptional achievement (Goleman, 1995). While technical skills are necessary for productivity, these are insufficient to explain the difference between high and mediocre performers. High performance individuals show emotional intelligence as task complexity increases.

Authors agree that individuals with high emotional intelligence are motivated, self-disciplined, aspire to excellence, and continually seek re-skilling, learning and adding value (Goleman, 1995, 1998, 2000; Ashforth & Humphrey, 1995; Gilad, 1998 and Mayer & Salovey, 1997). Their mental agility sustains long-term business development and builds organizational culture of high morale, which prevents the loss of talent.

Leadership Ability and Emotional Maturity

So far we have looked at leadership ability and emotional maturity in isolation. We now explore what authors and theorists say about emotional maturity when they talk about leadership ability. Zaccaro (1996 and 2001) emphasizes the important role of social intelligence in organizational leadership. He developed a model of organizational leadership that identified the various performance requirements leaders needed to address at ascending levels in the organization. According to him, such skills as flexibility, conflict management, persuasion and social reasoning became more important as leaders advanced in the hierarchy.

Bass (1997) and Bar-On (1997) echoed similar sentiments when he suggested that transformational leaders achieved higher levels of success in the workplace than transactional leaders. He attributed a transformational leaders' superior work performance to high emotional quotient scores.

Goleman, Boyatzis & McKee (2002) opine that all leaders need enough intellect to handle the tasks and challenges at hand. However, intellect alone won't make a leader. Leaders execute a vision by motivating, guiding, inspiring, listening, persuading and creating resonance. As a result, the manner in which leaders act is a fundamental key to effective leadership. Resonance implies that there is common shared vision, that leaders and future leaders are aligned, and that leaders will propagate their own kind. One would expect that such a process would require a certain kind of maturity to flourish and prompts us to explore whether leadership ability and emotional maturity from a talent management perspective aren't two sides of the same coin. This idea has also been propounded by Goleman (2000) – the leadership style exhibited will depend on the competencies associated with emotional intelligence.

Case Study of Tesco Hindustan Service Center

The above narrative leads us to believe that if we were to test people for Leadership Ability and Emotional Maturity, we should find a strong correlation between the two, that is, Emotional Maturity is a necessary condition for Leadership Ability, irrespective of diversity factors like culture, geographies, gender, etc. The literature reviewed is primarily based on examples from the west.

We studied the talent management practices at Tesco Hindustan Service Center (Tesco HSC) based in Bangalore and found strong support for the views expressed above. Tesco HSC is the group technology and operations center of UK based retail giant, Tesco Stores Ltd.

Tesco HSC – a brief background

Tesco HSC was established in the year 2004 in Bangalore to provide technology and operations support to Tesco in UK. Since then Tesco HSC has grown to over 6000 employees supporting Tesco operations in UK, Ireland, US and Central & Eastern Europe. The support areas include Information Technology, Finance, Commercial, Property, and a variety of Business Services including Payroll and Pensions, Stores Helpdesk, Internet based operations, etc.

Tesco HSC is not about providing cost arbitrage, though that may be one of the outcomes of having an operation in India. Each of the Functional Units mentioned above adds considerable value by helping Tesco in other countries to improve operational efficiencies, and reduce waste. Tesco maintains all elements of operations that involve direct customer interface with the stores. Only those roles are transferred to HSC that do not involve direct customer interface. That way Tesco is able to respond effective to culturally diverse global customer sensitive needs as it builds efficiencies through standardization of non-customer interfacing tasks.

Talent Management practices at Tesco

Tesco has a fairly evolved and mature talent management process and invests heavily on developing people – both in terms of functional and leadership skills. In the words of Sandeep Dhar, CEO, in the magazine Human Capital, "An amazing testimony that Tesco places on leadership development is our Academy in Seoul, South Korea. At the Academy, the staff is trained, mentored and connected with colleagues across the world. They greatly benefit from use of smart technologies, e-learning, and tablet computers, which enables them to download training materials, blog about courses, and share experiences, wherever they are in the world."

The processes for identifying and developing talent are institutionalized through a well-defined framework called the Leadership Framework. The leadership framework revolves around the elements of Me, Us, and IT.

"Me" is all about me, the leader living the values. It involves one's personal approach, integrity, drive and commitment. Leadership starts with the individual, their vision, mindset and role modeling. "Us" is about taking people along. It involves working through others, building teams, gaining commitment, building relationships and supporting individuals and teams to achieve their full potential. "It" is about the business context. It involves customer focus, maximizing contribution to business, decision making, change management and overcoming barriers.

Tesco has a People Matters Group (PMG) where Tesco's leadership discuss and deliberate all people matters of significance – ensuring that its People Plan reflects business priorities and that key processes and policies reflect Group principles and blueprints, governance around business structures and headcount, and taking key decisions around Reward, Talent and Performance related data for senior level colleagues.

The leadership actively engages in identifying and developing talent through the year through various programs. The '5-5-5' program is designed for Directors. Each of them invests in 5 days of training for themselves, 5 days in training others and takes on the responsibility of 5 mentees.

"Options" is Tesco's flagship program for developing future leaders. Every year, the leadership team gets together to shortlist colleagues from among the high potential and high performing colleagues identified through a talent spotting process. The shortlisted candidates are put through a rigorous assessment process, and those who qualify then go through a development program that readies them to take up larger roles. Tesco has been gradually broadening the scope of the Options program to identify leaders early in the pipeline.

Another program initiated by Tesco is the Global Management Program (GMP) - a fast track program through which it identifies bright youngsters across the group with the potential to scale up to senior leadership positions within a span of five years. These colleagues go through fast paced learning programs that involve class room training, projects, and experiential learning through assignments in a variety of business functions and geographies.

Tesco understands that providing promotional opportunities may have its limitations. It has, therefore, devised a Talent Planning program through which it explores both promotional and lateral opportunities to retain its high performing, high potential talent. This is one way in which Tesco seeks to enhance the colleagues' breadth of experience and prepare them to succeed in larger roles. The Academy runs regular scheduled programs for the masses as well. These help colleagues build functional expertise and leadership capabilities.

Focus on Values

Tesco has a strong focus on values. It takes precedence over all other criteria of decision making, and it is expected that all colleagues practice the Tesco values. These are – *No one (else) tries harder for customers; Treat people how we like to be treated;* and, *We use our scale for good*. These values too reflect the ME, US and IT ethos. Tesco HSC's modern and innovative Talent Management practices have helped it develop the competitive advantage through strategic differentiation and retain its leadership position in the market.

Conclusion

In a world that is getting fiercely competitive and resources are scarce, one is forced to be thrifty and prioritize on how available resources are to be spent. A differentiated approach helps focus on the essentials by removing the clutter. It helps all functions to align to the organizations core purpose and synergizes their efforts. Managing Talent to attract, develop, and retain leaders with emotional maturity is imperative for organizations to innovate and drive strategic initiatives successfully.

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Shareholder Activism

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Abstract

Shareholders are interested in how the company is being managed. In case of dissatisfaction about the functionality or performance of the company; they take the reins and monitor the management to ensure that it is managed in the best interests of the company. Shareholders influencing the corporate behavior by exercising their rights as owners are termed as shareholder activism.

Shareholder activism has earned its place in the financial press in the recent times. Internet helps in coordination between different groups and reduces asymmetries of information. Shareholders whose interests are diverse, aided by proxy advisory firms are flexing their muscles in varied ways like proxy requisitions, request for shareholder meetings, proxy fights to influence the behavior of the management. Presence of media acts as a catalyst to activism. The author cites, as examples a number of wins scored by activists in India and abroad. The challenge before corporate is to deal with activism without compromising the fiduciary duty of acting in the best interests of the company but not to specific activist shareholders.

Key words : *Shareholder activism, institutional investors, retail investors. Proxy advisory firms, regulations*

Introduction:

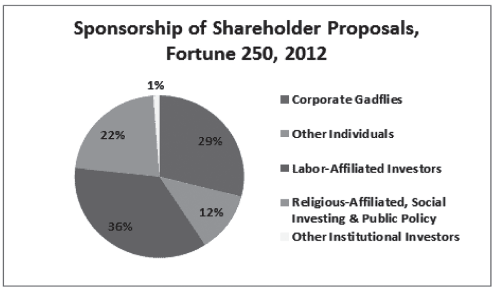
Shareholder activism has become an increasingly important force in the hands of the investor to create pressure on corporate management to satisfy the dual interests of wealth creation and social justice .This has received much attention in the financial press in the recent times. Shareholder activism that has long been the privy of the United States has now became popular in Europe, Australia and other parts of the world including India. Regulatory reforms aiming at increasing the rights of investors, greater disclosure norms to reduce the asymmetry of information, internet based technology providing access to information and connectivity, increased participation of institutional investors like hedge funds and augmented concerns about good corporate governance practices led to an upsurge in shareholder activism in the recent past around the globe. Shareholder voices which are unheard of previously in the general meetings are heard more loudly and regularly. Shareholder proposals, shareholder requisitions for meetings and proxy battles became more frequent with the activist investors scoring some wins are sending shivers down the spine of the erring management of companies. For instance, shareholders revolted to the extreme extent in the annual general meeting leading to the removal of the chief executive and the entire board in case of Euro tunnel. Under the pressure of foreign shareholders, Deutshe Borse dumped the proposal to purchase London Stock Exchange.

Shareholders being owners of the shares and residual claimants of the firm's income are endowed with a bundle of rights by law with which they can safeguard their interests. For a long period time they were content with the economic benefits they receive like dividend or capital appreciation at the time of exit. Earlier shareholders settled to the role of being silent spectators of the AGM or praising the chairman, applauding the company, enjoying the lunch or day out provided by the company and requesting for higher dividend. But this is all history and now with activism taking its stride, the general meetings are action packed. Shareholders who earlier showed interest only in economic issues are now turning their attention to non-economic issues like transparency, good performance and social justice. Apart from seeking more dividends and ROI ,they are flexing their muscles to pursue the goals like changes in corporate boards like removing underperforming management, seeking board representation, changes in corporate strategies including merger and acquisition strategies, share buy backs, restricting executive packages, better corporate social responsibility and sustainability etc. to name a few.

Shareholder activism is not a new concept. It dates back to 1622 .Dutch East India Company witnessed public battles between the shareholders and management due to agency problems. In 1888, an activist shareholder of Metropolitan District railway lamented in his letter to the editor in Financial Times dated February 13, 1888, at the depressing character of the 6 monthly financial reports and called for a shareholder meeting to oppose the reappointment of chairman and demanded the resignation of the board. Investopedia explains shareholder activism as 'a way in which shareholders can influence a corporation's behavior by exercising their rights as owners'. A shareholder disappointed with the performance of the management company has three options in hand. One, to sell off the shares and exit the company, two, to be loyal to the company, be complacent and let the management manage and third to show the dissatisfaction by way of activism. Shareholders who finance risk capital and appoint board of directors to manage the affairs of the company, owing to agency problem, sluggish economy, increased corporate scandals, market volatility, roller coaster equity prices, poor corporate governance practices followed by the organizations felt the need to opt for the third option of taking the reins to monitor the management to act in the best interests of the company is the root cause of shareholder activism. Greater disclosure norms and more information on internet in the recent years enabled the shareholders more knowledgeable about the companies in which they invested to judge how they are performing and are raising their voice against underperforming management by following the recourse of activism.

Hence, it is not out of place to refer to Calpers (The California Public Employees' Retirement System) which has rightly used the term shareowners instead of shareholders recognizing the importance of actively exercising the ownership rights than passively holding the shares. They are ascertaining their rights by putting tougher questions to management and exercising their franchise to exert pressure on management to influence its behavior in order to ensure better management, less frauds, superior performance and improved corporate governance. It creates an environment in which management becomes more accountable to shareholders. Shareholders activism turned boring shareholder meetings to action packed.

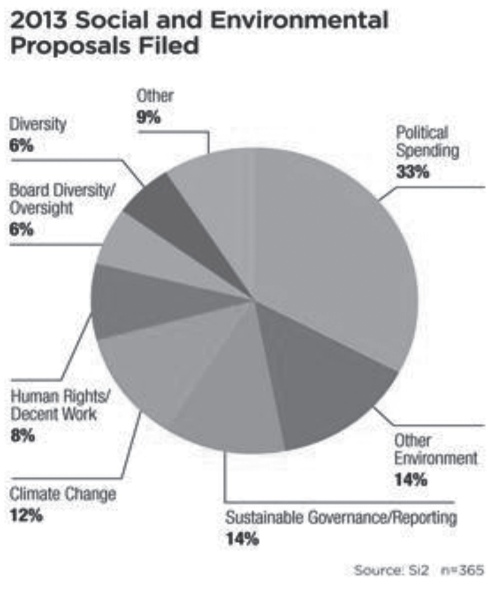
Fairly small stake in the company like holding a single share is sufficient to launch activism .A large variety of shareholders like individual retail investor, institutional investors like hedge funds, pension funds, mutual funds, strategic investors, not for profit groups and the like are becoming shareholder activists and management was noticed like never before. Religious investors entered the fray and led the shareholder activism movement in 1970s starting with the disinvestment campaign in apartheid South Africa. Nowadays labor unions are shredding their passive role and are becoming active shareholders. In addition to these categories there are corporate gadflies who hold few shares in different companies file multiple shareholder proposals. Evelyn Y. Davis and the team of Lewis D. and John J. Gilbert N are prominent in this cadre who say they represent the interests of small shareholders in the professional sense. Shareholder activist Jack Tilburn 86 year old, a former school teacher, attended 500 AGMs and made his voice heard to uphold shareholder democracy. Dan Loeb, an activist shareholder is responsible for putting pressure and on the board of Yahoo to dismiss Scott Thomson CEO, the reason being a CEO is lying on his resume.



Source: Proxy monitor

It is said the activist target companies which are under performing measured by earnings, having executive compensation issues, for carrying excess cash in the balance sheet, and those that are poorly governed and there is consistent failure on the part of the management to deliver as per the expectations of the shareholders. Out of these poor earnings are often cited as a principal motivation underlying proxy contest (De Angelo, 1988.). Some investors like Warren Buffet purchase block of shares in companies with an intention to profit in the future by improving their performance. They seek better financial and environmental performance by the companies. LENS Funds followed the strategy of 'investing in a handful of poor performers and then relentlessly pestering their managers to adapt a better strategy" (Economist, 1997).

Shareholder activism is intended to improve private and social gains. Private gains augment the shareholder wealth. They can insist on improving performance of the company, negotiate with the management regarding the managerial compensation and also the distribution of the surplus to the shareholders thereby increasing the shareholder wealth. It is realized that executive compensation is unfairly enriched the executives and eating the corporate earnings hence 'say on pay' resolutions became a norm mostly in cases if disconnect between pay and performance. Nearly 55% of the shareholders of Citigroup voted against the board approved pay pack of $ 14.1 million in 2011 as against $1 million awarded the previous year to CEO Vikram Pandit. In contrast to private gains, social gains improve the welfare of the society as a whole. All private gains are not social gains and all social gains are not private gains. For example shareholders may put weight to stop spending on sponsorships for public welfare; it can be a private gain but not social gain. Shareholder activism serves the interests of not only the shareholders but also other stakeholders like workers, consumers, environment, society and future generations as a whole. Investor capitalism based on the model of responsible ownership developed to focus on environmental, social and governance (ESG) issues. A record number of resolutions were filed and numerous shareholder campaigns are focusing on environmental and social issues. For instance, NGOs operating for the benefit of cancer patients grilled LIC for investing Rs 3500 Crores in tobacco companies. High shareholder activism may force better corporate governance.



Forms of activism

Activism can be shown in many forms like privately discussing the pertinent issues with the management with an intention to resolve them, increased attendance at general meetings, putting tough questions to the management regarding the company policies in the meetings, letter writing campaigns, members requisition for meetings, filing shareholder resolutions, voting proxies, sending out press releases, public campaign, and proxy fight and the like. Institutional investors by virtue of their large shareholdings have direct access to management, hold meetings with the management of companies to discuss policy issues. Shareholders adopt a strategic approach in adopting the forms of activism. They prefer following confrontational techniques in the first instance and shift towards adopting more hostile techniques only in case the first mentioned techniques fail to give desired results .For instance, initially they make a formal demand to seek a representation in the board and if this demand fails they may go for a proxy statement or a proxy fight .Takeover attempts and legal battles are also adopted as the last option. Legal recourse can be taken only when the management takes an illegal course of action.

Role of Media

Media plays an important role in promoting shareholder activism. Management tries to avoid media where as activist shareholders have an affinity for media. If the issues go to public domain, it may consume managerial time and can result in entrenched positions, hence management shuns public glare over shareholder rebellion in the AGM. On the other hand, activists choose to use public domain as a medium to kick off the changes they require. This facilitates the activists attend the meeting with back up material to toss the AGMs out of gear if the management is not fully prepared to face the situation. According to New York Times activists are turning to social media to solicit support of small shareholders, prospective allies and organize proxy votes. They can frame a debate using social media tools like twitter or Face book in no time without any cost.

Diffused interests of shareholder activists

As the shareholders perceive shareholder value in different ways, sometimes be inconsistent with each other, it can be said that shareholder interests are diffused .Hence activist agendas are not the same for all the activist groups as different activists. In addition, the time horizon of investments of all the shareholders is not the same. Hedge funds, which are relatively free from regulatory controls, have short term interests. Their activism is based on value extraction and exit, hence induce the management to under invest. According to the study conducted by Prof Wei Jiang of Colombia Business School,' Although it is too early in the cycle to predict the fate of hedge fund activism with any certainty, if activism can be viewed as another form of arbitrage, then it is likely that the returns associated with it will decline, or even disappear, as the more funds chase after fewer attractive targets'. Hedge funds mostly target more profitable firms than other types of activists. They mostly stress upon high dividend payout, buy back of shares and cut in CEO pay.

On the other hand, insurance companies and other long term investors look for the long term interests of the company in contrast to hedge funds. They cannot exit the companies easily as they hold large stocks in different companies and if they attempt to sell their stock it may affect the stock prices in the market. Hence they can give more time to the management to implement good corporate strategies to enhance the shareholders wealth as well as get the fruits of good governance. Pension funds on the other hand due of their fiduciary responsibility towards their investors have to concentrate more on private gains .Social activists concentrate on environmental issues Labor unions pursue goals related to management sensitive topics and labor related issues rather than shareholder return. It is criticized on the grounds that labor unions are utilizing shareholder activism as a capitalist tool in the class struggle. They are in an advantageous position due to their inside information about the company's management.

Criticism to shareholder activism

Despite of the virtues shareholder activism is also criticized on multiple grounds. Activism acquired a negative connotation due to aggressive tactics like hostile takeover attempts and 'just vote no' campaigns adopted by a few prominent shareholders. Many of the shareholder proposals like the social responsibility were considered as frivolous and received very little support. Activists are said to have all rights and no duties. Activist sometimes disrupted the shareholders meeting, as it happened in case of GE shareholder meeting, 99% spring activists marched exterior Detroit's Renaissance Center to complaint unfair pension and living allowance measures. Thousands of activists turned out to protest Bank of America's shareholder meeting in 2012 which resulted in a number of arrests. AGM of Tesoro ended in a record time of 12 minutes as the activists rattled the meeting.

It is also said that short term investors show myopic behavior seeking instant gratification may influence the management to change to promote the short term gains like declaration of high dividend, reduce research and development expenditure and capital expenditure which could be detrimental to the company in a long term. Moody's report in 2007 raised the eyebrows of one and all by concluding that increase in shareholder activism in American companies increased the credit risk to the detriment of bondholders and long term shareholders .Activist shareholders with their power to nominate board are damaging the credit quality of the company. Moreover under performing companies which are activist targets, find it difficult to raise further funds from the public for future needs.

It is further debated that the activists lack the proficiency to advise the professional management of the company and are interfering in the way in which business is conducted making it difficult for the management to perform their job. It leads to close monitoring of the management which may shrink the managerial discretion which in turn can be expensive as managerial discretions come with certain benefits. It is said to slow down the business and disrupt the economy. Activism is said to have sometimes led to the release of sensitive information to the public. Though there are merits in these arguments, these are not totally true. Shareholder activism does not mean shifting of power and authorities from managing to shareholders in order to micromanage the companies in which they invest. It means shareholders have the power to review the management and in situations where the management fails to perform and deliver, shareholders step in and use their voting power to change the people and policies. Some investors like for e.g. like institutional investors with their rich experience and expertise may give better insights, regarding which management may deliberate upon. Activists can play the role of 'fire alarm' to direct the management attention towards critical issues.

Shareholder activism does not come free of cost. It is costly to the shareholders and management of the company as well. Shareholders have to bear the costs of negotiating with the management, proxy advisory firms, for coordinating with various shareholders, hiring legal corporate governance experts, advertising firms and investment bankers. On the other hand management has to incur costs in dealing the shareholders in terms of money as well as valuable time of the management. There is a call that those shareholders should not abuse their rights as general meetings are called using shareholders money only.

Indian scenario

The ownership structure of Indian companies is different from that of U.S companies. Promoters hold majority shares in Indian companies including some listed companies. Except institutional investors, outside individual shareholders hold a few shares each and have a wide spread geographical base. Hence in the annual general meetings the power equation favors the promoters' as institutional shareholders remain passive observers for their own reasons and individual shareholders have only a nominal say hence they only seek the economic benefits like dividend and capital appreciation at the time of exit they get from the shares.

Now in the recent times, there is a change in trend. The shareholder activism which was unheard of in India three years back is showing its sparkling presence as the shareholders are assertive of their rights .Institutional investors and FIIs are leading the show. Even minority shareholders stared putting tough questions to the errant management. U.K based children's investment fund which held only one percent stake in Coal India has questioned the management for succumbing to the demand of the Indian government on coal pricing ignoring the fiduciary responsibility towards its shareholders .It took a step further and threatened to sue the management. An equity research arm of Macquarie an Australian bank had expressed its doubts about the accounting policies followed by HDFC. Shareholders of Vedanta Inc. faced protests from shareholders including minority shareholders when it announced restructuring decision. Minority shareholders of Crompton greaves forced the company to give a commitment to sell the loss making jet. Investor activists questioned the transfer of tax liability worth thousands of Crores from Essar Oil to Essar House and the reversal of the deal followed by supreme courts decision. Infosys faced shareholder activism. Veritas Investment research of Canada made a sensational report on Reliance Communications, India Bulls, King Fisher Airlines and DLF for which the stock market reacted sharply. Cases were filed in courts of law against this report. These were only glimpses of what happened in the recent past in India. But compared to other countries, it can be said that shareholder activism is still in its infant state in India but is striding forward taking baby steps.

Shareholder activism is encouraged by the recent changes in the regulation. When the class action suit was filed against Satyam by overseas investors, Indian investors who had no recourse under the law watched powerlessly. Now, Companies Amendment bill 2012 allows class action suits to be filed, if the affairs of the company are conducted in a manner that is prejudicial to the interests of the company or its shareholders. These suits can be filed when minimum 100 shareholders come together. Now, financial assistance is provided for class action suits by SEBI from investor protection and education fund established in India following the provisions Companies Act, 1956 for promotion of investors' awareness and protection of the interests of investors to the approved investor associations, if they can prove that at least 1000 shareholders are affected by fraudulent practices. The changes in the takeover code allow the minority investors to buy up to 24.99% without an open offer obligation which can enable them to have more say in the affairs of the company. But legal protection alone may not ensure investor protection unless the shareholders recognize their ownership rights

Small investors who invest in mutual funds delegate the decision making power regarding where the investment is to make and do not have a right to vote on the shares held on behalf of them. Mutual funds have a fiduciary duty to act in the best interests of the fund holders. Mutual funds despite of having economic power, played a passive and did not accomplish as active participants in the meetings of the companies in which investments were made with fund holders money and pursue the companies to follow good corporate governance practices and act in the best interests of the shareholders. According to the report from Ingovern out of 23,482 resolutions passed by the companies in which investments were made only 326 are voted against by mutual funds in the financial year 2011-12. SEBI 's mutual fund advisory committee felt that mutual funds should play an active role in the governance of listed companies issued guidelines that AMCs should disclose their general policies and procedures regarding the exercise of voting rights with respect to the shares held by them. As per the directives of SEBI, it became obligatory on the part of asset management companies to disclose the actual exercise of proxy votes in the annual and extraordinary general meetings on their websites and annual reports. It further prescribed the areas where they are to exercise due diligence. The direction from SEBI is a welcome move but until and unless the mandate of SEBI followed in the true spirit of the words, it can only be "shareholder engagement¸"rather than shareholder activism.

SEBI took a further step forward, mandated 500 top class companies to provide for e voting facilities to enable wider participation of the shareholders in important decisions of the companies without being physically present at the general meeting. Clause 35A of the listing agreement provides that e voting is mandatory in case of all resolutions which are transacted using postal ballots. Postal ballots are currently obligatory under section 192A of the Companies Act and in other regulations like ICDR Regulations, Takeover Code, etc. In a statement SEBI said, "In line with the budget proposal of Finance Minister, to make it mandatory for top listed companies to provide for electronic voting facilities, it has been decided to implement the said proposal by making electronic voting mandatory for all listed companies in respect of those businesses to be transacted through postal ballot. The same would be implemented in a phased manner,'' NSDL and CDSL Ventures Limited are already providing e-voting platform. This change provides a win -win solution to the shareholders as well as the company. This conversion enables the shareholders to give their assent or dissent to the resolutions proposed in any number of companies in which they hold shares within minutes in the comfort of their home or office .It also reduces the administrative costs associated with postal ballot to the company.

Role of Institutional investors

Individual investors, holding few shares in the company have negligible voting rights and hence they may not be able to influence the policies of the company. Evidence proves that most proposals put by small shareholders were incapable to get majority vote. They have only an advisory role to play. There were instances where boards disregarded their proposals. Small shareholders with their minimal holding do not have any incentives to indulge in activism until and unless they come together and take a collective decision. Some individual investors, now a days are placing proxies and coordinating with other investor groups to exercise their franchise but these instances are rare. Since shareholders are dispersed over wide geographical regions with different languages and cultures, investments made with different objectives in mind face the problem of coordination to take a united action to discipline the inefficient management. Small non-controlling and non-monitoring shareholders who are less sophisticated look forward only for economic benefits and if dissatisfied, following The Wall Street rule have to sell his stock and exit rather than try to change the company's policies ignoring their ownership rights leave the company to the mercy of the management. Sale and exit becomes easy if the market is liquid. Institutional investors, as they are holding large stocks in the companies cannot walk out without affecting the market, hence need to hold the shares for a longer period of time. Researches Edamns and Manso (2011) proved that exit is also a form of activism, as it can affect the share price though for a short time if the managers have direct utility with shore term stock prices. This can have an impact on the behavior of the top management of the firm. In general ,shareholders decision to hold a particular stock depend on a number of factors like a stock price, level of systematic risk, the percentage of stock owned in a firm, market characteristics and advantages that can be gained with the inside information. Exercising opting-out option works against effective corporate governance. If they are indexed investors, the only option left to them to improve the client's holdings is to monitor the management of the companies and ensure that they are managed better to enhance the shareholder value.

Active engagement of institutional investors who hold large equity position in their portfolio of companies in which they invest can resolve this problem. Most institutional investors manage the pooled savings of small investors it becomes their ultimate responsibility to protect the interests of the small investors. They have the required resources at their perusal, ability to monitor the management and incentive to develop specialized expertise to monitor the management of the companies in which they invest. Company's managements will also be more careful that they are monitored by large shareholders. Large shareholders are likely to be more efficient than small and dispersed shareholders in monitoring the company management since they have substantial investments at stake as well as significant voting power to protect these investments (Berle and Means, 1932; Jenson and Meckling, 1976; Shleifer & Vishny, 1986). Large institutional shareholdings in a firm deter managers from pursuing opportunistic earnings management through discretionary accrual choices (Chung et al 2002).

Institutional investors of U.S hold majority shares in most large U.S corporations. Owing to the size of their holdings they had access to the board and executives which enabled them to understand the business. In earlier days, they preferred working behind the scenes by discussing work the boards to resolve the issues. Now they have become more vocal in the shareholders meetings and have shown signs of growing activism to monitor the management company in the best interest of the shareholders. The high profile activism showed by The California Public Employees' Retirement System (CalPERS) needs appreciation in this regard. It has chased reforms at Focus List firms and is involved in bringing out the reforms that would increase shareholder rights and create billions in shareholder value. But most institutional investors are yet to follow this path. Institutional investors, despite their substantial aggregate holdings, do not sit on corporate boards and have virtually no real influence on management's behavior because they invest nearly all their assets in index funds rather than directly in companies (Porter, 1997).

Activism by institutional investors is dependent on the financial, legal and social factors that are not homogeneous for all funds .Institutional investors like pension funds, mutual funds and insurance companies operate under different legal and regulatory environments. They are also constrained by the factors like liquidity of their portfolio, fiduciary responsibilities they owe. Certain institutional investors like banks and insurance companies have existing or future possible future business relationship with the company which may inhibit them from exercising the franchise against the management of the company. Sometimes the pressure tactics adopted by the management has an influence on them. Fund managers have different motives. These institutional investors are not just shareholders who are trying to enhance the value of their clients but also competitors' among themselves .As their performance is compared with their competitors, they tend to beat the benchmarks rather than increasing the shareholder value in absolute terms. They concentrate on constructing their portfolio of stocks so as to eliminate firm specific risks and increase the returns.

They may not have the expertise and talent to advise the management of the company to improve the performance of their companies. The other reason could be they are unwilling to sacrifice the liquidity of their investment to monitor the management of the company. In the due course of activism they may have access to inside information, and there is a potential liability for insider trading.

Proxy advisory firms

Shareholder activism does not come free of cost. Activist shareholders have to bear all the costs of activism and as the benefits are to be shared with all the shareholders of the company. There is a classic free rider problem. Asymmetric pattern of costs and benefits discourages activism. In financial terms, Institutional investors conduct a cost benefit analysis and undertake activism in their portfolio companies only when the benefits outweigh the costs. The free rider problem is reduced to a considerable extent as the holding of the institutional investors have risen considerably in the recent years.

Apart from these costs, the knowledge about the firm and the environment in which it operates which is a prerequisite for activism is difficult to obtain. Governance and proxy advisory firms entered the fray to fill in this gap by playing a vital role in advising institutional and other investors in exercising the corporate franchise and are giving a boost to shareholder activism. Glass, Lewis &Co, Institutional Shareholder Services, Egan-jones proxy services, Proxy Tell are globally reputed proxy advisory services. These proxy advisory firms professionally manned do corporate governance and allied research like valuation of mergers and acquisitions, compensation analysis, give vote recommendations to shareholders on payment basis. This enables the shareholders to be equipped with information with which they can cast their corporate vote more diligently. They also provide the service like casting proxy statement votes on behalf of shareholders. In India Proxy advisory firms like Investor Advisory Services launched by Singhvi and InGovern Research Services promoted by Shriram Subramanyam catalyzed shareholder activism in India.

Empirical evidence suggests that the influence of proxy advisors on the voting pattern is phenomenal. Institutional investors, though they have the ultimate responsibility for the votes that they cast, are increasingly employing the services of proxy advisory services. Facing the shareholder spring, companies are now aggressively attacking the proxy advisory firms for influencing the market raising doubts about the veracity of the analysis done by the proxy advisory firms basing on which voting recommendations were given. There is a hue cry round the world that proxy advisory firms should be subject to regulations which require them to disclose the source of information, assumptions made and methodology adopted to prepare the research reports basing on which they give voting recommendations to the investing community. Companies on their part can of course take the initiative to directly interact with the proxy advisory firms and divulge the accurate information needed for voting recommendations.

Measuring the effect of shareholders activism on governance and the impact of governance on corporate performance is difficult task. Empirical evidence was mixed and show the impact of activism on firm's performance. Apart from activism a number of other factors also play a vital role on governance of which go unnoticed like for example , behind the scene negotiations with the management though they have an effect enhancing the firm value, if the management by accepting the proposal from of active shareholders to enhance the governance of the firm. There is very little empirical research done this area

Conclusion

Shareholder activism per se has the potential to enhance the value of the firm and corporate governance practices for which the activism should be meaningful. Purchasing one share in the company and cribbing at environmental disaster in an energy company or put a shareholder resolution for the postponement of AGM just because you cannot attend on that date is not called activism.

The companies should be prepared as shareholder activism is here to stay and if they ignore activists they have to do it at their risk. Not all the shareholders of the company are active. Only a small proportion of the total shareholders are active, In order to avoid controversy with active shareholders, companies are taking proactive steps like knowing their shareholder base, identifying the activist shareholders and having dialogue with them to address their concerns. But in this context the management should be very conscious as it is the responsibility of the board is to act in the best interests of the company but not in the best interests of active shareholders who apply pressure on the management whose interests may be different from the interests of other shareholders and the company. Coca Cola and Motarola are directly networked with institutional investors like pension funds and mutual funds. More and more U.S companies have become watchful of shareholder activism and are hiring shareholder surveillance companies to know the concerns of their shareholders from time to time. CEOs are now more accessible to money managers". It is definitely a good initiative on the part of the company to meet the activist shareholders often and discuss the issues and diffuse the situation than letting it go to public. Hewlett-Packard Co. has hired Goldman Sachs to help frame a strategy to be better equipped to deal with active shareholders. Executives of the companies choose to engage in a dialogue with the activists to and address their concerns to avoid negative publicity.

Management should always be fully prepared to defend the corporate decisions. An open, transparent and honest communication with the shareholders can reduce the chances of being the target company for activism and hence is to be included in the communication strategy of the company. Companies can strategically put the information in the public domain to ensure full disclosure and transparency to enable the shareholders understand the situation as it is done in case of easy Jet which went to press to explain the remuneration policy. Shareholder activism should also be included in the risk management strategy of the company. An integrated approach should be adopted in dealing with activism. Companies should constitute a response team preferably consisting of key managerial personal including company secretary, public relations personnel and legal advisors to facilitate discussions with activists.

The challenge before corporate is to deal with activism without compromising the fiduciary duty of acting in the best interests of the company but not to specific activist shareholders.

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Customer Perception on Performance of RRBs in Odisha

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Abstract

Regional Rural Banks (RRBs), now spread all over India, play an important role in the all round rural development of the nation, and also for the financial-inclusion mission. To strengthen the functioning of these RRBs further, many committees have given suggestions, for major reforms, including amalgamation. As considerable time and effort have been given on this reforms-measure, time has come to check whether 'amalgamation' of RRBs has helped improving service-quality?

The present paper reviews the growth of Indian banking sector and, particularly the Regional Rural Banks (RRBs) of Odisha. The paper uses both secondary and primary data to study and check, whether there has been any significant improvement in functioning of RRBs, in the state of Odisha.

Introduction:

The importance of banking-system, in the socio-economic development of a nation, has been a well researched topic. But, as compared to other commercial banks, the performance of Regional Rural Banks (RRBs) has been a worry-some case for the Government, at least until recently. In the recent past, more focus was been given on how to improve both the efficiency as well as the very credibility of such RRBs, which were established (by a special RRB Act, in 1976) to boost the rural economy of India.

Since the establishment of Regional Rural Banks, various groups/ committees have been set up by the Reserve Bank of India and Government of India to review their performances. The committees had specific suggestions, to bring about requisite amendments in the working of these banks so that the scope of their functioning can be improved both qualitatively and quantitatively. The suggested reform-measures included amalgamation (of RRBs), which was implemented throughout India, including Odisha, in phases.

The present paper aims at studying the performance of RRBs of Odisha and their service quality, as perceived by the customers, post amalgamation.

First, we briefly summarize the development in banking industry, reforms measures adopted after liberalization and then discuss about the parameters for measuring operational efficiency as well as consumer perception. Operational efficiency is proposed to be analysed through secondary data, while the 'customer perception' is to be analysed by a sample survey of some existing customers of RRBs in Odisha.

Indian Banking & Financial System

The Indian financial system can be categorized into two distinct sectors: formal financial system and informal financial system. The formal financial system is regulated by Government of India, Reserve Bank of India, Securities Exchange Board of India, and other regulatory bodies, whereas the informal financial system consists of indigenous money lenders, landlords, traders, chit-funds, etc.

In the last two decades, there has been a considerable expansion of the Indian financial system, both in terms of growth in infrastructure and business volume. The role played by the financial institutions, particularly the banking sector, in the development and growth of a nation's economy has been widely acknowledged by the various researchers. To make the banks more efficient, delivering better results, committees have prescribed various measures like the end of control on loans, deregulation of interest rates, reduction in reserve ratios like CRR and SLR, implementation of prudential norms (Narasimham,1991). Those reforms were set up with the main objective of improving efficiency in financial resources mobilization and allowance.

According to the recent policy guidelines, the second phase of amalgamation of the RRBs working in a state sponsored by different commercial banks are being amalgamated so that each proposed RRB will have minimum 350-400 branches working in a contiguous area and each State would have one or two RRBs. This process has already been initiated from the 1st October, 2012. So this is the most opportune moment to study the effect of first phase of restructuring (2005) on the efficiency of the RRBs working in India to assess whether amalgamation has really improved the performance of the Regional Rural Banks working in the State of Odisha.

Need for the research

The performance measurement is a process which helps in evaluating how well or how efficiently an organization is performing. It helps the management, to assess whether the organisation is moving in the right or desired direction. It also motivates the people in the organization and out of the organization who are directly or indirectly involved in managing it by making them conscious of the achievements made by the organization. Last but not the least reviewing performance provides necessary feedback to make either any midway correction, if warranted, to improve the overall performance of the organization or to plan for the future.

Objectives of research

The main objectives of the research are:

- to study whether amalgamation has made any impact on the performance of RRBs of Odisha,
- to study whether the Customer Services provided by the RRBs of Odisha are satisfactory,
- to analyze the demographic profile of the customers of RRBs and their possible impact on service-quality.

Research Methodology

In the present research both qualitative and quantitative methods have been used. The present research study covers data for the period from 2000-01 to 2011-12.

As the process of amalgamation of RRBs started in September, 2005 and concluded in 2009-10, 5 years prior to 2005-06 and the subsequent (5-year) period up to which latest data are available (that is, 2011-12) have been selected for study.

The present research is based on both primary and secondary data. The primary data have been obtained through survey method. Descriptive methodology has been used for the study. Both primary and secondary data have been used. The customers of the ten branches of Odisha Gramya Bank have been surveyed.

Progress of RRBs in India

The Regional Rural Banks which came into existence on 2 October, 1975, got expanded very fast and became popular as 'small man's bank'. The period during, 1975-1990, the first fifteen years, was the period of 'inception and expansion', when it found all round spatial expansion and growth in its business. This period witnessed large scale increase in the number of banks, branches and districts covered. Figure –1 shows the expansion of RRBs from 1975 to 1990. The number of Regional Rural Banks operating in India in 1975 was only five but at the end of fifteen years, in 1990, it grew to 196.

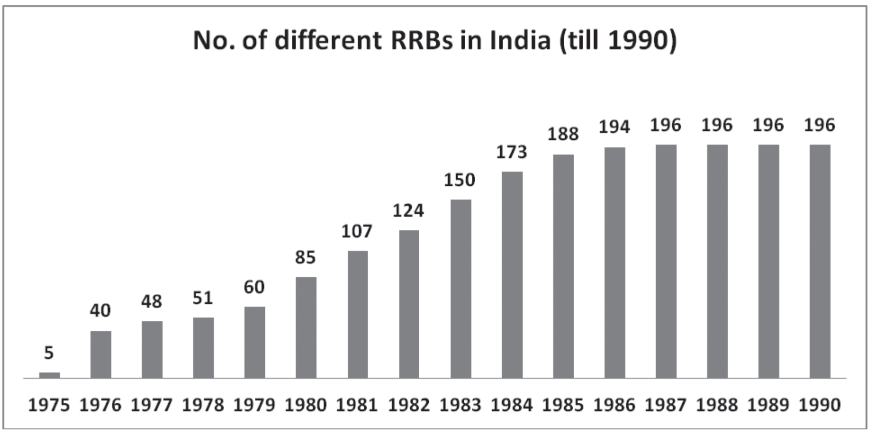


FIGURE –1: GROWTH OF RRBs in India

During the same period, the number of RRB branches increased from 17 to 14,443 (in the year 1990). The branches of the Regional Rural Banks which were opened mostly in the remote rural and unbanked areas gave an opportunity to the hitherto neglected rural mass to experience benefits of banking services.

Deposit Mobilization

The two important functions of any bank are deposit mobilization and credit disbursal. The idle savings in the hands of the people are mobilized as deposits by the banks and the same is deployed in productive use through the borrowers of the bank. The deposit grew from meager amount of Rs. 0.2 crores in 1975 to Rs.4151 crore in 1990. The annual growth rate of deposits during period 1979 to 1990 was as high as 68 per cent in 1981 and as low as 5.16 per cent in the year 1989. The average annual growth rate of deposits during the period 1979-1990 was 40 percent. The compounded annual growth rate (CAGR) of deposit for this period was 39.88 %.

Credit Amount

The Regional Rural Banks were specifically set up to cater to the needs of the rural people. Their prime task was to meet the credit needs of the small and marginal farmers, rural artisans, small businessmen and other borrowers under the target group. The credit outstanding grew steadily during the period 1975 to 1990. The banks which started functioning in 1975 could reach credit outstanding level of Rs. 3554 crores in a short span of 15 years. The average annual growth rate of credit in the same period was 33 %.

Credit-Deposit Ratios

Credit-deposit (CD) ratio of a bank reflects the utilization of deposits mobilized by a bank in the economic development of the locality or region by deployment of credit in the region. Ideally the CD Ratio of a bank should be more than 60 percent. CD Ratio is found to be much above the stipulated rate of 60 per cent. It shows that RRBs had all along used the mobilized resources in the development of the local region.

Productivity per Bank

Productivity per bank and productivity per branch are standard measures used to assess the performance of any bank. It is measured by dividing the total business mix of deposits and advances by the number of banks. It increased from Rs. 0.6 crore in the year 1975 to 39.31 crores in the 1990.

RRBs of Odisha

The study of the development and working of commercial banks in Odisha during the post nationalization period (1970-1979) deserves a special mention. Firstly, the period succeeds implementation of Lead Bank Scheme on the recommendations of the National Credit Council set up by the Government of India in the year 1968. Under the scheme the Lead Banks were required to concentrate on the banking business and resource development in the districts assigned to them in collaboration with other developmental agencies. Secondly, the period also witnessed nationalization of commercial banks on 19th July, 1969. Here, an attempt is made to study the working of banks in Odisha during the decade after nationalization of banks.

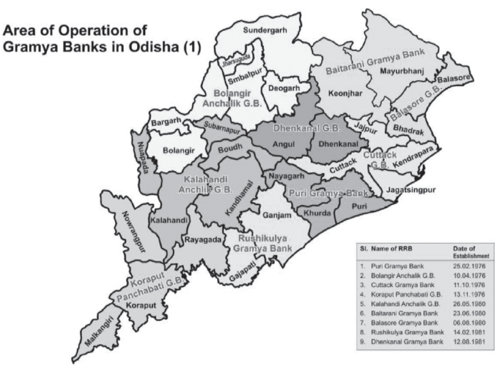
The Government of India initiated the process of amalgamation of the Regional Rural Banks in Odisha in February, 2006, which was ended in August, 2007.

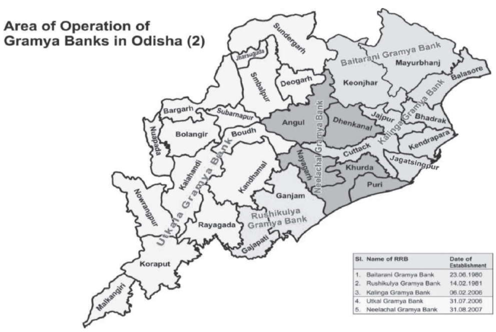
Performance of RRBs in Odisha

There were five regional Rural Banks working in Odisha as on 31.03.2012. They were operating through 875 branches spread in 30 districts of the State. The Key indicators like number of branches, deposits and advances outstanding and Credit-deposit ratios from 1996 to 2012 have been provided in the following table (Table-1).

Table-1: Growth of RRBs in Odisha: Key Indicators

Year	No. of RRB	No. of branches	Amount of deposits (in Rs crore)	Amount of advances (in Rs crore)	Credit-Deposit Ratio (%)
1996	9	819	816	364	44.61
1997	9	816	768	421	54.82
1998	9	823	958	462	48.25
1999	9	838	1194	578	48.41
2000	9	839	1429	716	50.10
2001	9	834	1770	859	48.53
2002	9	832	2155	1124	52.16
2003	9	836	2455	1331	54.21
2004	9	832	2891	1616	55.90
2005	9	834	3196	1999	62.55
2006	7	835	3594	2328	64.77
2007	5	849	4151	2699	65.02
2008	5	857	5298	3080	58.13
2009	5	871	6557	3372	51.42
2010	5	875	7887	3913	49.61
2011	5	875	8823	4689	53.14
2012	5	885	9648	5645	58.55





[Fig./ Exhibit – 2: Maps showing district wise coverage, before & after amalgamation.]

Credit Operation

One of the objectives of nationalization was to ensure adequate credit flow to genuine productive sectors. To fulfill the plan priorities, banks went on extensive credit operation after nationalization. This was made possible by the enlarged resource base of banks during the period. Annual targets were laid down for lending to priority sectors as a whole with sub targets for weaker sections of the society. It was also stipulated that a major portion of the deposits mobilized in rural and semi-urban areas should be deployed in respective areas.

The credit operations of banks during the period are summarized below (Table-2).

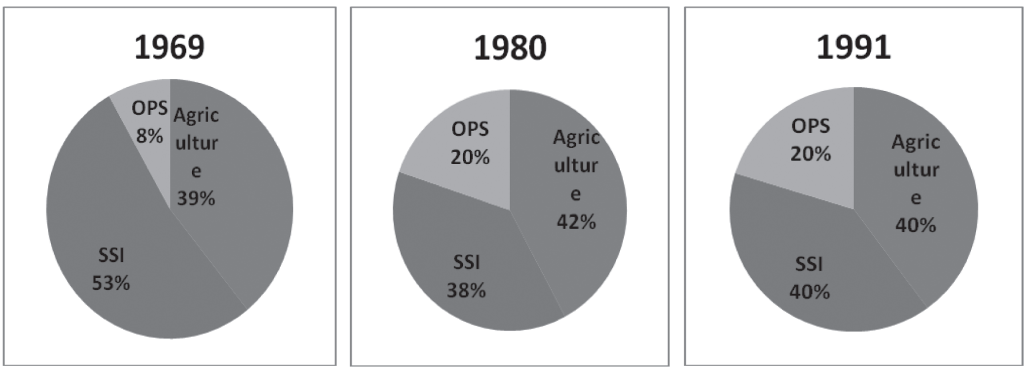
Table-2: Advances Before Nationalisation [Rs in Crore]

Year	Bank Credit	Priority Sector	Out of Priority Sector		
			Agriculture	SSI	OPS
1969	3729	659	258	347	54
Percent		17.67	39.15	52.66	8.19
1980	25371	8501	3584	3229	1688
Percent		33.51	42.16	37.98	19.86
1991	125592	45425	18157	18150	9198
Percent		36.17	39.97	39.96	20.07

Source: Bank Quest Dec. – 2002

Bank credit increased seven fold between 1969 and 1980 and by five times between 1980 -91. Within the priority group the share of agriculture was 39 percent in 1969, 42 percent in 1980 and it remained at that in 1991 by 40 percent. The share of SSI sector in total bank credit was 52.66 percent in 1969 showed a relative decline to 38 percent in 1980 and 40 percent in 1991.

Fig. 3: Classification of Priority Sector Advances: 1969-1980



Hypothesis Testing

We have taken here Net interest margin (NIM) ratio, to study whether there is any significant improvement, post-amalgamation. A bank earns interest on its loans and investment. At the same time it pays interest on the deposits mobilized by it and on the funds borrowed from other institutions. Net interest margin is the difference between the total interest income earned by a bank and total expenditure made in the interest head by the bank. It reflects the capacity of the management in generating surplus.

Net Interest Margin Ratio = (Interest income – Interest expenditure)/ Assets x 100

Null Hypothesis (H_0): There is no significant difference in Net interest margin ratio of pre- and post amalgamated period of Kalinga Gramya Bank.

Alternative Hypothesis (H_1): There is significant improvement in Net interest margin ratio of Kalinga Gramya Bank, after amalgamation.

Table – 4: Net Interest Margin Ratios of Kalinga Gramya Bank, Odisha

Pre-amalgamation	NIM Ratio	Post- amalgamation	NIM Ratio
2000-01	0.00	2005-06	0.010
2001-02	0.01	2006-07	0.050
2002-03	0.00	2007-08	0.062
2003-04	0.03	2008-09	0.098
2004-05	0.06	2009-10	0.413
Mean	0.02	2010-11	0.527
Std. Deviation	0.02	2011-12	0.812
		Mean	0.282
		Std. Deviation	0.308

t-Test: Two-Sample Assuming Unequal Variances

	Pre-amalgamation	*Post- amalgamation*
Mean	0.02068	0.2816
Variance	0.0005	0.0945
Observations	5	7
df	6	
t Stat	-2.23	
P(T<=t) one-tail	0.03	
t Critical one-tail	1.943	
P(T<=t) two-tail	0.066	

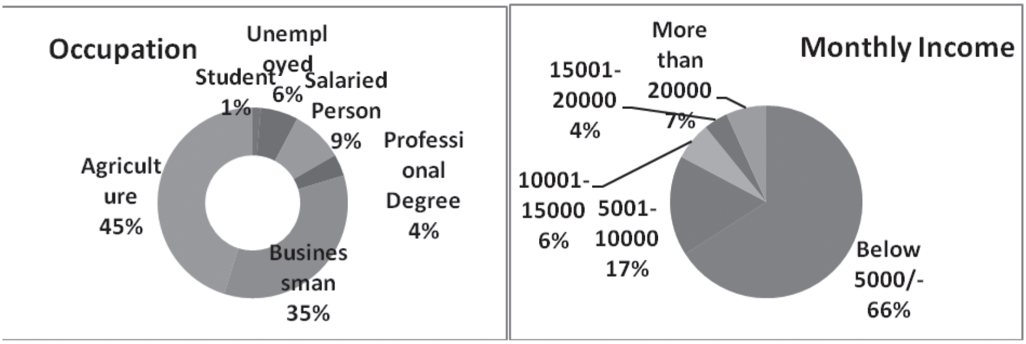
The mean score and standard deviation for post-amalgamation period were M= 0.282, SD= 0.308, while the same for the pre- amalgamated period were M= 0.021, SD= 0.02, respectively. From the result of t-test above, it is seen that the p-value is 0.06, which is more than 0.05. It implies that the difference between the mean value of post and pre amalgamated period is not significant at 5% level. But at higher level (6-10%), we can conclude that, there is some improvement in NIM.

Customer Survey on Service Quality

To understand, whether there is any remarkable change/ improvement in consumer perception, on how bank is operating (governed), a structured questionnaire was canvassed at 10 branches of RRBs of Odisha, where a total of 516 bank-customers have responded. Here we present only the summary of results, particularly on the available facilities and customer expectations.

Following graph shows the brief demographic profile of the customers surveyed.

Fig.-4: Occupation and Income of the Customers of RRBs (from a sample of 500)



Almost 66 per cent of the customers surveyed have income of below Rs. 5000/- per month .It reflects the economic condition of the rural poor. People having monthly income of Rs. 5,001 to 10,000 constitute 17 per cent of the respondents. Only 7 per cent of the people among the respondents have monthly income above Rs. 20,000/-.

Facilities and amenities

During the survey, the respondents were asked to rank sixteen facilities and amenities that they expect to be made available at the branches according their importance in their perception. At the same time they were also asked rank those facilities as available in the branches according their perception. The findings have been tabulated below in descending order according to the rank given by the respondents. The rank is based on the weighted average of the ranks accorded by the individual respondents.

Respondents rank requirement of ATM followed by air-conditioned environment, name board, parking facilities, etc. Need of putting identification boards at counters has been ranked lowest by the respondents.

Table - 5

Sl.	**Amenities Expected** - (Importance measured in 4-point rating scale)	**Weighted Average Score**
1	ATM facility at the branch (Importance)	1.39
2	Air-condition comfort (Importance)	1.44
3	Name board and other information about working hours etc.	1.79
4	Parking facilities (Importance)	1.88
5	Drinking water facility (Importance)	1.91
6	Convenient location of the bank (Importance)	1.95
7	Sitting arrangement (Importance)	2.05
8	May I Help You counter (Importance)	2.17
9	Dust bins (Importance)	2.29
10	Lighting (Importance)	2.30
11	Electronic token number display and audio announcement system	2.46
12	Complaints and suggestion boxes (Importance)	2.54
13	Flooring (Importance)	2.65
14	Availability of personal assistance/guidance (Importance)	2.71
15	Display of products and services information (Importance)	2.85
16	Display of identification boards at counters (Importance)	3.18

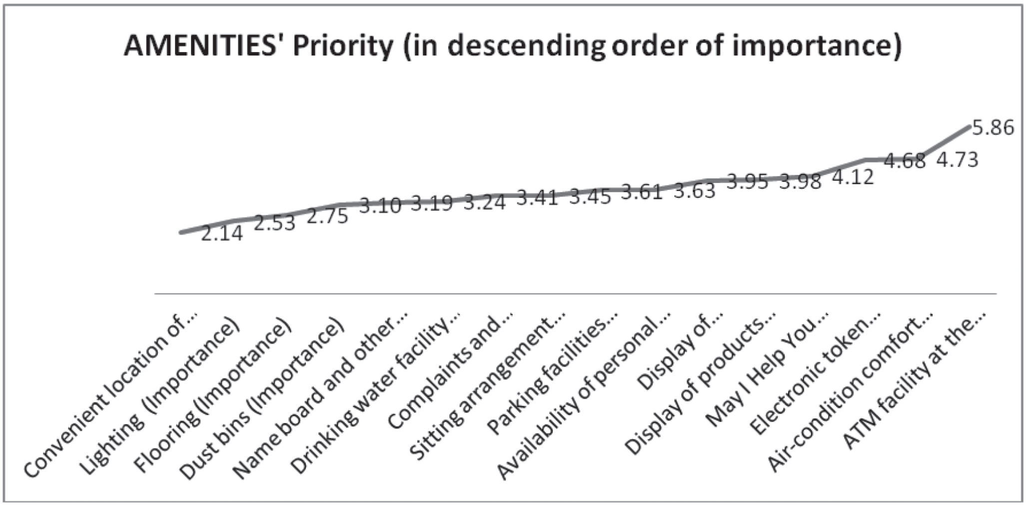
Respondents rank convenient location of branches followed by proper lighting, flooring in the branches as first, second and third respectively. Availability of ATM and air-condition have been ranked lowest by the respondents.

Table - 6

Sl.	**Amenities Available** (Importance, as felt by customers)	**Weighted Average Score**
1	Convenient location of the bank (Importance)	2.14
2	Lighting (Importance)	2.53
3	Flooring (Importance)	2.75
4	Dust bins (Importance)	3.10
5	Name board and other information about working hours etc.	3.19
6	Drinking water facility (Importance)	3.24
7	Complaints and suggestion boxes (Importance)	3.41

8	Sitting arrangement (Importance)	3.45
9	Parking facilities (Importance)	3.61
10	Availability of personal assistance/guidance (Importance)	3.63
11	Display of identification boards at counters (Importance)	3.95
12	Display of products and services information (Importance)	3.98
13	May I Help You counter (Importance)	4.12
14	Electronic token number display & audio announcement system	4.68
15	Air-condition comfort (Importance)	4.73
16	ATM facility at the branch (Importance)	5.86

Figure - 5



It shows that maximum number of respondents that is about 45 percent depends on agriculture for their livelihood. The second highest percentage of respondents (35 percent) are business men. The composition truly reflects the rural profile of the customers of the bank.

Factors influencing the choice of a bank by the customers:

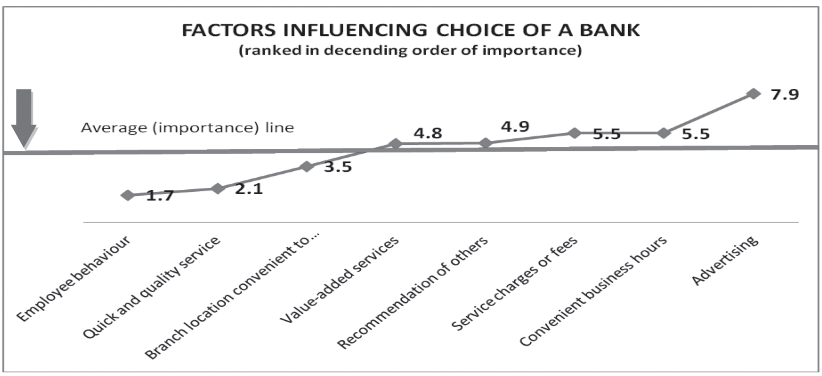
A person's decision to choose a particular bank is influenced by various factors like advertising, quick and quality service, etc. The respondents were given choices of eight such factors and were asked to rank them from 1 to 8 in order of priority according to their perception, 1- *being most influential in their choice* of the bank.

Table-7: Factors influencing choice of a bank (1 being most influential, 8 being least influential)

Sl. No	Factors influencing choice of a bank	Rank
1	Employee behavior	1.7
2	Quick and quality service	2.1
3	Branch location convenient to me	3.5
4	Value-added services	4.8
5	Recommendation of others	4.9
6	Service charges or fees	5.5
7	Convenient business hours	5.5
8	Advertising	7.9
	Mean =	**4.5**

In the present era of globalization and privatization where great emphasis is put on marketing for success of any product or service, it is the general perception that people's choice of bank is greatly influenced by advertising. But the findings of the survey, contrary to the general perception, have shown that most influential factor influencing the choice of a person for choosing a bank is the employee behavior and it is followed by quality of service. It has again brought in to focus the contribution of the human touch in the success of a service industry in particular the banking sector. It is the behavior of the employees who deal with the customers that matter in retaining in customers and in bringing in new customers. Advertising is the factor which is found to be the least influential among the eight factors listed for ranking by the respondents influencing choice of a bank by them. So to improve the customer base, attract new customers and retain the existing customers the top management of the banks should give emphasis on enhancing the quality of the employees and Customer Relationship Management rather than on advertising.

Fig.-6: Factors influencing choice of a bank



The top four factors influencing the choice of a bank by the respondents are employee behavior, quick and quality service, branch location and value added service provided by a bank. Similarly, the bottom four factors influencing the choice of a bank by the respondents are advertising, convenient business hours, service charges and recommendations of the friends.

Conclusion

As per the findings of the research, secondary data analysis shows mixed result. All policies, reforms and Government initiatives, (aimed at governance-reform), have so far resulted in some positive impact, like improvement in liquidity, interest-income, reduction in operational expenditure. But there is no clear evidence of improvement in achieving the assigned social commitments (like attention to priority sector). In the customer-survey analysis, though amalgamation has helped in increasing the confidence level of existing customers (on the very Banking system of RRBs), expectations on service-quality front is still very high and mostly not available, as of now, when the customers tend to compare with the standards of other commercial banks.

[**Note**: This article is part of the doctoral research work done by Mr. J Ram, under the supervision of Prof. RN Subudhi, at KIIT University Bhubaneswar.]

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■■■

Business Potential of Fish Parlours in Uttar Pradesh

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Abstract

The state of Uttar Pradesh is having vast water resources of flowing water and confined water. Uttar Pradesh accounts for about 15% of the country's river length, around 5 percent of reservoir area of the country. The present study evaluates the inland fishery resources and long term trend of fish production in Uttar Pradesh. It provides the business potential of fish galaxies by analyzing the mean changes in consumption pattern of the buyers in fish galaxies over traditional fish markets.

Background:

The contribution of fisheries sector to the GDP has gone up from 0.46 per cent in 1950-51 to 1.47 per cent in 2000-01 (at current prices). The share of fisheries in agricultural GDP (AgGDP) has impressively increased during this period from a mere 0.84 per cent in 1950-51 to 4.01 per cent in 2000-01 at all India level. The role of fisheries in agricultural economy of almost all the states has also been increasing as its enhancing share in the agricultural state gross domestic product over years. Interestingly, this share has increased more prominently in the non-traditional fisheries states like Bihar, Haryana, Punjab, Madhya Pradesh, Uttar Pradesh, etc (NCAP and World Fish Center, 2004). Fish production per hectare of water bodies in Uttar Pradesh calculated at 0.75 tonne per hectare in 2008 is higher than the national average of 0.57 tonne per hectare (Central Water Commission, 2010). Despite encouraging signs of fish production in Uttar Pradesh, per capita fish consumption in the state has remained on the lower side.

To provide a vital forward linkage to fisheries, the Government of Uttar Pradesh has embarked upon a plan to open fish parlours under public-private partnership (PPP) all over the state. The scheme is aimed at integrating fish production to the supply chain to benefit the producers and small fisherman. It is planned to open such parlors in every district of the state. Under the scheme, land is provided by the private parties and venture capital is arranged by the State Government with necessary bank linkage. At present, these parlours are functioning in cities like Lucknow, Meerut, Faizabad, Ghaziabad, Jhansi, Gorakhpur, Varanasi and Moradabad. After introducing mobile fish parlours in various cities, the fisheries Department has now shifted its emphasis to Fish Galaxies which are fixed parlors, in strategic locations. One such parlour very recently in January 2013 has come up at Barabirua location in Lucknow. Previously, there was a congested unhygienic market yard for selling inland fish. Around 50-60 sellers were engaged in selling very limited varieties of inland fish only. Now, one observes that the number of varieties of fish being sold in that market has gone up and the customers are getting quality fish in a clean environment. In this backdrop, present study with the aid of primary data obtained from buyers attempts at assessing the business potentials of such parlours in strengthening the supply chain of fishing.

After setting the backdrop of the study, the subsequent section of the study evaluates the inland fishery resources and long term trend of fish production in Uttar Pradesh. Section-3 provides the business potential of fish galaxies by analyzing the mean changes in consumption pattern of the buyers in fish galaxies over traditional fish markets.

Objectives of the Study

- To evaluate the inland fishery resources in Uttar Pradesh.
- To study the impact of fish galaxies on the buyers' consumption Pattern and to examine the business potential of the fish galaxies over the traditional fish marketing places.

MATERIALS AND METHODS

In order to examine the study objectives, secondary data obtained from different published sources and primary data obtained from buyers are analyzed. Primary data are obtained under two market clusters which are Barabirua Fish Galaxy (Experimental Group) and Alambagh, Power House Choura traditional fish markets, Bangla Bazar Sunday Fish Market (Control Group). Business potential of the fish galaxies are examined by analyzing the changes in fish consumption behavior of the buyers of the galaxy fish market with that of the traditional nearby fish markets. Buyers are interacted at market points after the completion of their fish purchase. For obtaining relevant information, 100 buyers from each market are interacted with the aid of a fully structured format.

TREND OF FISH PRODUCTION IN UTTAR PRADESH

Inland Fishery Potentials of the state

The state of Uttar Pradesh is having vast water resources of flowing water and confined water. Presence of a great length of rivers, canals, natural lakes, and ponds provides adequate potentiality for best possible inland fishing in the state. Uttar Pradesh accounts for about 15% of the country's river length, around 5 percent of reservoir area of the country. Added to it, the state is having 7% of the country's tanks and ponds; around 17% of flood plain lakes and derelict water. Besides the land area under water bodies of the state standing at 4.32 lakh hectares accounts around 6 percent of the land area under water bodies available in the country (See Table-1).

Table-1: Fishery Resources in Uttar Pradesh as a proportion to All India

Sl No	Resources	UP	India	% share of UP in India
1	Rivers and Canals (kms)	28500	195210	14.6
2	Reservoirs (lakh Ha.)	1.38	29.07	4.7
3	Tanks and Ponds (lakh Ha.)	1.61	24.14	6.7
4	Flood Plain Lakes and derelict bodies (lakh Ha.)	1.33	7.98	6.7
5	Total Water Bodies (lakh Ha.)	4.32	73.59	5.9

Source: Dept. of Animal Husbandry, Dairying and Fisheries (2011-12): Annual Report

River resources:

The extensive network of rivers constitutes one of the major fishery resources of the state. The drainage pattern is dominated and controlled by river Ganga system recognized as the master stream in the state. The most important tributaries are Yamuna on the right side and Ram Ganga, Gomti and Ghagra on the left side. Yamuna is 1376 Sq. km long basin, covering an area of 320 lakh Sq. km of which 61750 Sq. Km. lies in U.P. The important tributaries of Yamuna are Chambal, Sind, Betwa, Dhasan, Baghin and Ken. These rivers contribute 79 billion cubic m of water every year into the main stream.

Reservoir, wetland and pond resources:

Out of the 62 reservoirs spread over 17 districts in the state, the four large reservoirs *viz.*, Rihand, Matatila, Kalagarh and Sardasagar occupy 71, 196 hectares. Sonebhadra district with 52, 000 hectare has the largest area under reservoirs. Apart from reservoirs, Uttar Pradesh is one of the prominent zones of wetland resources of the country. The distribution of major reservoirs in the state is presented in table-2.

Table-2: Distribution of reservoirs in Uttar Pradesh (by districts)

Sl No	Districts	No of reservoirs	Area (Ha.)	% share
1	Varanasi	5	5522	4.03
2	Sonebhadra	4	52002	37.95
3	Mirjapur	11	14544	10.61
4	Jhansi	8	11051	8.06
5	Hamirpur	8	4307	3.14
6	Banda	5	7228	5.27
7	Lalitpur	1	10360	7.56
8	Allahabad	2	374	0.27
9	Bijnaur	2	8631	6.30

10	Agra	1	259	0.19
11	Eta	1	518	0.38
12	pillibhit	2	10969	8.00
13	Bahraich	2	232	0.17
14	Gonda	6	2494	1.82
16	Siddharthnagar	2	381	0.28
17	Basti	2	200	0.15
Total		62	137034	100

Source: Central Water Commission (2010)

Trend of the production of fish

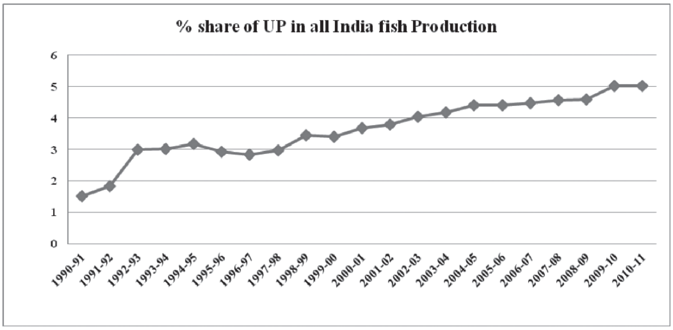
Due to vast potential of inland fishery resources prevailing in the state, there has been a steady increase in the production of fish in the state from 58, 000 tonnes in 1990-91 to 417, 000 in 2010-11 registering a CAGR of 9.85 percent. During the corresponding period at all India level, fish production has increased from 3836, 000 tonnes to 8295, 000 tonnes with lower CAGR of only 3.74 percent. Similarly looking at the fish production index calculated in table-3, it might be said that during the last 21 years, fish production is merely doubled at all India level as against 7 fold increases in the state of Uttar Pradesh. Due to steady increase in the volume of fish production, the percentage share of Uttar Pradesh in all India fish production has steadily increased from 1.51 percent in 1990-91 to 5.01 percent in 2010-11. On the basis of CAGR and fish production index, and steady increase in the percentage share of UP in all India fish production, Uttar Pradesh occupies a prominent position with regard to inland fish production in the country.

Table-3: Fish Production in Uttar Pradesh

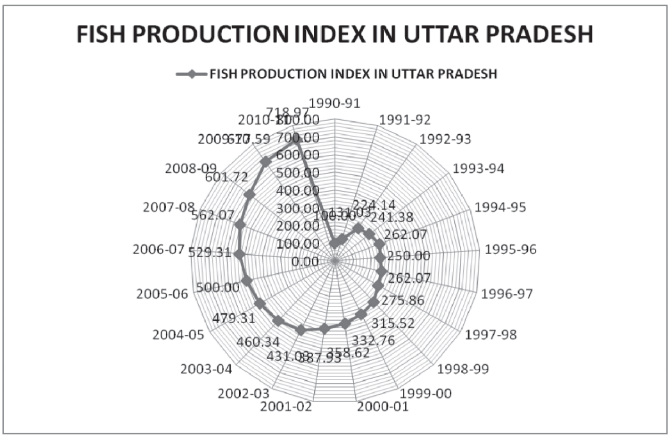
Sl No	Year	Fish Production in Uttar Pradesh (000 tonnes)	Fish Production in India (000 tonnes)	% share of UP in all India fish Production	Fish Production Index of UP (Base Year = 1990-91 = 100)	Fish Production Index at All India level (Base Year= 1990-91 = 100)
1	1990-91	58	3836	1.51	100.00	100.00
2	1991-92	76	4157	1.83	131.03	108.37
3	1992-93	130	4365	2.98	224.14	113.79
4	1993-94	140	4644	3.01	241.38	121.06
5	1994-95	152	4789	3.17	262.07	124.84
6	1995-96	145	4949	2.93	250.00	129.01
7	1996-97	152	5348	2.84	262.07	139.42

8	1997-98	160	5388	2.97	275.86	140.46
9	1998-99	183	5298	3.45	315.52	138.11
10	1999-00	193	5675	3.40	332.76	147.94
11	2000-01	208	5656	3.68	358.62	147.45
12	2001-02	225	5956	3.78	387.93	155.27
13	2002-03	250	6200	4.03	431.03	161.63
14	2003-04	267	6399	4.17	460.34	166.81
15	2004-05	278	6305	4.41	479.31	164.36
16	2005-06	290	6572	4.41	500.00	171.32
17	2006-07	307	6869	4.47	529.31	179.07
18	2007-08	326	7127	4.57	562.07	185.79
19	2008-09	349	7616	4.58	601.72	198.54
20	2009-10	393	7852	5.01	677.59	204.69
21	2010-11	417	8295	5.03	718.97	216.24

Source: Compiled from Handbook on Fisheries Statistics, Dept. of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.



(CHART-1)



(CHART-2)

Pattern of Fish Consumption in Uttar Pradesh

Notwithstanding the achievements with respect to production, fish consumption in the state has remained very much on the lower side. The pattern of fish consumption in Uttar Pradesh in relation to All India level is provided in table-4. From this table it is found that MPC of fish and NFCH for both rural and urban areas were lower in UP in comparison to All India figure in the year 1996. In the year 2008 also, the position of Uttar Pradesh stands lower with respect to MPC and NFCH in comparison to All India pattern. However looking at the percentage variation in 2008 over 1996, it is revealed that the variation in MPC of urban households and NFCH of both rural and urban households in Uttar Pradesh is more than all India figures. From this discussion, it leads us to believe that the demand for fish in Uttar Pradesh could be further promoted by adopting suitable forward linkages. Fish parlors and Fish Galaxies are expected to provide such suitable forward linkage.

Table-4 : Monthly per capita consumption of fish (KG) and number of fish consuming Households (per 1000 Households) in Uttar Pradesh in comparison to All India

Year	UTTAR PRADESH				ALL INDIA			
	MPC-Rural	MPC-Urban	NFCH-Rural	NFCH-Urban	MPC-Rural	MPC-Urban	NFCH-Rural	NFCH-Urban
1996	0.04	0.02	109	52	0.15	0.17	282	262
2008	0.05	0.03	163	69	0.2	0.21	342	278
% Variation	25.00	50.00	49.54	32.69	33.33	23.53	21.28	6.11

Note.: MPC stands for Monthly per capita consumption of fish (in KG) and NFCH stands for number of fish consuming Households (per 1000 Households)

Source: Hand book on fisheries statistics 1996 and 2008, Govt. of India

BUSINESS POTENTIAL OF FISH GALAXIES

Business potential of the fish galaxies are examined with the following set of null hypotheses

- $H0^1$ = The mean distances covered by the customers to reach at the Galaxy fish market and traditional fish market are not significantly different.
- $H0^2$ = There is no significant difference in the consumption pattern of fish in both markets in terms of mean quantity of fish consumption and mean number of times per month fish consumption.
- $H0^3$ = Fish Galaxy has the potentiality to offer more choices to the consumers across occupations.

Distance to the fish Market

Occupation category wise the mean distance covered by the consumers to reach at galaxy fish market and non galaxy fish market is provided in Table-5. It is found that the mean distance covered by the consumers for galaxy market and non-galaxy market are 2.67 and 1.44 kms respectively. Even across all occupation categories, the consumers prefer to go to fish galaxy though distantly located. The differences in the mean distances covered by the consumers in both the market is statistically significant for which the H_0^1 is rejected for the alternative hypothesis (H_1^1) that there is significant difference in the mean distance covered by the consumers in both the market conditions as the critical value of 'P' is less than the tabulated 'P' value. This implies that buyers from distant places also prefer to galaxy market.

Table -5 : Occupation wise distribution of Buyers and average distance they cover to reach at fish Market in both the markets

Occupation Category	Galaxy Market		Non Galaxy Market	
	Number of respondents	Mean distance to fish Market (in Km.)	Number of respondents	Mean distance to fish Market (In km)
Govt. Employee	21	2.26	17	1.58
Private Sector Employee	21	2.57	12	1.95
Business	11	2.18	19	2.34
Professionals	4	3.62	25	0.56
Skilled Labour	20	2.92	14	1.28
Casual Labour	22	2.98	13	1.35
Total	99	2.67	100	1.44
'P' Value with 't' Test	*0.009			

** Statistically significant at 5 percent level*

Consumer spending behavior on fish

The consumers, spending behavior on fish is examined by analyzing occupation category wise average quantity consumed per visit, average number of times visited to the fish market, average expenditure per visit incurred by them, and ratio of non-fish(other non -veg item) consumption to fish consumption in number of days for both the galaxy market and non galaxy market. Occupation category wise mean quantity consumption and mean number of times visit for both the type of fish markets is shown in table-6. From this table, it is revealed that overall mean consumption and mean number of times visit in a month is significantly higher in galaxy market than the non galaxy market. Thus H_0^2 is also rejected in favour of mean consumption pattern of the buyers are better in Galaxy market.

Table-6 : Occupation Category wise Mean quantity of fish purchased in grams per visit and averages number of times visit per month in both the market conditions

Sl No.	Occupation Category	GALAXY MARKET		NON GALAXY MARKET	
		Mean consumption / visit	Mean no. of times visit / month	Mean consumption / visit	Mean no. of times visit / month
1	Govt. Employee	981	4.71	895	6.56
2	Private Sector Employee	919	6.08	756	2.39
3	Business	968	10.09	864	5.56
4	Professionals	1175	4.81	653	3.86
5	Skilled Labour	925	8.06	562	6.86
6	Casual Labour	880	5.86	798	6.83
	Mean across all occupations	940.48	6.53	752.7	5.27
	'P' value with 't' Test for mean consumption per visit	*0.001			
	'P' value with 't' Test mean No. of times visit per month	*0.108			

** Statistically significant at 5 percent level*

As per table-7, it is also found that the average expenditure per visit in galaxy market calculated at Rs.142/- is higher than the non galaxy market. It is also revealed that people spending more amounts on fish prefer to galaxy market than non galaxy market because all the non galaxy market consumer are found with less than Rs.300/- spending per visit as against around 6 percent of the consumers spend more than Rs.300/- per visit to the galaxy market. This might be due to the availability of costly varieties of fish in the galaxy market.

Table-7: Mean expenditure on fish in Galaxy Market and Non galaxy Market

Sl. No.	Expenditure (Rs.)	No. of Consumers in the galaxy Market	No. of Consumers in the Non-galaxy Market
1	0-100	35	53
2	100-200	47	36
3	200-300	12	11
4	300-400	3	0
5	400-500	3	0
Total		100	100
Average Expenditure		142	108
'P' value with 't' Test mean expenditure per month		0.5	

** Statistically significant at 5 percent level*

Analyzing consumers' preferences for fish over other non vegetable food items in terms of the ratio of non fish to fish , it is found that 11 percent in the galaxy market and 20 percent in the non galaxy market are exclusively consume fish only as the corresponding ratio for this group stand at '0'. If the value of this ration happens to be between '0' and '1', it implies that they have more preference for fish and less preference for non fish. It is found that 56 percent of the galaxy consumers and 41 percent of the non galaxy consumers' fall under this category. Combined '0' and '0-1' (preference to fish than non fish) indicates that 67 percent of the fish lovers go to the galaxy market as against 61 percent of the non galaxy market.

Table-8: Distribution of respondents on the basis of the ratio of Monthly Per Household Consumption (MPHC) of Non-fish to fish (number of days)

Sl No	Ratio of non-fish Consumption to fish consumption	Number of respondents in the Galaxy Market	Number of respondents in the non galaxy market
1	0	11	20
2	0-1	56	41
3	>1	33	39
	Total	100	100

Extent of Choice to Consumers

The extent of choice to consumers on the basis varieties of fishes available in both the market condition is presented in Table 9. On the basis of sample data it is found that the consumers of galaxy market are reported to have their consumption of 16 varieties of fishes as against only 5 varieties of fish in the non galaxy market.

Besides these 16 varieties many other varieties of marine and inland fish including dry fish are available in the galaxy market. Except professional category of consumers, all other consumers have uniform choice pattern along all categories of fish and sample professional people prefer to only two varieties of fish like Rehu and Baden.

Table-9 : Varieties of Fish available in both the Market Condition and Occupation Category wise preferences on the basis of sample data

Sl No	Fish Varieties in the Galaxy Market	Fish Varieties in the Non-Galaxy Market
1	Rehu	Rehu
2	Seul	China Rehu
3	Bagi	Mangur
4	Mangur	Bachua
5	Bachua	Tengan
6	Tengan	
7	Pabda	
8	China Rehu	

9	Baiki	
10	Tuna	
11	Padhen	
12	Baden	
13	Gaichi	
14	Suhiya	
15	Pamphlet	
16	Grass corp	

Conclusion

On the basis of CAGR and fish production index, and steady increase in the percentage share of UP in all India fish production, Uttar Pradesh occupies a prominent position with regard to inland fish production in the country. During last 21 years, fish production is merely doubled at all India level as against 7 fold increases in the state of Uttar Pradesh. MPC of fish and NFCH for both rural and urban areas were lower in UP in comparison to All India figure in the year 1996. In the year 2008 also, the position of Uttar Pradesh stands lower with respect to MPC and NFCH in comparison to All India pattern. However looking at the percentage variation in 2008 over 1996, it is revealed that the variation in MPC of urban households and NFCH of both rural and urban households in Uttar Pradesh is more than all India figures. The study empirically finds that across all occupation categories, the consumers prefer to go to fish galaxy though distantly located. Overall mean consumption and mean number of times visit in a month is higher in galaxy market than the non galaxy market. The average expenditure per visit in galaxy market is higher than the non galaxy market. It is also revealed that people spending more amounts on fish prefer to galaxy market than non galaxy market. Fish lovers have the tendency to go to the galaxy market than the non galaxy market. This is because of the more choices available to them. From this analysis it could be said that fish galaxy has the potentiality to better cater the consumers' needs.

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Service Quality Gaps Banking Industry: A Comparative Study

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Abstract

Financial services generally undifferentiated products, it becomes imperative for service organization to strive for improved service quality if they want to distinguish themselves from the competition (Stafford, 1994). Several researches show that service quality is a significant issue which is used in positioning and marketing of organization. In banking also, Service Quality has been one of the concerns. This has been necessitated by the unbending rivalry in the banking industry. Banks are go-getting hard to offer quality services and products in a proffer to maintain existing customers and woo new ones as well.

Keywords: *Service Quality, Service Environment, Interaction Quality, Empathy, Reliability*

Introduction

The services sector has been a major and vital force steadily driving growth in the world economy as well as Indian economy for more than a decade, which contributes to over 60 per cent to India's economy (Economic survey 2012). The Economic Survey 2011-12 pointed out that the Services Sector grew by 9.4% in 2011-12 as compared to 9.3% in the 2010-11. Banking Industry also increased its share from 5.2% to 5.8% from 2006-07 to 2010-11. Indian banking sector emerged as one of the strongest drivers of India's economic growth. Positive changes witnessed in the last two decades have impacted every aspect of banking, ranging from regulatory standards to customer management. The landscape of banking sector in India has changed significantly. There had been 'cut throat competition' with the entry of new private banks and expansion of foreign banks. In the competitive market, non-price factors like customer service become more important (Kotler, 2003). Thus, it became desirable for banks to develop a customer-centric approach for future survival and growth.

Banking Industry

The phenomenon of globalization, liberalization and privatization coupled with other significant changes as technology and policy pertaining to the banking sector has fundamentally changed the banking scenario of the country. Technological advances redefined distance, time and location and liberalization and globalization have led to reduced entry barriers, shorter strategy and product cycles, commoditization of products and increased competition. These factors have impacted banking sector considerably.

The banking sector reforms over the past decade coupled with the impact of the above mentioned forces have resulted in a greater integration of the banking sector with the global markets. As a result, the culture specific banking sector participants have also sought a new framework that has emerged across the globe that successfully addressed the needs of the highly competitive and rapidly changed environment.

The nature of the banks also changed from a depositing and lending institutions to a one stop superstore of all financial needs. This new banking model provided a clutch of services from retail and corporate banking to industrial lending, invest banking to insurance. Modern banks have grown tentacles that went beyond mere brick and mortar structures.

Profile of the Banks under Study: The study has selected two largest banks from the public and private banking space of the country viz. State Bank of India and ICICI Bank.

SBI also has the following non-banking subsidiaries:

1. SBI Capital Markets Ltd
2. SBI Funds Management Pvt Ltd
3. SBI Factors & Commercial Services Pvt Ltd
4. SBI Cards & Payments Services Pvt. Ltd. (SBICPSL)
5. SBI DFHI Ltd
6. SBI Life Insurance Company Ltd.
7. SBI General Insurance

ICICI Bank: ICICI Bank Ltd. is an Indian diversified financial services company having its headquarter in Mumbai, Maharashtra. It is the second largest bank in India with respect to its assets and third largest by market capitalization. ICICI Bank is India's second-largest bank with total assets of Rs. 4,062.34 billion (US$ 91 billion) at March 31, 2011 and profit after tax Rs. 51.51 billion (US$ 1,155 million) for the year ended March 31, 2011. The Bank has a network of 2,630 branches and 8,003 ATMs in India, and has a presence in 19 countries, including India. (ICICI Bank Annual Report 2011-12)

ICICI Bank is the largest private sector bank in India. ICICI Bank has been one of the pioneers in the starting superior customer experience in the Indian banking space and is also credited with many of the customer service innovations. Tremendous amount of Service Quality innovations has been initiated by ICICI Bank. This is one such bank in the private banking space that has done private banking as public sector banks and reached out to customers with the aggressive reach of public sector banks and superior service experience of private sector banks. ICICI Bank offers a wide range of banking products and financial services to corporate and retail customers through a variety of delivery channels and through its specialized subsidiaries and affiliates in the areas of investment banking, life and non-life insurance, venture capital, asset management and information technology. ICICI Bank's equity shares are listed in India on stock exchanges at Chennai, Delhi, Kolkata and Vadodara, Mumbai and the National Stock Exchange of India Limited and its American Depositary Receipts (ADRs) are listed on the New York Stock Exchange (NYSE).

Subsidiaries of ICICI Bank

The ICICI Bank includes a network of eight domestic subsidiaries and three international subsidiaries. Through the establishments, it offers various services including merchant banking services, fund management, factoring services, primary dealership in government securities, credit cards and insurance.

Domestic

- ICICI Lombard
- ICICI Prudential Life Insurance Company Limited
- ICICI Securities Limited
- ICICI Prudential Asset Management Company Limited
- ICICI Venture
- ICICI Home Finance
- ICICI direct.com
- ICICI Foundation

International

- ICICI Bank UK PLC
- ICICI Bank Canada
- ICICI Bank Eurasia LLC

Review of Literature

Modern customers are aware customers and they willingly participate in the market processes, numerous services processes and affect the result significantly in terms of quality and value addition. Service Quality enables businesses to realize, recognize and respond to total satisfaction internal as well as external customers. Edvardsson (1998) in his study stated that "a company does not sell services, but opportunities for services".

There are two important component of Service Quality which needed explanation in comprehension of Service Quality.

Researchers generally agree that Service Quality is not a bi-dimensional construct that reflects whether a firm's customer service is excellent or poor. Instead Service Quality represents a composite of factors that determine customers' perceptions about the offering. Service Quality is not objectively measured according to some technical standards but is subjectively felt by customers and measured relative to customer-determined standards (Kwortnik, 2005). The most popular definition of Service Quality has been the customer's perception of service excellence (Parasuraman et al., 1990; 1998) and relative superiority of performance (Bitner and Hubbert, 1994; Gronroos, 1982).

Parasuraman et al. (1985) stated that Service Quality is a degree and direction of discrepancy between customers' service perceptions and expectations. Reeves and Bednar (1994) in his study explained Service Quality as excellence, value, conformance to specifications and meeting or exceeding customers' expectations. Bitner and Hubbert (1994) defined Service Quality as the customers' overall impression of the relative inferiority or superiority of the organization and its services. The definition of Service Quality also included attitude (Parasuraman et al., 1988, Cronin and Taylor, 1992). DeMoranville and Bienstock (2003) identified Service Quality as a measure to assess service performance, diagnose service problems, manage service delivery, and as a basis for employee and corporate rewards.

Service Quality

Different researches have been conducted on different aspects of Service Quality and its dimensions, few prominent of which with their conclusions are presented below:

Berry et al.'s (1985) believed that the instrument could be used to assess quality in a wide range of service firms. They found that the model's five dimensions were insufficient to cover quality in a retailing setting. Siu and Cheung (2001) found that the dimension physical appearance and policy have the greatest impact on the overall Service Quality & the future shopping behavior. In their study they also found that Personal interaction was rated the weakest dimension and customers were mainly dissatisfied with the physical appearance & promises. Khan et al., (2009) found that the two dimensions, viz privacy /security and fulfillment are not contributing significantly towards the overall Service Quality. Munhurrun et al., (2010) found that Customer rated the importance of attributes as reliability, assurance, responsiveness, Tangibles and empathy respectively and also found that the largest gap was observed for reliability and responsiveness. Truclien (2010) found that not all the factors of Service Quality have positive effect on perceived Service Quality. There are two factors reliability and responsiveness doesn't have positive effect on perceived Service Quality. Convenience has been identified as the most effective factor to perceived Service Quality.

Service Quality in Banks

In the present competitive banking context, characterized by rapid change and increasingly sophisticated customers, it has become very important that banks determine the service quality factors, which are pertinent to the customers' selection process. With the advent of innovations at the marketplace, the customers have greater options to select from and this is posing great difficulty among the marketers of banks. To gain and sustain competitive advantages in the fast changing retail banking industry in India, it has become crucial for banks to have a deeper understanding of customer's perception of key dimensions of service quality and its impact on the identified dimensions. In this view Mehta (2005) found that public sector banks enjoy a better quality perception among their customers as for public sector banks, three out of five dimensions have scored higher than average, however, in case of private banks, only two dimensions have had higher than average values. Awasthi and Dogra (2005) found that customers regard reliability as the most important dimension of services in banks. Singh and Tripathi (2007) suggested in his comparative study that private banks should improve responsiveness, competence, product range and security features in their services. Seema (2008) found that the perceived performance of Prime Bank (one of the bank) is relatively close to expectations in comparison to other two banks and studied the variations in service quality across demographic variables and income of customers. Mohanty (2008) Observed that there are wide gaps exist between the expectations and views of customers and also the products and service delivery by banks. Rai Alok K (2010) Identified that the perceptual gap in service quality exists for both public and private sector banks and this gap is on all the dimensions. Rai, Pareek, Yadav (2012) Identified that offers and delivery are the two most significant service quality dimensions where maximum gap exists for rural customers.

Measuring Service Quality in Banks

Quality is sought across sectors and industries. But measuring Service Quality with the same scale might not suffice as different industries have different specific issues to address. Even the scale developed in one environment might not be equally significant when is used in another environment as different countries have different peculiarities and even in the same country, may issues and relevance may be differ from tier 1 city to tier 2 or tier 3 cities and may also vary from urban to rural markets.

This questioned the universal applicability of most widely used scale i.e. SERVQUAL developed by Parasuraman et.al. (1988). Addressing this issue, Karatepe et al., (2000) developed Banking Service Quality Scale (BSQ), a scale developed exclusively for banking industry and duly tested for its validity and reliability for the measurement of perceived Service Quality in banking services.

In the banking Industry, perceived Service Quality results from the difference between customers' perception of the complete offering experience by the bank and their expectations from the bank. The four dimensions presented in the BSQ scale included:

1. Service Environment,
2. Interaction Quality,
3. Empathy and
4. Reliability

Research Methods

Based on discussion of above literature it is evident that four factors (Service Environment, Interaction Quality, Empathy and Reliability) are assumed to influence overall Service Quality. The survey instrument is composed of questions on the basis of these dimensions.

Research Objective

The study has following objectives to address:

1. To investigate the Service Quality of the Banks.
2. To establish the relationship between Service Quality and its dimensions in banking industry.
3. To compare Service Quality performance between public and private sector Banks.
4. To find the most prominent Service Quality dimension and compare therein between private and public sector banks.

Research Design

The Research design of the study is descriptive.

Data Collection

This paper investigates the Service Quality of Indian banks. A multi-item scale developed by (M. Karatepe et al., 2000) to operationalize the Service Quality construct in manufacturing has been used in entirety in this study. In this study, Service Quality was measured using "Perception –only approach. Specifically, Service Quality items were transformed in to likert type scales and the respondents were asked to indicate their perceptions of the bank on each item using a five point scale ranging from "5= strongly agree" to "1=strongly disagree'. The survey included one single item- item measures relating to over all Service Quality. Responses to overall Service Quality item were elicited on a five point scale ranging from "5= very good" to "1= very poor". The study was conducted on select public and private banks.

Data Analysis

The study has used various statistical results and techniques as Mean, Standard Deviation, Factor Analysis, Multiple Regression and discriminant analysis on SPSS 16.0 for objectivity in the finding and categorical inferences.

Sampling

Universe: Current & Savings a/c holders of SBI and ICICI bank of Varanasi

Sampling Unit: Individual customer

Sample size: 200

Sampling: Convenience sampling

Results: The findings and the subsequent application of tests provides following results:

Service Quality of Public Bank:

Service Quality Dimension's	Mean Score	Gap scores	% Gap
Service Environment	3.28	-1.22	24.4
Interaction Quality	3.55	-1.45	29
Empathy	3.10	-1.90	38
Reliability	3.42	-1.58	31.6

From the above graph Customer's response that there is 24.4% gap exists in Service Environment dimension, 29% in Interaction Quality, 38% in Empathy and 31.60% in Reliability of public Banks which is the function of overall Service Quality.

Service Quality of Private Bank:

Service Quality Dimension's	Mean Score	Gap scores	% Gap
Service Environment	3.59	-1.41	28.2
Interaction Quality	3.47	-1.53	30.6
Empathy	3.24	-1.76	35.2
Reliability	3.64	-1.36	27.2

Customer's responses that there is 28.2% gap exist in Service Environment dimension, 30.6% in interaction Quality, 35.2% in Empathy and 27.2% in Reliability of Private Banks.

Service Quality of Indian Banking Industry:

Service Quality Dimension's	Mean Score	Gap scores	% Gap
Service Environment	3.43	-1.57	31.4
Interaction Quality	3.51	-1.49	29.8
Empathy	3.17	-1.83	36.6
Reliability	3.53	-1.47	29.4

Customer's Reponses that there is 31.4% gap exist in service Environment dimension, 29.8% in interaction Quality, 36.6% in Empathy and 29.4% in Reliability in Indian Banks.

Mathematical formulation of Overall Service Quality:

The combined prediction powers of Service Environment (SE), Interaction Quality (IQ), Empathy (E) and Reliability (R) on the overall Service Quality was also identified by applying multiple linear regressions and a functional relationship was established in the form of mathematical equation.

The functional relationship in the form of equations can be expressed as:

Overall Service Quality = f (SE, IQ, E, R)

The regression equation in the form of dependent and independent relationship can be expressed as:

Overall Service Quality = Constant (intercept) + a*SE + b*IQ + c*E + d*R

Where,

SE= Service Environment

IQ= Interaction Quality

E= Empathy

R= Reliability

a, b, c and d are all coefficients of all variables under study.

The regression result presents following equation among the above selected variables. From the regression analysis we get the values of each factor in the regression equation.

Y= 1.289+.434 Empathy + .334 Reliability

With the help of step wise regression analysis, coefficient of multiple correlation value (.614) shows 61.4% relationship between the observed Service Quality and predicted Service Quality score by the model. The strength of above mentioned model is also tested through the value of Adjusted $R^{2.}$ Which in the above mentioned case is Adjusted R^2 (0.365) .This shows that 36.5% of the variation in the overall Service Quality can be explained by the model. The result found existence of a moderate model between them. Further, Discriminant analysis was conducted to predict which of the service quality dimensions of Public and private was responsible to discriminate these two sectors and also found the discriminating function. Predictor variable were Service Environment, Interaction Quality, Empathy and Reliability. Significant mean differences were observed for all the predictors on the dependent variable. While the log determinants were quite similar, Box's M indicated that the assumption of equality of co- variances matrices was violated as the discriminant function revealed a significant association between groups and all predictors, accounting for 29.9 % of variation in the grouping variable. The discriminant function obtained is

D = (1.101* Service Environment) + (-1.473*Interaction Quality) + (.734*Empathy) + (.245* Reliability) - 1.804

The discriminate function coefficients indicate the partial contribution of each variable to the discriminate function controlling for all other variables in the equation.

Conclusion:

The analysis of public bank Service Quality dimension we see that reliability and interaction quality have greater score from other dimensions. Empathy and interaction quality have the lower value are big contributing towards the lower Service Quality of the public bank. The private sector banks clearly identify Service Environment and reliability dimension have greater perception mean score among all the dimensions. Empathy has scored the minimum value in the private bank, which certainly is a big factor contributing towards the lower Service Quality of the private sector banks. When we talk about the overall banking industry Service Quality, dimension Empathy contributing towards lower Service Quality. Comparison of individual scores with the average mean value also confirms the above average perceptions in public sector & private sector banks.

From the regression analysis only dimensions Empathy and reliability loaded satisfactorily into multiple regression models. Other remaining dimensions such as service Environment and Interaction Quality was not considered enough to be included. This indicates that overall Service Quality is dependent of dimension Empathy and reliability. Its value can be predicted by the values in both dimensions. The above equation shows that empathy was the most powerful predictor of overall Service Quality. The value of adjusted R^2 (.365) was very low and this indicate that this is very weak model. So, we cannot generalize.

In Discriminant function, closer analysis of the structure matrix revealed only two significant predictors, namely Service Environment (1.101) and Interaction Quality (-1.473) with Empathy and Reliability poor predictors.

Implication: Competition can be well managed by differentiating through Service Quality. This study helps the managers of the banks to identify the large amount required area where they need quick actions furthermore satisfy their customers. This study exposed that how managers work on service quality dimension so they can easily plan customer satisfaction with the overall service quality. The Service Quality of public and private banks can be compare. Further, this study helps in identify the dimensions which discriminate to each other in order to take competitive advantage over each other.

Scope of the Study: The study is limited to the Scheduled commercial banks of Varanasi city. The present study focuses on the retail banking operations of nationalized and private commercial banks of selected district Varanasi.

Limitation: Homogeneity of respondent may be vary due to smaller sample size with only two banks and restricted geographical location is one of the important limitations of the study.

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Annexure:

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	QE	.	Stepwise (Criteria: Probability-of-F-to-enter < = .050, Probability-of-F-to-remove >= .100).
2	R	.	Stepwise (Criteria: Probability-of-F-to-enter < = .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: SD

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.523[a]	.274	.266	.55792
2	.614[b]	.377	.365	.51921

a. Predictors: (Constant), QE
b. Predictors: (Constant), QE, R
c. Dependent Variable: SD

Excluded Variables

Model		Beta In	t	Sig.	Partial Correlation	Co linearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	SE	.198[a]	2.102	.038	.209	.806	1.241	.806
	QI	.205[a]	1.833	.070	.183	.577	1.734	.577
	R	.334[a]	4.019	.000	.378	.928	1.077	.928
2	SE	.118[b]	1.291	.200	.131	.759	1.318	.759
	QI	.197[b]	1.893	.061	.190	.576	1.735	.555

a. Predictors in the Model: (Constant), QE
b. Predictors in the Model: (Constant), QE, R
c. Dependent Variable: SD

Standardized Canonical Discriminant Function Coefficients	
	Function
	1
SE	.766
QI	-.898
QE	.530
R	.216

Structure Matrix	Function
	1
SE	.719
R	.411
QE	.322
QI	-.212

Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions; (Variables ordered by absolute size of correlation within function).

Consumer Perception of Services for Retail Products : A Case Analysis of State Bank of India

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Abstract

This case briefly describes a study conducted for State Bank of India, which is India's largest bank with the most number of branches and also in terms of the total value of the business.

The emphasis is initially on initiatives by SBI and offerings for the people which make it stand out. The idea is to understand customer perception and their choices and then make customizable products to suit their need and demands. The financial institution has mostly happy customers and a large database too. The customers have been in the forefront always for SBI.

Keywords: *Financial institution, Services by SBI, mutual funds, security trading, pension fund management, custodial services, general insurance*

Introduction

Before the establishment of banks, the financial activities were handled by money lenders and individuals. At that time the interest rates were very high. Again there were no security of public savings and no uniformity regarding loans. So as to overcome such problems the organized banking sector was established, which was fully regulated by the government.

This case focuses on The State Bank of India and how it has believed in customer satisfaction.

SBI is the largest bank in India owned by Indian Government. As of March 31, 2012, the Bank had a network of 20,193 branches, including 5,096 branches of its five associate banks. In addition to banking, the Company, through its various subsidiaries, provides a range of financial services, which include life insurance, merchant banking, mutual funds, credit card, factoring, security trading, pension fund management, custodial services, general insurance (non-life insurance) and primary dealership in the money market.

Review Literature

Basically, customer service is the provision of service to customers before, during and after a purchase. Customer service is a series of activities designed to enhance the level of customer satisfaction – that is, the feeling that a product or service has met the customer expectation (Mohmed & Radi, 2007). Sheeraz et al. (2012) and Angur et al. (1999) in their research have reinforced this fact and always considered customers at the epitome of any business.

Many researchers have talked about SBI's Grievance Redressal Policy to help customers put forward their grievances and help them find a solution at the earliest. Initiatives like these have helped the financial institution gain a competitive edge over its competitors and in return grow its business.

Sharma & Djiaw (2011) have focused in their research on product innovations offered by SBI and how it has kept pace with time bringing new innovations always.

Researchers have commented upon product changes and technology upgrades that are a core part of SBI and a key to its success. Even though being a Government Entity, it has moved faster than its private counterparts and always wins the race for innovations.

Research Methodology

The main aim of this study and research was to understand the consumer perception and satisfaction level of customers with reference to the services they receive from the State bank of India at various branches as compared to other private banks and how it is affecting the business of State Bank of India.

Research in a descriptive form was used to assist this study. A pilot study was conducted and customers were asked how they feel about the company and analyze their satisfaction levels.

A number of questions were answered with the help of the study.

The participants were existing customers and employees of State Bank of India, and Feedback from MNC employees either male or female. They were generally the procurement managers and results were based on their personal perception. The place of this study was Noida and neighboring areas.

The objectives of the study are:

1. To study the perception of the customers regarding SBI and other banks.
2. To determine the factors that play key role in satisfying customers and maintain their loyalty towards a particular bank.
3. To get customer reviews and understand their behavior.
4. To understand factors that affect consumer behavior.

Analysis and Interpretation of Data

A total of 200 respondents participated in the survey. The profiling has been done on the basis of age, occupation to create profiles and analyze the data.

The data was collected and analyzed on basis of age first to see the different type of customers the bank has. Then the factors which influenced the reason for choosing SBI over others for these customers were analyzed and data grouped appropriately.

The respondents were also asked to mention a second preference over SBI for taking a loan. This helped to identify certain factors which competitors had and SBI did not.

Responses were also recorded for the type and condition of branch facilities. Based on all these factors satisfaction level was defined.

Identification of Factors/ Goodness of Data

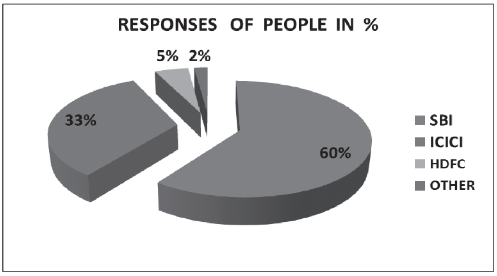
Apart from other factors on which the research was based, the research also tried to measure satisfaction levels among customers. It related this satisfaction to level of awareness about the bank's products and offerings. It also analyzed future growth areas by asking people preferred bank for loans and gained insight into such demographics. The study in this project is carried out using following three perspectives:

1. ***Perspective1****: Online customer survey from customers.*
2. ***Perspective2:*** *Personal Visit to branches and questioning from the staff and the customers at banks.*
3. ***Perspective 3:*** *Feedback from MNC employees and surveying why SBI is not opted by them.*

After completing the study of three perspectives an analysis tool named "Pareto analysis" was put to use which suggested that 80% of the defects are due to only 20% causes.

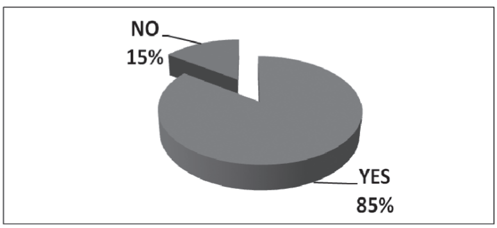
Hypothesis

Hypothesis 1: On which bank you depend for your regular transaction?



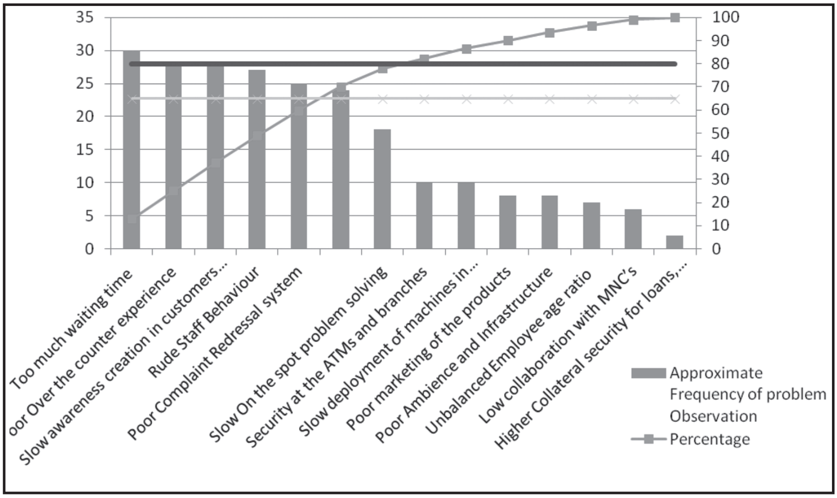
From above figure above we can see that State Bank of India has preferred by most of the clients for regular transactions. 60% of our respondents do regular transaction from SBI, 33 % from ICICI, 5 % HDFC and a meager 2 % chose other banks apart from stated three. We can hence draw the inference that majority of customers chose SBI over others for regular transactions.

Hypothesis 2: ***Are you aware of products & services provided by SBI?***



From above we see that 85 % of respondents are aware of products and services State Bank of India offer. Whereas 15 % of our respondents do not know about the products and services they offer. We can hence draw the inference that majority of people are aware of SBI products and services they have.

Pareto tool, is a statistical technique in decision making that is used for the selection of a limited number of tasks that produce significant overall effect. It uses the Pareto Principle (also known as the 80/20 rule) the idea that by doing 20% of the work you can generate 80% of the benefit of doing the whole job. Or in terms of quality improvement, a large majority of problems (80%) are produced by a few key causes (20%). This is also known as the vital few and the trivial many.



So, we can draw the inference that the above chart is a Pareto chart which depicts the theoretical 80-20 rule i.e. 20 percent problems are the causes of 80% of the defects or loopholes in the service. Practically in our analysis, we observe that 35% of the problems are cause of 65% loss of business of SBI or 65% defects in the customer service of SBI or 65% dissatisfaction of the customers, whichever way quote it.

Practically the purple line cuts the red line after 5th problem bars. Out of the total 14 issues, these five are the most significant few i.e. (5/14)*100= 35 % approximately. These 5 problems should be on priority for resolution by SBI and remaining 9 problems that represent 65% of the lower priority problems should be put in line after resolution of the first 5.

The resolution of these will significantly increase the confidence of customers in the services of SBI and thus would promote more business from the youth and prime customers.

Problems Under Analysis	Approximated Frequency	Cumulative Frequency	%
Too much waiting time	30	30	12.9
Poor Over the counter experience	28	58	25.1
Slow awareness creation in customers for machine usage	28	86	37.2
Rude Staff Behavior	27	113	48.9
Poor Complaint Redressal system	25	138	59.7
Lack of practicality or laid- back attitude of employees	24	162	70.1
Slow On the spot problem solving	18	180	77.9
Security at the ATMs and branches	10	190	82.2
Slow deployment of machines in branches	10	200	86.5
Poor marketing of the products	8	208	90.0
Poor Ambience and Infrastructure	8	216	93.5
Unbalanced Employee age ratio	7	223	96.5
Low collaboration with MNC's	6	229	99.1
Higher Collateral security for loans, renewal charges and processing fees	2	231	100
Total	231		

Conclusion

The conclusions from the research were pretty conclusive. People obviously prefer SBI over other private banks which accounts for its massive database and its turnover.

Customers would prefer to experience a better ambience at SBI which is not comparable to their private counterparts. Customers also felt if bureaucracy could be reduced at SBI since it makes difficult to get things done because of that. A good and positive conclusion was that there is high awareness amongst SBI customers and they are well aware of all its products and promotions.

State bank of India still need to focus on improving the surroundings it provides to its customers. This can be accomplished by having good interiors, and young and charming staff. Due to the large number of customers they also need to ensure waiting times are within certain limits and hire extra staff during festive season. The bank needs to figure out a way how to be personally attached to its customers. This might seem to be a daunting task with the number of customers it has, but it needs to find a way out to retain those customers and add more in the future to become bigger and better.

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Perceived Risk and Consumer Behavior Towards Online Shopping : An Empirical Investigation

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Abstract

The past decade has witnessed the beginning of a major directional change of consumer behaviour, from physical stores purchasing to online purchasing behaviour, in the retailing industry. In India, internet is still considered as a new medium to link customers with retailers. Still Indian people have been attached to the traditional brick and mortar stores, they take online shopping as a risk. In this study author have attempted to find out the factors leading to perceived risk with online shopping. Reliability coefficient for the scale containing 18 variables was satisfactory and factor analysis generated 6 major factors: product risk, financial performance risk, psychological risk, time risk, delivery capability risk and website performance risk.

Key Words: *Online Shopping, Internet, Perceived Risk*

Introduction

The adoption of the Internet as a way to purchase goods and services has seen an increasing trend over the past two decades globally. Compared to traditional shopping, the Internet not only facilitates transactions between buyers and sellers from anywhere at any time, but also provides a wide range of product choices and a platform for exchanging ideas for customers with low costs. To achieve the success of electronic commerce, companies place great emphasis on attracting customers continuously and building long-term relationship with customers on the web. According to latest forecast from internet and mobile association , there are more than 35.5 million Indians shop online. The ultimate reason behind this growth is the convenient of online shopping which not only saves time of the customer but also provides wide variety of items before him. It also provides scope for comparing the offering of variety of vendors at one click of mouse. Apart from this the most significant benefit of online shopping is the attractive discounts that most of the e-tailer provide to attract and retain their customers. Again online stores are available 24×7 in the service of their customers and provides better access to product review and rating system.

However, people still remain reluctant to make purchases on the Internet due to the lack of trust toward businesses in the new electronic environment. many people still locate information on the internet and purchase products offline at traditional stores, conversion rate being very low. Past researches have indicated that consumers' perceived risk of online transaction constituted a key barrier to the use of Internet shopping.

Conceptually perceived risk stands for the uncertainty that a consumer feels when they became unable to foresee the outcome of their purchase decision. It also represents the customers subjective belief about the possibility of a reverse outcome from any purchase decision. The nature of these risks vary from consumer to consumer depending on the product category, shopping situation and also with their personal, cultural and psychological consideration.

Existing literature:

Internet is a relatively new channel of purchase for customer and distribution for vendors . in general customers perceive it more complex and risky than traditional commerce in brick and mortar arrangement. Tan in the year of 1999 taken an early attaemt to identify the risk factor associated with online shopping and found that perceived risk is higher when a consumer purchases via internet in comparison to purchasing from in house means.

In a study conducted by Rajjamma, Pswan and Ganesh in 2007 it was found that services are more likely to be associated with online shopping mode , whereas purchasing of tangibles are associated with brick and mortar shops. As per the study conducted by Vijaysarthy and jones in 2000 , it was found that this perceived risk influences both attitude and intention of a customer to shop on line. Miyazki and Fernandez in their study in 2001 found that perceived risk decreases with internet experience of him.

In separate studies conducted by Cunningham, et al. in 2005; Liberman and Stashevsky in 2002; Park and Kim in 2003; Miyazaki and Fernandez in 2001 it was found that the major concerns of online shopping are security of online payment and privacy of personal information. According to the study conducted by Doolin et al in 2005 it was found that lack of ability to inspect merchandise before purchase; puts them at higher risk of fraud on the part of the merchant than in a physical store.

Bhatnagar et al. in his study in 2000 recognized two types of risks in online shopping: product risk and financial risk. Product risk is associated with performance or functionality of the product as expected. It is higher for technologically complex products like electronics& hardware, ego-related products.

As per the above discussion it can be revealed that perceived risk in Internet context is multidimensional nature. Thus in light of this background the present paper entitled "Perceived Risk and Consumer Behavior Towards Online Shopping: An Empirical Investigation", attempts to provide an better insight to understand consumer's perceived risk towards online shopping in India.

Objective of the study:

To find out the factors which encourage perceived risk of the customer in online shopping decisions

1. To find out the Inconvenience of customers in online shopping
2. To suggest further Up-gradations required for enhancing the adoption of online shopping.

Methodology:

The study is analytical in character and seeks to examine the perceived risk associated with online shopping in India. The study was conducted in Bhubaneswar and data was collected through survey method. An 18-item scale was constructed based on previous studies comprising of all major concerns. Perceived risk was measured on 7 point Likert-type scale with '1' indicating 'strongly disagree' and '7' indicating strongly agree'. Personal interviews were conducted on a sample of 150 respondents who were chosen on convenience basis.

The collected data are to analysed using Factor analysis with the help of SPSS 20 Version for deriving meaningful conclusions out of the study. All statistics were run at 95% confidence level.

Empirical results

Demographic profile:

Out of 150 respondents 70% are male and 30% are female respondents. In terms of age group, 33% respondents are in the age group of 31-45 and 67% are below the age of 30. Educational status of the respondents indicates that 60% of total respondents are graduates, 33.4% are post-graduates and only6.6% respondents are educated upto secondary level. In terms of occupation, students formed the highest portion with 61.66% respondents, 23.34% belong to salaried group, and 15% of the respondents belong to professionals.

Reliability of the study:

Internal reliability of the scale was assessed using Cronbach's alpha. Results showed that alpha value was 0.715 which is quiet satisfactory.

Factor analysis:

In the present study, the factor analysis is used to remove the redundant (highly correlated) variables from the survey data and to reduce the number of variables into definite number of dimensions/ factors associated with perceived risk of customers in online shopping. The factor analysis is performed using the principal component extraction method with varimax rotation.

In order to establish strength of the factor analysis solution, the Kaiser-Mayer-Oklin (KMO) and Barlett's test was first computed and given in table-2.

Table-2 : **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.560	
Bartlett's Test of Sphericity	Approx. Chi-Square	796.663
	Df	153
	Sig.	.000

From the above table, it is found that the value of KMO statistics is greater than 0.5, indicating that factor analysis can be employed for the given set of data.

For the study, six factors having eigen-values greater than one were extracted. The eigen-value of the six factors along with the cumulative percentage of the variance is shown in Table -3.

Table-3: **Total Variance Explained**

Component	Initial Eigen values		
	Total	% of Variance	Cumulative %
1	3.324	18.469	18.469
2	2.672	14.846	33.315
3	1.738	9.653	42.968
4	1.656	9.200	52.168
5	1.221	6.782	58.950
6	1.123	6.237	65.187

The result of the factor analysis using principal component method shows that 65.2% of the total variance is explained by classifying these 18 variables into 6 components or factors. The percentage of the total variance which is used as an index to determine how well the factor solution accounts for what the variables together represent.

The first factor F1 is the most important factor which explains 18.5% of variance before rotation. The second factor F2 is the second major factor which explains about 14.846% of the variance of the variables. The third factor F3 explains about 9.6% of the variation. Likewise the fourth factor F4 explains about 9.2% of the variation and the fifth factor F5 explains about 6.78% of the variations. Finally the sixth factor F5 explains about 6.78% of the variations.

Table -4 gives the factor loading of the variables under each of the five extracted factors. In order to interpret the results, a cut-off point of 0.5 is decided for each variable to group them into factors by forming a rotated component matrix.

Table-4 : Rotated component Matrix

	Component					
	1	2	3	4	5	6
Products sold by online shopping sites are defective and unsafe	.762	-.043	.114	-.116	.064	-.271
In online shopping, product features seldom match to the web specifications	.751	.026	.142	-.132	-.061	.201
Performance of the product purchased via online shopping is not as expected	.728	.004	.023	-.059	-.064	.073
In online shopping often there is a probability of additional hidden costs	.086	.647	-.197	-.126	.410	.037
There is a Lack of protection to the credit card information when shopping online	-.029	.736	.104	.243	.137	.024
In online shopping it is difficult to get back the money	.050	.665	.283	.408	.004	.084
In online shopping there is a chance of losing sensitive information related to bank	.232	.584	.267	-.291	-.356	.033
Online shopping leads to loss of time due to slow website, etc	.002	-.006	.728	.205	.286	.013
Online shopping often leads to psychological discomfort and tension	-.201	.338	.685	-.201	.194	-.113
Online purchase affects the self-image of a shopper	.220	.111	.626	.105	-.192	.121
In online shopping often there is a uncertainty about the delivery of a product	.242	-.063	-.151	.562	-.303	.308
Products are often damaged during shipment	.121	.309	.174	.729	.141	-.057
Products are often lost during shipment	.345	.225	-.089	.663	-.120	.069
The delivery time for the product is not satisfactory	-.245	.190	.148	.069	.715	.004
The Product is not delivered on time	.350	.020	-.070	-.265	.589	.410
The website of online shopping store is complex to use	.377	.106	-.695	.180	.066	.686
The website does not provide complete information about the product	.223	-.274	.278	.049	.136	.645
Authorization mechanism of the online shopping sites are not satisfactory	-.123	.321	-.015	-.084	.008	.779
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.[a]						

The first factor F_1 having three significant factor loadings can be named as "*product risk"* as it includes, 'defective and unsafe products (0.76)', 'mismatch of product to the web specification (0.751)' and 'poor performance of the product (0.728)'. The second factor F_2 having four significant factor loadings can be named as "*financial performance risk"* as it includes, 'probability of hidden cost (0.647)', 'lack of protection to credit card information (0.736)', 'poor refund policy (0.665)' and 'loss of sensitive financial information (0.584). The third factor F_3 having three significant factor loadings stands for *psychological risk* as it includes 'wastage of time due to slow web operation (0.728)', 'psychological discomfort (0.685)' and 'impact on self-image (0.626)'. The fourth factor F_4 having three significant factor loadings stands for *delivery risk* as it includes 'uncertainty about the delivery of a product (0.562)', 'damage to product during shipment (0.729)' and 'loss of goods during shipment (0.663). The fifth factor F_5 having only two significant factor loadings stands for *time risk* as it includes 'un satisfactory delivery schedule (0.715) as well as 'lack of in time delivery of a product (0.589). Finally the sixth factor F_6 having three significant factor loadings can be named as *website performance risk* as it includes 'complexity of website to use (0.686)', incomplete information about the product from the web site (0.645) and 'improper authorization mechanism (0.779)'.

Findings:

The findings of the study show that the first extracted factor namely *product risk* (as it accounts for 18.469% of the total variance) is the most important factor to be taken care of by the online shopping sites to reduce the perceived risk of the customers. Likewise *financial performance risk*, (accounting for 14.846% of the total variance) is the second major factor influencing the customer's perception about an online shopping site . Next to financial performance risk, *psychological risk* (with 9.653% of the total variance) is the third major factor followed by *delivery risk, time risk* and *website performance risk* with 9.200%, 6.782 and 6.237 % respectively of the total variance are to be taken care of by online shopping sites when devising strategy for customer orientation and satisfaction for their service.

Conclusion:

Online shopping is a relatively new platform for Indian customers. As a result of immense growth in internet access for entire population , it may see a promised future tremendous growth in India. But it is essential for the vendors to measure and reduce the perceived risk of customer which will help them to maximize both customer orientation and satisfaction with profit.

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Measuring Effectiveness of Attendance Management Systems in Time Office

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Abstract

There are various problems that have been faced in the field of Workforce Management such as, some of the data that has to be converted into vital information which needs to be collected within the stipulated time period could not be acquired. This study is helpful to overcome the problem stated. Therefore by means of this study; the organizational goals can be achieved at a higher level. The present study helps to overcome the challenges in the work force so that the organizational goals can be achieved efficiently and effectively.

Introduction

The present study is an attempt which can help overcoming the challenges in the work force so that the organizational goals can be achieved efficiently and effectively. There are various problems that have been faced in the field of Workforce Management such as, some of the data that has to be converted into vital information which needs to be collected within the stipulated time period could not be acquired. This study is helpful to overcome the problem stated. Therefore by means of this study; the organizational goals can be achieved at a higher level. The HR manager needs the details of manpower shortage with respect to production in each shift so that the shortage can be compensated by sending in the contract employees and achieves the desired level of production. E.g. the Shortage in 1st shift has to be produced at 8 am to the HR manager so that within 9 am he sends the contract employees compensating the shortage. But there is a problem of getting the details about manpower shortage in each shift. This detail has to be furnished by the time office, but they are unable to provide this detail within the time. The problems that are faced by the time office personnel in providing this detail is carefully analysed for a certain period and the problems has been listed with their recommended solutions.

Objectives

- To Measure the effectiveness of maintaining the attendance management system in time office.
- To observe the day to day activities of the time office employees

- To identify the problems faced by time office personnel in their day to day operations.
- To analyse those problems faced in order to arrive at a better solution for it.
- To make the work done by the time office employees simple and easier.
- To overcome further problems in the near future and to face any uncertainties that may affect the advancement in technology to be used and the fulfillment of the organization goals.

Review of Literature

Dr Anne[1] recommended the core elements of effective attendance management policies. These elements are to provide the necessary guidance to the public sector on managing attendance at work, consist of the following modules like, management training, accurate recording and monitoring of absence in the organization ; early management contact with absent individuals; return to work interviews; trigger points for action and review; review of individual cases. There is an assumption that recommended 'best practice' in any field is based on evidence of proven effectiveness. However, recent application of rigorous evidence reviewing processes in a variety of fields, including those related to health, has revealed that in many cases such assumptions are unfounded. The objective of the current report therefore was to provide such a review of the evidence on which current "best practice" in the field of attendance management is based. He carried out using standard evidence-based review methodology comprising systematic and transparent literature searching, paper selection according to pre-determined criteria and critical evaluation of each paper in terms of the standard of scientific methodology to be employed.

In any fast growing organization, according to Prassanna & Senthilkumar[2], tracking and monitoring employee time and attendance and preparing payroll are tedious, time consuming and risky as it is more prone to errors. Biometric time and attendance management system is one of the most successful applications of biometric technology, serves an alternative for the traditional manual signing process. The most challenges in transforming towards biometric based attendance management system from traditional system are, first, providing platform to store and maintain employee data, secondly the timely collection of huge amount of data from biometric machines, deployed as cluster of nodes, into a central database and finally to setting up a distributed computing environment to support the payroll process. They designed and implemented a reliable, scalable and cost effective Biometric Attendance payroll System over Cluster based Cloud technology, by which we successfully overwhelmed all these challenges. Our cloud based Biometric Attendance Manager (BAM) works with text files to collect data from different Biometric Terminals (BT) and process them to store in cloud based Enterprise Biometric Information Server (EBIS) to generate payroll.

The development of an alternative attendance management system using biometrics is proposed by Shoewu & Idowu[3]. Managing student attendance during lecture periods has become a difficult challenge in the class room environment. The ability to compute the attendance percentage becomes a major task as manual computation produces errors, and also wastes a lot of time. For the stated reason, an efficient attendance management system using biometrics is designed. This system takes attendance electronically with the help of a finger print device and the records of the attendance are stored in a database. For student identification, attendance is marked to a biometric (fingerprint) identification based system. This process however, eliminates the need for stationary materials and personnel for the keeping of records. Among Eighty candidates were used to test the system and success rate of 94% was recorded. The manual attendance system average execution time for eighty students was 17.83 seconds while it was 3.79 seconds for the automatic attendance management system using biometrics. The results showed improved performance over manual attendance management system.

Research Methodology

Collection of data

Qualitative as well as quantitative data were used in the project. Primary data were collected in the form of Observation and Questionnaire. Secondary Data were collected from World Wide Web, Magazines, Articles and published journals, etc. The data is collected in the form of schedule and observation. The schedule consists of a number of questions and their response is collected filled up by the researcher. Observation was done for a period of 15 days and data was noted down by the researcher.

Hypotheses:

(H0): There is no significant relationship between age and software customization.

(H1): There is significant relationship between age and software customization

(H0): There is no significant relationship between age and pace timer.

(H2): There is significant relationship between age and pace timer.

(H0): There is no significant relationship between age and swipe card.

(H3): There is significant relationship between age and swipe card.

Analysis and interpretation

The organization currently uses two types of technology for attendance management system. One of which is Smart card reader used for managing the attendance of apprentice workers and regular employees and another one is barcode reader come biometric finger print scanner used for only the contract workers. Both systems have their own drawbacks.

Tabulation (Percentage Analysis)

1. TABLE showing age wise classification of employees

Age	No of respondents	Percentage
Below 25yrs	10	33%
25-40yrs	15	50%
40yrs above	5	17%
Total	30	100%

From the above table it is found that the numbers of respondents with age groups below 25yrs, 25-40yrs, 40 above are 30,50, and 20 respectively. It is inferred that majority of the respondents are from age group 25-40yrs.

2. TABLE showing gender wise classification of employees

Gender	No of respondents	Percentage
Male	27	90%
Female	3	10%
Total	30	100%

From the above table it is found that 90% are male and 10% are female of the total number of employees. And the majority of the employees are male with 90%.

3. TABLE showing years of work experience of employees

Years of work experience	No of respondents	Percentage
0-1 yrs	4	13%
1-2 yrs	6	20%
2-5 yrs	17	57%
Above 5 yrs	3	10%

From the above table it is clear that 13% of employees have 0-1 yrs of experience, 20% have 1-2 yrs of experience, 57% have 2-5 yrs of experience and 10% have above yrs of experience. So it clear that majority of employees have 2-5 yrs of experience.

4. TABLE showing experience in producing reports

Experience in producing reports	# of respondents	Percentage
Very easy	5	17%
Easy	15	50%
Manageable	8	27%
Difficult	2	6%
Very difficult	0	0%

From the above it is inferred that 17% of employees feel very easy to produce reports using the current software system, 50% say that it is easy to produce to reports, 27% say that it is manageable for them to produce reports and only 6% feel it is difficult for them to produce reports and none feel that it is very difficult to produce reports. Hence majority of the employees feel it is easy to produce reports using the software.

5. TABLE showing ease of use attendance software :

Ease of use of attendance software	No of Respondents	Percentage
Poor	0	0%
Ok	0	0%
Good	18	60%
Very good	8	27%
Excellent	4	13%

From the table it is clear that none of the employee has opted for "poor" or "ok". 60% say that it is good in using the software, 27% feel it is Very good and 13% it is excellent regarding the ease of use in using the attendance software.

6. TABLE showing respondents of employees to need of customization of software:

Is customiztion of software required?	# of respondents	Percentage
Yes	27	90%
No	3	10%

From the table it is clear that 90% of employees say that there is a need of software customization and 10% of employees feel that there is no need of software customization.

Majority of them feel that there is need of software customization for efficient working.

7. TABLE showing response of employees regarding the problem with pace timer

RESPONSES	YES	NO
Is there any problem with the pace timer?	20	10
Percentage	70%	30%

From the above table it is clear that about 70% of employees say that there is some problem in the pace timer. And the remaining 30% of employees deny that there is no problem with the pace timer.

8. TABLE showing response of employees regarding the problem with swipe card

RESPONSES	YES	NO
Is there any 3problem with the swipe card?	27	3
Percentage	90%	10%

From the above table it is clear that about 90% of employees say that there is some problem in the swipe card. And the remaining 10% of employees deny that there is no problem with the swipe card.

9. TABLE showing response of employees to hardware related problem

Responses	Card Reader	Swipe Card	System Memory	All the three
In hardware related problem, where do you think the problems occur?	6	4	2	18
Percentage	20%	11%	9%	60%

From the table it is clear that about 20% of employees say that hardware related problems is due to Card Reader and about 11% of employees say that swipe card totally contributes to the hardware related problems. 9% of employees say that system memory is responsible for hardware related problems and remaining 60% of employees say that all three i.e. the reader, swipe card and the system memory is responsible for hardware problems of the attendance system.

10. TABLE showing response of employees to software related problem

Responses	Data Transfer	Poor Software Coding	Network Problem	Due to Virus
In software related problems, where does the problem occur?	10	14	4	2
Percentage	31%	49%	11%	9%

From the table it is clear that about 31% of employees say that software related problems occurs during data transfer .And about 49% of employees say that poor software coding the attendance system accounts to the software related problems. 11% of employees say network problems accounts to software problems and remaining 9 % of employees say that software problems are due to the viruses that are present in the system.

11. TABLE showing response of employees to performance of attendance system

RESPONSES	Very Low	Low	Average	High	Very High
Rating of the current attendance system	5	20	4	1	0
Percentage	17%	67%	11%	5%	0%

It is clear from the table, about 17% of employees feel that the performance of the current attendance system is very low. And about 67% of employees feel that the performance of the current attendance system is low. 11% of employees say that the performance is Average and remaining 5% of employees feel that the performance is high. None of the employees have opted for very high performance.

12. TABLE showing opinion of employees to change the attendance system

RESPONSES	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Opinion in changing Attendance System	7	17	4	2	0
Percentage	22%	56%	11%	5%	0%

It is clear from the table that about 22% of employees Strongly agree to change the current attendance system. And about 56% of employees agree to change the current attendance system. 11% of employees are neutral in their opinion about changing the system and remaining 5% of employees disagree to the opinion of changing the current attendance system.

13. ANOVA- TEST

AGE VS. CUSTOMIZATION, SWIPE CARD AND PACE TIMER

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Is customization necessary	Between Groups	1.500	2	.750	16.875	.000
	Within Groups	1.200	27	.044		
	Total	2.700	29			
Is there any problem in the pace timer	Between Groups	3.333	2	1.667	13.500	.000
	Within Groups	3.333	27	.123		
	Total	6.667	29			
Is there any problem in the swipe card	Between Groups	1.500	2	.750	16.875	.000
	Within Groups	1.200	27	.044		
	Total	2.700	29			

The calculated value is .000 which is less than (< .05) the table value, hence reject the null hypothesis and accept the alternate hypothesis. So there is significant relationship between age and software customization.

The calculated value is .000 which is less than (< .05) the table value, hence reject the null hypothesis and accept the alternate hypothesis. So there is significant relationship between age and pace timer.

The calculated value is .000 which is less than (< .05) the table value, hence reject the null hypothesis and accept the alternate hypothesis. So there is significant relationship between age and swipe card.

Findings & Recommendations:

1. Majority of the respondents feel that there is problem in both the software and hardware components of the attendance system.
2. Most of them have opted that there is a need in software customization of the current attendance software.
3. Majority of the respondents are unsatisfied in the performance of current attendance software.
4. Most of them have opted that there is problem in swipe card and pace timer.
5. Most of the respondents feel that it is easy to produce reports using the software.
6. Most of the respondents are well experienced in using the software.
7. Most of the respondents are also ready to work in new kind of attendance system that suits their industry.

Most of the system related problems that prevail is because of the mismatching of the company's requirement and the software design of the current attendance system. This can be overcome by customizing the attendance software according the specific needs of the company i.e.

- Extending the software memory support up to 5000 employees from 4000 employees.
- Upgrading the software up to the latest available technology so that it doesn't need any buffer to store data the temporarily where the data gets lost.
- Periodic surveillance of the software has to done by the software service provider and caters the needs for customization if necessary.

Problem with the pace timer can be rectified by debugging the software and properly maintaining it once in 6 months. Problem with swipe card can be resolved by using high quality magnetic tapes where wear n tear is minimal. For ancillary problems management has to clearly define duties and responsibilities of each designation and address the problems of the employees.

Paper works for c-off and weekly off application form can be made online at least for the executives so that time spent on paper works can be reduced and make the time office employees concentrate on other important works. All the system related problems can be fixed by using one of the advanced technologies that is recommended by the employees. All the system related problems can be completely overcome by implementing palm vein technology for the following reason:

This technology doesn't use buffer memory (Access memory) to temporarily store the data rather they directly capture the information and store it in the system memory (SQL). Unlike the present system having just 4000 user capacity this technology have 10000 user capacity thus avoiding overloading of the machine. Using this technology avoids 'buddy punch' i.e. a worker swiping the card of his co-worker to make him escape from the late entry or mark him present for the day. Unlike the biometric finger print scanner used for the contract workers the rejection ratio in palm vein technology is very minimal. Palm vein technology overcomes the disadvantages of barcode enabled swipe card system since this technology is contactless, fast and hygienic. Build with Latest technology thus avoids software and hardware overload problems.

Conclusion

Attendance system is a vital component in any type of organization as it serves as an important and only source of information providing the entire details of the each and every individual employee that are used in payroll system, workforce management by the HR manager, by finance department and for other purposes. Only if these purposes are fulfilled organization can function effectively without any hurdles. Thus attendance system has to properly monitored, maintained and to be checked for any contingencies and rectified if there is any as it is vital source of information. Hence it is sometimes even better to replace the system for the smooth working of the organization.

Notes:

1. Dr Anne Spurgeon Institute of Occupational Health The University of Birmingham September 2002;
2. Implementation of Biometric Attendance Management System on Cloud Environment by Prassanna J, Senthilkumar, 2003.
3. Development of Attendance Management System using Biometrics. O. Shoewu and O.A. Idowu.

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Behaviour of Individuals in Everyday Financial Decisions : A study of Demographic Variables

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Abstract

Behavioral finance considers the impact of individual's attitude on their financial decisions. The present paper empirically assesses the factors that influences the individual behavior regarding everyday financial decisions and further examine the impact of demographic variables on these factors. The study is mainly primary data based with a sample of 250 respondents from Hisar district of Haryana state and applied statistical tools of factor analysis and one way ANOVA to achieve the objective of the study. The factor analysis discloses nine factors which are named as compulsive shopper, financial awareness, financial botheration, financial advice, concern for future, saving schemes, composed decision believes in savings and income. Further, gender, age, marital status and occupation are found to have significant impact on the derived factors.

Key Words: *Financial behavior, Factor analysis, ANOVA.*

Introduction

Behavioral finance is an integral part of financial decision making process of individuals. It is the persuasion of feelings on decisions concerning the spending of money. Researches on behavior of individuals regarding financial affairs are subject to certain psychological and emotional aspects. According to Barberis and Thaler (2003), individuals show considerable disparity in decision making process when judged against the presumed behavior. This may be because, it is not expected from humans to arrive at a conclusion exclusively on the basis of objective factors, rather the issues such as their behavior, emotions, attitude and frame of mind are the major analyst in shaping their decisions. Moreover, Tversky and kahneman (1981) recognized that the psychological behavior that administer the sensitivity of decision making and assessment of likelihood of outcome generates alteration in preferences even when the same problem is framed in different ways. According to Skinner (2005), it is exceptionally complicated to examine the human behavior since each individual has dissimilar personality and the actions taken by them are the intricate influence of internal as well as external stimulants. This interface of stimulants forms the human behavior.

Although, an appropriate financial decision can play a considerable role in maximizing the financial gains, but each individual behave in their own way in making up their mind about the spending decisions on their needs and necessities and further a huge variation can be seen with respect to demographic variables i.e. socio-economic background, educational qualification, sex, age etc among humans. Moreover, the integral part of individuals is the emotions where same individual behave in different manner in different phases of his life. Therefore, financial decision making is most complex and challenging for humans.

The researchers have shown that individuals do not make investments purely on rational manner, rather their investment decisions are influenced by a number of factors which include psychological biases, social affiliation, demographic factors and so on (Kumar and Lee, 2006; Barnea et al, 2010). Therefore, an endeavor has been made to study the behavioral pattern among individuals about everyday financial decisions making in their life. The paper also tries to study the impact of demographic variables on behavioral aspect of decision making on routine financial matters.

Review of Literature

Many recent studies in applied finance argue that individual's behaviour is often affected by a variety of psychological heuristics (Barber, Odean and Zhu, 2009). According to Campbell (2006), the household finance is intricate because it is not simple to evaluate the household behavior. There is evidence that households are familiar with their own limitations and stay away from financial strategies for which they feel inept. Ronay and Kim (2006) have recognized that there is no behavioral difference between individuals of different gender towards risk in financial investments. Whereas, Fellner and Maciejovsky (2007), studied the impact of risk taking behavioral differences on gender and found that female investors are more risk averse than their male counterparts, which is established by their more conservative investment behavior. The study conducted by Racciardi (2007) disclosed the relationship between risk taking behavior of individuals in financial decision making and demographic factors. The study revealed that males are more risk-takers compared to females, unmarried are more risk-takers compared to married people, young people have a tendency to take more risks compared to elderly, more educated people tend to take more risks compared to those with less education and the people with more financial information take more risks compared to those with less financial information. Similarly, Brown et al. (2008), found in their study that Individuals' financial investment decisions might be stimulated by approval from peers and family and they found it easier to learn about taking financial decisions, by discussing with their friends than by using other mechanism. The study also disclosed that even without verbal idea or endorsement, people observed the behavior of others and learned in the course of interface with them. Funfgeld and Wang (2009) conducted a study on the financial attitude and behavior of German-speaking part of Switzerland on daily financial affairs. The paper revealed five underlying dimensions on financial attitudes and behavior, i.e. anxiety, interests in financial issues, decision styles, need for precautionary savings and spending tendency. Moreover, gender, age, and education were found to have significant impacts. Graham et al. (2009) have recognized that perceived expertise leads to overconfidence among investors regarding investing their hard earned money.

Thus, it can be observed that literature has extensively examined the behavior of individuals' on various aspects of financial investments, however, there has not been much work focusing on everyday financial decision making behavior of individuals. Hence, the present paper is an effort to examine the extent to which behavior influence financial decision making of individuals.

Objectives of the Study:

- To investigate the factors that influences the individuals' behavior regarding everyday financial decisions.
- To determine the relationship between demographic variables and factors affecting the financial decisions.

Hypothesis

As demographic variables affect the decisions of individuals, therefore, to achieve the objective of the study, following null hypothesis have been formulated:

$H_0(1)$: There is no significant relationship between gender and factors influencing decision making regarding financial matters

$H_0(2)$: There is no significant relationship between age and factors influencing decision making regarding financial matters

$H_0(3)$: There is no significant relationship between marital status and factors influencing decision making regarding financial matters

$H_0(4)$: There is no significant relationship between occupation and factors influencing decision making regarding financial matters.

Research Methodology

The present study is an empirical research based on the sample of 250 respondents from Hisar district of Haryana state. Convenient sampling method is adopted for collecting the sample. The questionnaire is designed with two sections: section 1 confine to demographic information of the respondents and section 2 has questions describing the financial decision making behaviour of individuals. The questionnaire used a Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The data is analyzed using SPSS version 13.0. The study employs factor analysis to find out the underlying factors from the collection of apparent important variables. Factor analysis trims down the total number of variables into fewer factors and also shows the correlation between the factors (Nargundkar, 2005). Further, the paper makes use of one way analysis of variance (ANOVA) to study the association between demographic variables and the factors. Mean score was calculated for factors where significant relationship between independent variable (demographic) and dependent variables (factors) was observed. Secondary data is collected through research papers, journals, websites and books.

Demographic Profile of The Sample

The demographic description of the respondents unveils a fairly equal proportion of males (56 %) and females (44 %). The sample respondents are mainly in the age group of 45-55 years (30%) followed by age group of more than 50 years (21%). Further, a majority of the respondents (72%) were married. The respondents were largely post-graduates (59.2%) followed by graduates (26.8%) implying that sample consist of of high literate respondents. With regard to the employment status, service and professionals have (78%) share implying that respondents are well placed in their career. The table also depicts that 28% of respondents save up to Rs15000-25000. The sample had a majority of respondents (28.4%) earning between Rs 55,000-75000 followed by 15000-25000 (28%).

Result and Discussions:

In the present study, the researcher applies Kaiser-Meyer-Olkin (KMO) test and Bartlett's Test of Sphericity as pre-analysis verification for judging the suitability of the entire sample which is a pre-requisite of factor analysis.

Table 1.1 shows the value of Kaiser-Meyer-Olkin (KMO) and the Bartlett's Test of Sphericity as 0.532 and 1225.729 respectively, which are statistically significant at 1% level of significance. Thus, it indicates that the sample is suitable for factor analytic procedures (Hair et al., 2006). In addition, the significant value of chi-square test statistic (1225.729), depicts that there is exceptionally low probability of obtaining this result (a value greater than or equal to the obtained value) if the null hypothesis (H_0) was true. Hence, the null hypothesis that the population correlation matrix of the measures is an identity matrix has been rejected as the variables were found to be correlated with each other. Table 1.2 presents the overall reliability of this construct with Cronbach's coefficient alpha having the value of 0.629, which is highly significant.

Factor Analysis

The survey data from the questionnaire is analyzed using factor analysis in order to summarize the 22 statements related to financial behavior into smaller sets. First of all, the data is subjected to principal component analysis, where these 22 statements are reduced to nine principal components through varimax rotation (Table 1.3). The statements with factor loading of 0.40 or higher are clustered together to form separate constructs, as recommended by (Hair et al., 2006). The reliability coefficients for factors ranged from 0.562 to 0.841, indicating a fair to good internal consistency among the items of each dimensions. Nine factors have been extracted which accounts for 68.030 percent of variance. The percentages of variance explained by factor 1 to 9 are 14.227, 9.679, 8.158, 7.510, 6.773, 6.275, 5.521, 4.966 and 4.923 percent respectively. The communalities shown in the Table explains the amount of variance in the variable that is accounted by the factors taken together. Large communalities indicate that a large amount of variance has been extracted in a variable by the factor solution. The paper considers only those factors whose Eigen-values is more than one. Five statements are dropped due to factor loading of less than 0.40 which also reduces factors from nine to eight.

The names of the factor statements and factor loadings have been summarized in Table 1.3. A factor loading represents a correlation between an original variable and its factors. Factor loading is nothing but coefficient of correlation. Further, the nine factors that defined these characteristics have been assigned suitable names according to the nature of variables loaded on each factor. The nine factors are: compulsive shopper, financial awareness, financial botheration, financial advice, concern for future, saving schemes, composed decision, believes in savings and lastly Income. Five statements have been dropped due to factor loading of less than 0.40, and one factor i.e. income has also been dropped because of single statement with low factor loading. The derived factors represent the different elements of financial behavior which form the underlying factors from the original 5 point scale of 22 statements.

Factor-1: Compulsive Shopper

The rotated matrix has disclosed that five out of twenty two statements are loaded on significantly to this factor. This factor has been named as compulsive shopper as, it consists of statements like: not able to keep some money away for a rainy day, my expenses exceed my income some time, spend most of the part of my income and believe in taking loans to meet my requirements. Thus, it is observed that the sample respondents are squanderer and have a tendency to spend generously that ultimately leads to exceed their expenses. Moreover, they are likely to take loans to accomplish their wishes. It is the most crucial factor considered by respondents as this factor explained highest variance of 14.227 %.

Factor 2: Financial Awareness

The second most important factor accounts for 9.679 % of the variance. Three statements load high on to this factor. The factor includes statements such as, like to join conversations about financial matters, compare and calculate risk in different investment proposals and read the business newspaper or listen to business news regularly. Here, the sample respondents acknowledge that one should have knowledge on financial affairs by listening regularly to the business news and discussing the financial matters with experts, therefore has been named as financial awareness.

Factor 3: Financial Botheration

The third noteworthy factor, with high loading of two features, has been named as financial botheration that accounts for 8.158 % of the variance. The factor incorporates the statements such as, tend to postpone my financial decisions and financial decisions are botheration to me. Therefore, financial botheration disclosed by the respondents confirm that they are not fond of handling financial affairs since it involves spending of hard earned money and a wrong decision can have its repercussions. This may be the reason for feeling inconvenient with respect to financial decisions.

Factor 4: Financial Advice

Financial advice is considered to be relatively important as the respondents load two types of features on to this factor and they together account for 7.510 % of variance. This factor includes statements such as, believe in the advice of my family and like to have the advice of financial experts in managing the financial affairs. Thus, the respondents believe in taking advice from financial expert or family member since they wants to be double sure before investing their hard earned money.

Factor 5: Concern for Future

This is a very significant factor, which accounts for 6.773 % of variance. Two features have been loaded on to this factor i.e. care for future is essential for me and I do not complain very often, if I have taken a wrong financial decision. The factor has been named as concern for future since future is uncertain and the mistaken decisions will not allow you to go back to your old days, therefore one must save something for future.

Factor 6: Saving Schemes

The sixth factor that surfaced from the factor analysis accounts for 6.275 % of the variations and has been designated as saving schemes. The Eigen value of 1.38 denotes that the factor is of moderate significance to the respondents. The single statement incorporated on this factor is related to investment in variety of saving schemes for future uncertainties. This shows that the sample respondents contemplate over the various option of investing in saving schemes as they act as cushion at the time of financial need in future.

Factor 7: Composed Decisions:

This factor, which accounts for 5.521 % of variations, is named as composed decisions and only one out of twenty two variables have been loaded on this factor. The Eigen value of 1.21 substantiates to confirm that the factor is of modest importance with regard to financial decision aspects of the respondents. The statement included in this factor i.e. at the end of the day, I decide peacefully on the financial affairs, reveals that financial decisions should not be taken spontaneously rather, a calm and cool mind can assist in taking a better decision.

Factor 8: Believe in Savings:

The last factor, accounts for 4.966% of variance with a load of two statements. The two integrated statements of this factor incorporates, believe in saving a part of my income and special offers like sales can tempt me into buying. Consequently, it is named as believe in savings, because the respondents would try hard to put aside a part of their income as savings instead of spending on dribs and drabs. Moreover, they like to make purchases from sales at a lesser price to satisfy their desires and wishes. It can be concluded from the last factor that respondents believe in savings to meet their uncertain future needs.

Objective 2: To Determine the Relationship Between Demographic Variables and Factors Affecting the Financial Decisions.

1. Effect of Gender on Factors:

Table 2.1 displays that the null hypothesis H_0 (1) is partially rejected as it discloses that there is a significant difference between the views of males and females on five factors i.e. compulsive shopper, financial awareness, concern for future, saving schemes, and composed decision. From the descriptive analysis, it is evident that the females have assigned more significance to the compulsive shopper and concern for future. This may be because the females are comparatively more extravagant towards shopping. Further, they also assign priorities to their concern for future therefore, believe in maintaining some money for uncertainties of the future.

On the other hand, male consider financial awareness, saving schemes and composed decisions as more significant. It is widely seen in Indian families that males are extra awake on financial issues as compared to females and with their knowledge on monetary matters, they are assigned with the responsibility investing in different saving schemes that maximize their income. The results also shows that males are more unruffled, cool, calm and collected while taking financial decisions when compared with females. Thus, the perception of males and females show a discrepancy to a large extent regarding decision making on financial matters. Thus, it can be concluded that among sample respondents, males pay more attention towards economic information and subsequently, they make their mind on investment decisions on the other hand, females show their apprehensions for upcoming future needs but they do not have curiosity in acquiring the financial knowledge

2. Effect of Age on Factors

Table 2.2 clearly states that the null hypothesis H_0 (2) is rejected as age is found to be significantly related to the factors financial botheration, financial advice, concern for future, saving schemes, composed decision and income. Respondents in the age group of 45-55 years were found to be leaning with factors like financial botheration and financial advice. The higher age group respondents undergo a feeling of pressure and nervousness while settling on financial issues and for that purpose they tend to take the advice from experts. This is because the risk taking capacity declines with the increase in age and they want to be extra sure on their financial investments. Moreover, respondents in the age group of above 55 are found to be highly related to the factor composed decision. This is again for the reason that higher age group investors are risk averse and prefer to take financial decision with a peaceful and calm mind. The younger respondents in the age group of 25-35 years feel more concerned for future and saving schemes. This is a noticeable wisdom of young respondents who wish to spend apart of their income on variety of saving schemes as they are apprehensive for unsure future. Thus, there is difference in the preferences of the respondents which is predominantly due to the stage of their life cycle. The young respondents believe in savings and older respondents are risk averse and thereby believe in expert advice.

3. Effect of Marital Status on Factors:

Table 2.3 states that the null hypothesis H_0 (3) is rejected as marital status is found to be significantly related to the factors financial botheration, saving schemes, composed decision and believes in savings. Married respondents consider saving, composed decision and believe in savings as significant factors. This may be for the reason that married respondents have more responsibility towards their family and are more worried about their future protection, which can be fulfilled through investment in saving schemes. Additionally, they would like to take financial decisions with a peaceful state of mind which can explore the pros and cons of the investment decisions. At the same time, the unmarried respondents are more liable for only one factor i.e. financial botheration as, they are too young to think about savings. Besides, they are either student or in the early stage of career, where they don't have much money to save and whatever they earn they tend to spend that amount.

4. Effect of Occupation on Factors:

The results of one way ANOVA (Table 2.4) reveals that the null hypothesis H_0 (4) is partially rejected as occupation has a considerable impact regarding perception of the respondents on their behavior relating to financial matters. It can be observed from the result that six factors i.e. compulsive shopper, financial botheration, financial advice, saving schemes, believes in savings and income have significant relationship with different types of occupations. The descriptive analysis confirms that the respondents having business have higher agreement for compulsive shopper. This may be due to the higher disposable income on the part of business and self-employed respondents. These respondents love to handle financial affairs and do not bother their expenses**.** The respondents falling in the category of professionals reveal financial advice and believe in savings as more important factors. This highlights about the traits of professional respondents in view of the fact that, they assign priority in keeping some money aside from their income as savings and also believe in obtaining advice on financial matters before investing their hard earned money. They know that the financial decisions are irrevocable, therefore should be taken with a cautious advice. Similarly, the respondents in the service category also relate themselves more towards saving schemes and income. The service class respondents also have similar approach on financial matters as that of professionals because they also consider it important to have some investment in different saving schemes. The category others include students, housewives and retired people who think decisions on financial issues as botheration and for that reason they tend to postpone the financial matters. These respondents undergo hassles while choosing a correct course of action on financial matters. The combined results are also depicted in summary results of ANOVA (Table 2.5) highlighting the relation between demographic variables and derived factors.

Conclusion:

The present study is an effort to analyze the individuals' behavior regarding routine decisions on financial affairs and also the influence of demographic variables on the derived factors. The study uses the analytical tools of Factor analysis and one way ANOVA, to accomplish the purpose of the study. The results revealed through Factor analysis explains that the twenty two statements used to measure the financial decision making behavior of individuals were reduced to eight factors i.e. compulsive shopper, financial awareness, financial botheration, financial advice, concern for future, saving schemes, composed decision and believes in savings. The general disclosure about the financial behavior of sample respondents through the factor analysis enlightens about the financial awareness of respondents on financial matters and they do not hesitate in taking views from financial experts and from member of their family. The respondents also reveal their worry for future and for that they believe in savings and have a tendency to invest in a range of saving schemes. However, the respondents regard the financial decision making as botheration and for that reason, they believe in taking these decisions with a poised mind. Further, the results revealed by one way ANOVA discloses that gender, age, marriage and occupation of the respondents have significant impact on the factors regarding everyday decision on financial matters. Moreover, the saving schemes are the most important factor as it is found to be significantly related to all the demographic variables. This is followed by the factors composed decisions which is significantly different across gender, age and marital status. Moreover, financial botheration is also significantly different across three demographic variables i.e. age, marital status and occupation. On the other hand, compulsive shopper, financial advice, concern for future, believes in savings and incomes are significant only for two demographic variables. Financial awareness is the factor that is found to be significant only for gender.

Thus, the study highlights the factors which need to be emphasized concerning the behavioral decision pattern as regards to financial matters. Moreover, it becomes pertinent to give due weightage to those factors, which have their relevance with respect to demographic characteristics of sample respondents.

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Table 1.1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.532
Bartlett's Test of Sphericity	Approx. Chi-Square	1225.729
	df	231
	Sig.	0.000

Table 1.2: RELIABILITY STATISTICS

Cronbach's Alpha	0.629
No. of Items	22

Table 1.3: FACTOR NAMES AND THEIR LOADINGS

Sl. No.	Name of Factor	Statements	Factor Loading	Cronbach Alpha	Eigen Values	% of Variance
1.	Compulsive Shopper (F1)	A12: I am not able to keep some money away for a rainy day	0.795	0.679	3.130	14.227
2.		A15: My expenses exceed my income some time	0.736			
3.		A13: I spend most of the part of my income	0.578			
4.		A14: I believe in taking loans to meet my requirements	0.562			
5.		A4: I love to handle financial and money affairs	0.321 *			
6.	Financial Awareness (F2)	A9: I like to join conversations about financial matters	0.718	0.670	2.129	9.679
7.		A6: I compare and calculate risk in different investment proposals	0.695			
8.		A8: I read the business newspaper or listen to business news regularly	0.647			
9.	Financial Botheration (F3)	A3: I tend to postpone my financial decisions	0.727	0.555	1.795	8.158
10.		A1: I think financial decisions are botheration to me	0.724			
11.		A10: Even on large purchases, I tend to spend spontaneously	0.386*			
12.	Financial Advice(F4)	A21: I believe in the advice of my family	0.734	0.352	1.652	7.510
13.		A2: I like to have the advise of financial experts in managing my financial affairs	0.715			
14.		A5: After making a decision, I am anxious whether I was right or wrong	0.055*			
15.	Concern For Future(F5)	A18: To care for future is essential for me	0.809	0.345	1.490	6.773
16.		A11: I do not complain very often, if I have taken a wrong financial decision	0.589			

17.	Saving schemes(F6)	A19: I have invested in variety of saving schemes for future uncertainties	0.841	0.355	1.380	6.275
18.		A22: I will postpone the purchase decision if I do not have sufficient money to buy it.	0.331*			
19.	Composed Decision (F7)	A7: At the end of the day, I decide peacefully on financial affairs	0.775		1.215	5.521
20.	Believe in Savings(F8)	A16: I believe in saving a part of my income	0.725	0.306	1.093	4.966
21.		A17: Special offers like sales can entice me into buying	0.662			
22.	Income(F9)	A20: My family advises me to save a part of my income	0.251*		1.083	4.923

** represents the statements dropped due to factor loading less than 0.40*

Five statements i.e. A4, A10, A5, A22, A20 have been deleted due to factor loading less than 0.4.

Table 2: Summary Results of ANOVA

Factors	Gender	Age	Marital Status	Occupation
Compulsive Shopper	✓	×	×	✓
Financial Awareness	✓	×	×	×
Financial Botheration	×	✓	✓	✓
Financial Advice	×	✓	×	✓
Concern For Future	✓	✓	×	×
Saving Schemes	✓	✓	✓	✓
Composed Decision	✓	✓	✓	×
Believes in Savings	×	×	✓	✓
Income	×	✓	×	✓

(✓) *represents significant relation at 1% and 5% level of significance*

■■■

Corporate Restructuring: Causes, Measurement Methods and Effects

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Abstract

Corporate restructuring has been a very popular strategy for reinvigorating firms the world over. Highly diversified, poorly performing firms are using the strategy to restructure activities and unlock the hidden value. Against this background, it becomes pertinent to analyse the motives or reasons for the use of corporate restructuring by firms and empirical evidence relating thereto. The present paper aims to review the existing literature on causes, effects and measurement methods followed in evaluating the performance of restructured firms. Restructuring is viewed as process of unlocking the hidden value. Consequently, firms aim to improve the market valuation and financial performance.

Though there are both short-run and long-run methods of analyzing the performance of restructured firms the long-run methods are considered to be desirable in view of the fact that the benefits of restructuring are realized in the long-run rather than the short-run. The extent of benefits realized depends on the method of restructuring employed and the intensity with which the method is employed or used. In India, though several firms have employed restructuring methods, there exists no exhaustive study analyzing the performance of restructured firms for want of suitable data bases.

Keywords: *Restructuring, Wealth Effects, Regulatory Shocks, Measurement.*

Introduction

Corporate restructuring has been the widely used strategy to rid the business of various afflictions inflicting the body fabric or to reorient and rejig the activities to emerge as a new entity. It has become a common event in the professional lives of managers. Since 1980, more than a trillion US dollars have been spent by companies for restructuring, either in or out of court (Gilson 1998). Numerous firms have reorganized their divisions, streamlined their operations, and spun-off their divisions (Bowman, et al. 1999). Lewis (1990) estimates that 'nearly half of large U.S. corporations have "restructured" in the 1980s.' Similarly, a special report on corporate restructuring published in the Wall Street Journal (1985) found that out of the 850 of 'North America's largest corporations,' 398 (47%) of them restructured (Markides, 1995). According to a study by the Harvard Business School corporate restructuring has enabled thousands of organizations around the world to respond more quickly and effectively to new opportunities and unexpected pressures, thereby re-establishing their competitive advantage.

In view of this increased reliance on this strategy, it becomes pertinent to identify the concept and its value creating properties. From where do restructuring creates benefits and how to measure these benefits? Do all forms equally valuable? What are the measurement approaches and how reliable those measurement approaches? An attempt has been made in this paper to find explicable answers to some of these issues.

Concept of Restructuring

Jensen and Meckling (1976) argue that a company can be viewed as a collection of contracting relationship among individuals - a nexus of contracts. These contracts are what make it possible for the company to conduct business. The parties to these contracts include shareholders, creditors, managers, employees, suppliers and customers - in other words, anyone who has a claim on the firm's profits and cash flows. Restructuring is a process by which firms change these contracts (Gilson, 2010). Firms restructure to overcome some of these market imperfections, rigidities, or in-built inefficiencies crept in various contracts. The objective is to emerge out of suffocating environment and have more focused and stronger firms.

Corporate restructuring is an all-inclusive term which indicates all that a business firm does to regain its competitive advantage. Crum & Goldberg (1998) define restructuring of a company as "a set of discrete decisive measures taken in order to increase the competitiveness of the enterprise and thereby to enhance its value". It is a set of measures rather than a single measure. One action does not make corporate restructuring just like a fatty person starving for a day to reduce his weight. The measures are discrete in the sense that each measure is separate and distinct from the other. Each measure aims at a particular advantage. Further, the measures are decisive in the sense that they are used for a definite purpose and management is conscious of why it is using. The restructuring has a specific goal or purpose – the goal of increasing the competitiveness of the enterprise through unlocking the hidden value.

Venkiteswaran (1997) defines restructuring as a significant reorientation or realignment of the investment (assets) and/or financing (liabilities) structure of a company through conscious management action with a view to drastically alter the quality and quantum of its future cash flow streams. Small changes do not constitute restructuring activities. Actions undertaken are significant. Besides, they significantly reorient firms existing operations. The actions undertaken affect either or both side of the balance sheet, i.e., asset-side and liabilities-side. Measures like expansion or divestitures or sale of assets affect only the assets side of the balance sheet as sale of assets is offset by the receipt of the cash. Conversion of debt into equity or short-term debt into long-term debt affects only the left-hand side of the balance sheet. On the other hand, debt redemption or buyback of shares affect both sides of the balance sheet.

Reasons for Corporate Restructuring

There are many reasons as to why firms restructure their operations. Besides poor operating performance prompting firms to restructure activities, even a financially sound firm can restructure to preempt surprises overtaking it. Many successful companies undergo frequent restructurings to improve their overall efficiency (Herz and Abahoonie 1992). According to Brickley and Drunen (1990) poorly organized firms are motivated by market pressures to change their organizations. Change also occurs in healthy firms as part of the growth process. Restructuring often occurs where there is no evidence of takeover threats. Economic shocks to the corporate environment might give rise to several organizational inefficiencies. This has recently been occurred during the credit crisis when many firms in Europe tend to restructure their businesses to a more 'back to basics' approach to become more transparent for its stakeholders (Cockshott and Zachariah, 2010). Peel (1995) opines that although the strategic motives underpinning any particular restructuring transaction may be complex and varied and concludes that companies may be at least partly responding to a common set of environmental/macro factors. The economy-wide variables, such as deregulation of markets and increasing global competition are associated with strategic change and corporate restructuring.

Restructuring activity is generally associated with three motivations in the academic literature, namely (i) to address poor performance; (ii) to exploit strategic opportunities and (iii) to correct valuation errors (Reneboog and Szilagyi, 2006). Similarly Smart and Waldfogel (1994) opine that firms that are experiencing unusually low current performance may be more likely than other firms to restructure. As a precautionary measure, such firms realign or rejig their activities on an on-going basis so that the value does not desert them. John et al. (1992) and Kang and Shivdasani (1997) find that firms respond to financial distress using predominantly contraction policies, which refers primarily to asset sales, divestitures, spin-offs, employment reduction and emphasis on core business. Kang and Shivdasani (1997) document restructuring of 92 Japanese corporations that experienced a substantial decline in operating performance between 1986 and 1990.

Lang et al. (1995) argue that firms' restructure when raising funds on the capital markets is too expensive because of high leverage and/or poor performance. They find 26% of sample firms divesting their subsidiaries for poor operating results. Many studies also examine firms restructuring in response to financial distress (Berger and Ofek 1999, Atiase et al. 2004, Faccio and Sengupta 2006).

Brown et al., (1994) found that firms that had either defaulted or anticipated default, divest business units to improve overall performance and generate funds.

Pattnaik (2005) provides two explanations for US firms' restructuring decisions in the form of asset sales. The environmental explanation posits that the rise in corporate restructuring in the U.S. was due to changes in the regulatory and competitive environment, e.g., government antitrust and tax policies, monitoring and discipline from external capital markets through acquisition threats, and increases in competition leading to rise in corporate restructuring. In contrast, the financing hypothesis of asset sales, which is based on agency theory, argues that managers value firm size and control. Contrary to efficiency gains, managerial motivation in this case is to sell assets in order to survive the credit crunch. Under this theory, managers sell assets to obtain funds when alternative sources of financing are too expensive due to agency cost of debt or information asymmetry, which makes equity sales unattractive

Thus, in general, the following can be identified as reasons for restructuring across business enterprises:

- Change in legal environment affecting business enterprises, as in the case of natural gas sector in India. The Petroleum and Natural Gas Regulatory Board wants gas utilities like GAIL to separate gas transportation and marketing businesses.
- Restructuring may be resorted to reorient or refocus a firm's activities on core activities. This is generally termed as 'refocusing' strategy. Firms with wide diversification resorted to this practice in 1980s and 1990s. It is generally said that a diversified firm trades at a discount, known as 'diversification discount.' Berger and Ofek (1995) and Lang and Stulz (1994) shows that diversified US firms trade at a significant discount relative to specialized firms. A wide range of diversified firms restructured themselves in the late 1990s by divesting business units (Fukui and Ushijima, 2007). According to Merkides (1995) a significant proportion of major diversified firm in the U.S. have reduced their diversification in the 1980s by refocusing on their core businesses.
- Competitive pressures may unleash restructuring measures across diverse firms as mergers, divestitures, spin-offs, etc. Ekholm et al (2011) examine the impact of a sharp real appreciation of the Norwegian Krone in the early 2000s on Norwegian manufacturing firms. A change in the real exchange rate affects a firm's export sales, purchases of imported inputs and import competition faced in the domestic market. Both net exporters and import-competing firms were exposed to increased competition due to the real appreciation. Both groups reacted by shedding labor.

- To unlock hidden value as too many businesses may make it difficult for investors or market to value the business. This was realized by the Zee Telefilms Ltd when it restructured its businesses in response to investors' concerns that Zee had too many businesses under one company, making it hard to evaluate their prospects, and Zee hoped to attract more investment in the different units to fund their growth.
- Emergence of new technology could also lead to restructuring of businesses. The emergence of new technology has severely dented the performance of banks and they have been forced to restructure in the form of downsizing, focus on customers care, restructure of non-performing loans, etc. Cefis and Marsili (2012) examine the impact of innovation in product and processes on firms' M&A activities and restructuring activities for Dutch manufacturing firms. They find that firms which innovate more are less likely to be forced to close down their activities. This effect persists for a number of years after the achievement of the innovation, and is independent of the type of innovation. Further, innovative firms are less likely to engage in radical restructuring, which represents an exit of the firm in its current identify.
- Lower or poor valuations may prompt firms to restructure their activities and improve market valuations. Firms may use buyback options to propel market prices or may announce downsizing, cost cutting measures, etc. In India, Bata India Limited completed series of restructuring measures to improve market valuations. Such actions included direct marketing, debt-restructuring, introduction of new variety of footwear, etc. Denis and Kruse (2000) observe incidence of disciplinary events that reduce the control of current managers, and corporate restructuring among firms experiencing a large decline in operating performance. Roland and Sekkat (2010) argue that career concerns among managers in poorly performing firms' leads to adoption of restructuring strategies. Generally managers would lose their job if firms become takeover targets or if active governance mechanisms are activated. The study views restructuring as resulting only from managerial effort and call it defensive restructuring rather than strategic restructuring.
- Restructuring activities may be pursued by acquiring firms as a part of value maximizing strategy in post-merger period. Firms with greater potential but low current valuations might be acquired and restructured subsequently to weed out waste and unlock the hidden value. Maksimovic et al (2011) find for US

acquirers pursuing a vigorous restructuring that involved a significant number of sell-offs and closures of the target firm's assets. Within three years, firms sold or closed 46% of the plants they had purchased via whole-firm acquisitions or mergers. The extent of this restructuring far exceeded benchmarks based on industry/year matched firms or assets in partial-firm acquisitions.

Bandrowski (1991) cite the following eight reasons for restructuring by companies:

1. To sustain the growth and financial performance,
2. To get back to the core,
3. Because of poor prospects for the core business,
4. Because of shifts in markets or technology,
5. Due to a volume or profits shortfall,
6. To accomplish equity carve-outs,
7. To achieve break-up value, and
8. In leverage buy outs.

A survey undertaken by the Japan Institute for Labour Policy and Training (JILPT) of 1683 Japanese companies concerning the reasons for corporate restructuring reveals various reasons for restructuring. Table - 1 shows details:

Table – 1: Reasons for Corporate Restructuring as per survey

Sl. No	Reasons for Corporate Restructuring	% of Cos
1	Increasingly fierce domestic competition	84.4%
2	Maturing markets and stagnant demand	73.6%
3	Increased burden of long-term obligations related to employment	48.0%
4	Advances in technological innovation	37.6%
5	Problems with human resource procurement inside the company	32.2%
6	Changes in accounting standards	29.5%
7	Increasingly fierce competition with companies overseas	24.8%
8	Changes in funds procurement	20.3%
9	More frequent corporate mergers and acquisitions	15.6%
10	Changes in corporate governance	13.5%
	Total Number of Companies Surveyed	1683

Source: www.jil.go.jp/english/laborinfo/library/.../sr_restructuring(co).pdf

A perusal of the table shows that 'increasingly fierce domestic competition' and 'maturing markets and stagnant demand' in Japan are two major compelling reasons for restructuring. 24.8% of companies restructure due to 'competition from overseas players' while 15.6% have undertaken restructuring to undo frequent M&A activities, i.e., to undo diversification strategy. Industry analysis also indicates that the 'increasingly fierce domestic competition' as a major factor. For all industries except the information service industry and the personal services industries, 'maturing markets and stagnant demand' were the second biggest factor.

Does corporate restructuring create value?

Restructuring should create shareholders' value. In other words, it should benefit the shareholders. Otherwise, there is no meaning in carrying out the restructuring exercise. In fact, it is defined as a process of unlocking the hidden value. The classic motivation for corporate restructuring is to redeploy the firm's assets to higher valued uses. Anslinger et al. (1999) argue that companies that elect to restructure usually have one goal in mind – creating value for shareholders. As long as the restructuring improves the firm's operating performance and increases its post-transaction cash flow and debt servicing ability, it creates value for both shareholders and creditors (Renneboog and Szilgayi, 2008). The Wall Street Journal, in its report on 11/24/1994, states that 'investors love restructurings because following a jumbo charge, a company's profit nearly always improves sharply (Webb et al., 2005). Brickley and Drunen (1990) find that stock prices increase at restructuring announcements. The primary explanation proposed for these price increases is that restructuring announcements convey favorable information to investors on firms' efficiency prospects.

More specifically, restructuring creates value when value of a firm in post-restructuring period is greater than the value in pre-restructuring period. Symbolically,

$$Value\ Created = Value\ After\ Restructuring - Value\ Before\ Restructuring$$

How does restructuring create value? Value is defined as discounted value and is created by improving significantly the quantum, quality and timing of cash flows generated and by reducing the risk perception of investors. Symbolically, it is given by:

$$Value\ Created = \sum_{t=}^{n} ICF_t /(1+k)^t$$

Where

ICF_t *stands for incremental cash flows generated and k for discount rate*

However, the benefits of restructuring are not immediate and are realized over a longer period of time. Hence, while measuring the benefits of restructuring a longer time frame has to be considered rather than the immediate short-run period. Further, long-run period should be substantial enough for the restructuring strategy to demonstrate the wealth effects. Generally a period ranging from three to five years is taken for computing the wealth effects. Because restructurings are generally implemented over a one to two year time period, efficiency improvements promised by management may not be realized until the plan is fully implemented, which may be several years subsequent to the restructuring announcement (Webb et al, 2005).

Potential Sources of Value Creation

From where does restructuring exercise derive its benefits? The basic purpose of restructuring is to alter significantly the quantum and quality of cash flows of a firm. Value increases when firm increases the amount of existing cash flows and also reduces the unsystematic variability of the cash flows. The increased flow of information, as a result of improved corporate focus, reduces the extent of information asymmetry and makes holders of stock to value the company using a lower discount rate. The sources of value creation depend on the method of restructuring followed and the intensity with which the strategy is adopted. Some of the benefits of restructuring are quantitative and some are qualitative. Some of the benefits are realized in the short-run while the others over a period of time. In view of these reasons, it can be said here that it goes very difficult to project all the benefits. An element of uncertainty enters the process of predicting the cash flows. Significant sources of restructuring benefits are:

- Reduction in reported cash losses due to sale of loss-making divisions, segments, etc
- Acquisition of related businesses and strengthening the core competency levels
- Savings in labour cost on account of reducing the labour force and revamping HR policies
- Reduction in rejection rate and reworks cost
- Reduction in interest burden through appropriate debt recast measures
- Reduction in management expenses through a process of portfolio restructuring
- Savings in servicing costs on account of share buyback method
- Greater ability to raise larger funds with minimum flotation costs
- Improved industrial relations
- Improvement in relations with suppliers, bankers, customers and general public at large
- Focused approach resulting in clear vision and mission statements
- A responsive organizational structure
- Improvement in performance of divisions, segments, etc., spun off as separate firms
- Greater flow of information to market and improving the valuations
- Schipper and Smith (1983) claim that value creation may come from enhanced managerial efficiency as well as from tax and regulatory benefits

D'Souza et al (2001) analyse the effect of privatisation on the performance using a sample of 118 firms selected from 29 countries and 28 industries. They find significant increases in profitability, efficiency, output and capital expenditure. The study identifies three potential sources of value increases in privatisation decisions:

1. Privatisation subjects managers to the pressure of the financial markets and to the monitoring and discipline of profit-oriented investors. Use of publicly traded stock as performance-based compensation method would also incentivize managers.
2. The change in the firm's ownership redefines the firm's objectives and the managers' incentives.
3. Privatisation releases firm from government control and provides greater entrepreneurial opportunities including freedom to borrow at competitive rates from the market.

Measurement of benefits of restructuring

An accurate measure of the effect of restructuring on firm performance is important because it sheds light on organizational efficiency (Smart and Waldfogel, 1994). Scientific literature does not present a single methodology for estimation of restructuring impact on value of a company and its performance results (Stankeviciene, 2012). The empirical works have developed two methods of measuring the post-restructuring performance. Bowman et al (1999) identify two distinct methods of computing the gains involved in restructuring:

- Operating or accounting performance
- Market performance

In an operating performance approach, the effects of restructuring are identified by comparing the changes in pre and post-restructuring operating profits or by changes in financial parameters like return on equity and return on capital employed. Analyzing the firm's net cash flow (which is influenced by increasing revenues and cost reduction) the increase in shareholder value can be quantified (Brickley et al, 2003). This method of measuring the shareholder value is also supported by Hailemariam (2001) and Johnson (2002), who state that shareholder value is created when the return on investment is improved by increasing cash inflows and reducing risks. Beside traditional financial measures of performance other methods which use financial information are cash flow methods, value based methods and cash flow return on investments (Stankeviciene, 2012).

Atiase et al. (2004) examine the operating performance of 212 restructuring using return on equity and profit margin as their primary measures of operating performance. Jin et al (2004) examined the impact of restructuring on the operational aspects of the publicly traded firms in China and used changes in revenue, profit margin, return on assets and the total turnover ratio before and after restructuring as proxies for firm performance and conducted tests to determine whether restructuring resulted in significant changes.

Under market performance the abnormal movements in the firm's stock price in the days after a restructuring announcement are computed. These changes in returns are adjusted for market

-wide returns or for returns earned by control firms (firms of equal size and profitability in the same industry not carrying out any restructuring). There are both short-term and long-term price movement methods. The short-term methods capture the effect of announcement of restructuring plans on share prices and compute abnormal event returns. Since all returns involved in restructuring decisions are not immediate, long-run performance measures have been developed to gauge the long-run price behaviour. Long-run measure, buy-and-hold abnormal return, Fama-French Calendar Year approach, etc., are some of the methods used.

Josien (1995) argues against the use of market data. According to him, the 'balanced stakeholders' view is incompatible with stock market data, since these data do not represent the interests of other stakeholders. Restructuring affects more stakeholders than only the shareholders. Some of the studies employ either of these measures to study the effects while some examine both accounting market-based performance measures.

There are several studies which have employed both the measures of evaluating restructuring effects. Brickley and Drunen (1990) and Kross et al (1998) study the impact of restructuring announcement on short-period returns; both studies tangentially examine accounting measure of post-restructure operating performance. Brickley and Drunen (1990) measure operating performance as the industry-and market-adjusted return on equity for the seven years surrounding the restructuring year. Kross et al (1998) measure operating performance as return on assets.

Do these measures of evaluating the post-restructuring performance are scientific? A word of advice is suggested by Smart and Waldfogel (1994) in this regard. The authors argue that the relevant benchmark against which post-reorganization performance should be measured is not necessarily pre-organization performance. Firms that are experiencing unusually low current performance may be more likely than other firms to restructure. Simply calculating pre- and post-reorganization performance changes may overstate the effect of the reorganization. Another measure, known as a 'difference in differences' involves comparing the performance at the restructuring firm with that of control firm, similar size and characteristic firm which has not done any form of restructuring. The chief shortcoming of this approach lies in its assumption that, if not for the restructuring, the reorganizing firm would have experienced the same change in performance as its competitors. The difficulties in accepting this measure is that the restructuring firms are a non-random sample of firms, the reason for restructuring may depend on past and future performance, difference in the performance levels of different firms being at different levels relative to other firms, etc. The performance measure should be good enough to recognize all these fundamental flaws in different measures of performance.

Wealth Effects and Empirical Evidence

Several studies have been carried out over the wealth effects of restructuring announcements. As far as the wealth effects of restructuring are concerned, the empirical evidence is not clear. If one wanted to make a broad generalization about state of the literature, however, it would be to suggest that restructuring announcements generally produce small but significant increases in returns, at least in the US market (Beason, et al., 2008). Black and Grundfest (1988) find American corporations creating roughly $162 billion of shareholder value within only five years of restructuring. Analysing the effect of restructuring actions of Japanese firms for the period 2000-2001, Beason et al (2008) find that firms announcing restructuring programs experience significant improvement in operating earnings in the following year as well as in the second year following the announcement. Kinai W M (2012) in his study on impact of corporate restructuring on the shareholder value of Nairobi Stock Exchange listed companies observed that in a majority of the restructured companies, net cash flow, earnings per share, dividends per share, and market price per share had improved. This implied that restructuring contributed to the improvement in financial performance and enhancement of shareholder value. Further it was found that there existed a relatively strong positive correlation/association between earnings per share and market price per share, and also between dividends per share and market price per share.

Jin et al (2004) examined the impact of restructuring on the operational aspects of the publicly traded firms in China. They used changes in revenue, profit margin, return on assets and the total turnover ratio using before and after methodology. Their study showed that there were significant improvements in total revenue, profit margin and return on assets following restructurings but there was no evidence of any significant impact on asset turnover ratio. Yawson (2009) studied the effect of restructuring decisions on profits of sample Australian firms experiencing significant declines in operating performance. These firms experience significant gains in operating performance in each of the first 3 years following the restructuring. These changes were significant even after controlling for firms matched by size and industry.

However, contrasting evidence is also available. A recent American Management Association survey concludes that profits rose for only 51% of the companies that downsized between 1989 and 1994 and that only 34% reported an increase in productivity (Webb et al, 2005). Webb et al (2005) after incorporating a set of methodological enhancements designed to provide reliable evidence related to the long-term impact of operational restructurings finds that median profit margin, return on equity, return on assets, asset turnover and operating margin relative to non-restructuring control firms is either significantly negative or insignificant for all five post-restructure years.

Forms of restructuring and wealth creation

The literature distinguishes three different types of transactions, encompassing multiple forms of change in firm organization (Stewart and Glassman, 1988; Bowman and Singh, 1993; Gibbs, 1993). *Portfolio restructuring* makes disposals from and additions to a firm's businesses, through asset sales, spin-offs, equity carve-outs or mergers and acquisitions (M&As). *Financial restructuring* changes the firm's capital structure e.g. through leveraged buy-outs (LBOs), recapitalizations (LRs), share repurchases, or employee stock ownership plans (ESOPs). Finally, *organizational restructuring*, represents a change from a functional to a business-unit design. These restructurings often occur simultaneously or sequentially.

All forms of restructuring are not necessarily equally profitable. The wealth effects could vary across various forms. Further, two firms using the same restructuring measures need not generate the same amount of wealth. The wealth creation can vary from firm to firm depending on factors like nature of the firm, size, profitability status, intensity in implementation, etc. Bowman et al (1999) analyse the impact of financial, portfolio and organizational restructuring strategies by taking into account the number of studies estimating the impact. Table 2 shows the average impact of restructuring on company performance:

Table 2: Average Impact of Restructuring on Company Performance

Type of restructuring	Mean Percentage Performance Improvement	Median Percent Performance	Percent Positive Means	Number of studies	Average Sample Size
Portfolio	5.6	2.9	86	21	154
Financial	37.5	24.5	86	27	35
Organizational	-0.21	0.1	50	4	207
Portfolio and Organisational	2.7	0.7	81	10	NA

Source: Bowman et al., "When Does Restructuring Improve Economic Performance," California Management Review, 41 (2) 33-54, January, 1999.

The financial restructuring has the strongest positive returns, in large part due to the higher returns reported in studies of leveraged buyouts and management buyouts. Debt for equity swaps and other forms of financial restructuring are associated with considerably more modest returns and show negative values in some cases. Portfolio restructuring displays the next highest returns. Organizational restructuring exhibits the least impact.

The third column of the table shows the proportions of the studies that report positive means. It indicates that financial and portfolio restructuring studies display higher proportions of positive returns than organizational restructuring. In five out of six cases (86%) of financial and portfolio restructuring, the impact on performance is positive. In only half of the cases of organizational restructuring, however, the impact is positive.

More specifically, retrenchment actions are followed by improvements in operating performance, while expansion actions are not. Financial restructurings also result in performance improvements. These results are robust to outliers and industry adjustments. When we control for other firm characteristics, as well as for the performance change for non-announcing firms, the results for employment changes and internal reorganizations remain significant, although the performance improvement for contraction-type reorganizations are no longer significant (Bowman et al,1999).

Yawson (2009) studied the interaction effects of financial and other corporate restructuring decisions undertaken by a sample of performance declining Australian firms. The study provides evidence that revenue growth, debt restructuring and cost cutting are essential strategies for poorly performing firms to achieve turnaround. Asset contraction policies and forced CEO turnovers also increase the likelihood of performance improvement. When firms expanding assets cut dividend payments at the same time, they experience improvement in operating performance. Further evidence revealed that new CEOs who are able to pursue debt restructuring policies are more likely to achieve a turnaround.

Defining refocusing firm as one which divests at least 10% of its asset base or a firm which reduces the number of industries in which it is competing by more than two, Merkides (1995) analyses the performance of refocusing firms in US. He finds that over-diversified firm by using refocusing strategy improves the overall profitability. Eckbo and Thorburn (2008) survey the empirical literature on corporate breakup transactions, leveraged recapitalizations, and leveraged buyouts (LBOs). The empirical evidence shows that the typical restructuring creates substantial value for shareholders. The value-drivers include elimination of costly cross-subsidizations characterizing internal capital markets, reductions in financing costs for subsidiaries through asset securitization and increased divisional transparency, improved investment programs, reduction in agency costs of free cash flow, implementation of executive compensation schemes with greater pay-performance sensitivity, and increased monitoring by lenders and LBO sponsors.

Corporate Restructuring Exercises in Indian Companies

Corporate restructuring activities in India are on the rise. Firms across sectors are using one or other forms of corporate restructuring. Mergers, downsizing, management, organizational, portfolio, financial, debt, ownership restructuring strategies, etc., are used extensively to regain the competitive advantage lost in previous controlled regime. The other reasons for restructuring are to keep at bay the potential cash rich MNCs, Indian firms, etc., from making hostile takeover attempts.

However, there is no authentic source of data available relating to slew of restructuring measures undertaken by Corporate India. This could be one reason why there are no or limited studies undertaken in evaluating the wealth effects of restructuring measures. Most of the studies pertain to mergers and acquisitions and analyse either announcement returns or post-merger financial performance. Baumik and Selarka (2008) analyse the impact of M&A on firm performance in India where nearly 70% of firms are family controlled and where most of the family controlled firms are part of larger business groups. On average, M&A in India results in reduction in firm performance. Rajeshkumar and Panneerselvam (2009) analyse the announcement returns from the point of view of acquiring and target firms employing a sample of 252 acquirer and 58 target firms involved in acquisitions, and 165 acquirer and 18 target firms involved in mergers for the period 1998-2006. The study finds that mergers create more benefits for target firm shareholders than for acquiring firms. The 3-day CAR is 10.3% for target firms as against 1.79% for acquiring firm investors. On the other hand, under the acquisition situation the gains are limited to both types of firms: the 3-day CAR being 1.15% for acquirer and 0.07% for target firms.

Gautam (2012) analyses 325 asset sales by 282 firms manufacturing firms in India for 1996-2008 period. Besides finding characteristics of firms selling assets, the study finds no improvement in profitability, solvency or operations in post-asset sale period. It can be said here that this particular area is a fertile research area for future researchers. A critical review of reasons, methods and effects of restructuring strategies of Indian firms is called for to germinate new inputs and insights into the restructuring phenomena.

An attempt has been made here to list out some of the significant restructuring undertaken by Indian firms. The information was collated from several print and electronic media for several years. Table 3 summarises some such collections:

Table – 3: Forms of Restructuring Adopted by Selected Indian Companies

Name of the Company	Type of Restructuring adopted	Year of Restructuring
Bata India	Brand Repositioning Operational Financial Marketing Portfolio Technological & Manpower	2009 1998 2007 2009 1997 2005
SAIL	Financial, Debt & Manpower	2000
Wockhardt	Debt restructuring	2009
Suzlon Energy Ltd	Debt Restructuring	2012
Infosys	Management	2011
L&T	Split into nine independent verticals	2012
Vedanta Resource	Merge Sterlite Industries & Sesa Goa; Vedanta stake in VAL and Malco to be transferred to Sesa Goa Cairn India to become subsidiary of Sesa Sterlite	2012
Aditya Birla Nuvo	Management, Portfolio, etc (acquisition of Pantaloon) Spin-Off (financial services businesses)	2012
Asian Paints	Spin-Offs – Decorative India, Decorative International and Chemical Business – 3 SBUs	2012
Tata Steel	Divestitures (Cement Division) Manpower Restructuring (VRS) Asset Sale	2010-11 2011
Grasim	Demerger – Cement division into separate business	
Bajaj Auto	Demerger – four companies Downsizing	2010 2012
Tata Consultancy Services	Manpower restructuring/downsizing	2012
Coal India Ltd	Downsizing (20,000 employees)	2012
Sun Pharma	Spin-off its domestic formulation business	2012
Dabur India	Spins off its retail business into a separate unit – H&B Stores	2012

Conclusion:

The rapid changes in the external environment, a very volatile and vulnerable business cycle, as well as changes in technology, capital structure and increased global competition have created revolutionary changes in management. Organizations are repeatedly challenged to modify their strategies and reorganize and streamline their business to satisfy their shareholders and to enable their companies to weather through the mentioned challenges of the recent past. An increasingly favoured way of enhancing the company's value is to reorganize and restructure the firm's business. In doing so, American corporations were able to create roughly $162 billion of shareholder value within only five years (Black & Grundfest, 1998).

There are no accepted methods of evaluating the performance of restructuring as each method has its own pros and cons. The period of measurement is another complex issue in the measurement process. Since the benefits are expected to flow only in the long run, what long run period is to be considered to capture the benefits is a difficult question for a finance researcher. Separating the benefits of restructuring from other policy actions of the firm is yet another problem encountered. All the improvements in post-restructuring period cannot be ascribed to the restructuring only. Restructuring generally involves use of more than one form of restructuring and the effects could vary. A portfolio restructuring on its own can produce different gains compared to a situation when it is used along with organisational and or financial restructuring. Identifying benefits to a particular form is well-nigh possible. Reasons for restructuring can also vary across firms and might be difficult to judge the exact cause for which firms restructure though empirical evidence shows that poor performance compels a firm to restructure. However, successful firms also restructure. Economic and industrial shocks could generate restructuring actions.

In recent years a controversy over the desirability of corporate restructuring has arisen because of the effectiveness and efficiency of the "newly invented" firms. Proponents argue that leaner and more efficient organizations arise after being restructured, while critics assert that organizational disruption exceeds the anticipated benefits from such transactions and therefore is a method of destroying shareholder value. The question arises as to which actions can be taken to reorganize a company, and much more importantly, which actions can spur the company's performance and thus satisfy the shareholder and enhance the company's value effectively.

India presents a peculiar picture for researchers in finance. There are no organisations documenting corporate restructuring actions. Data is hardly available. Most of the studies so far have concentrated only the M&As activities while other restructuring processes like asset sale, spin offs, split offs, divestitures, equity carve-outs,, downsizing, ownership changes, debt recast, etc., are hardly looked at. A well organized research inputs on these aspects would make the Indian researchers to study the Corporate India's perspective on these forms of restructuring.

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Climate Controlled Environment and Student Productivity : An Empirical Analysis

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Abstract

This paper deals with the influence of climatic condition on student productivity. It highlights the impact of temperature on student's performance. Several factors plays important role on student productivity one of it is 'variation in internal temperature of a class room'. Climatic conditions of India are different to that of its western counterparts. Studies conducted in Indian conditions often points to a host of teaching quality related factors rather than external environmental impact. This study adopts a descriptive approach and uses primary source of data comprising the classes in professional courses, carrying equal weight age. All total 60 samples are taken comprising of students from both climate controlled and non-controlled class rooms, for the test.

Key words: Climate controlled class rooms, Students, Productivity

Introduction

Research shows that, academic achievement is directly correlated to factors like 'ventilation' and 'behaviour of parties', concerned equally in the classroom. The research also shows that behaviour is enhanced or degraded by some factors such as 'confidence', 'consistency', 'encouragement', 'responsiveness', etc. By introduction of air condition classroom 'concentration' can be enhanced and negative behaviour such as 'bunking', can be minimized.

Further, research outcomes show that, the academic achievement at school level during winter get affected by parameters like varied temperature, humidity and air speed. Air velocity, if inadequate in these conditions, affects the performance a lot. The students usually complain about headache, difficulty in concentration, problems in respiration, cough and lastly the usual tiredness due to inadequate availability of above mentioned air control parameters inside class rooms.

Literature Review

Influence of the School Facility on Student Achievement: Thermal Environment

Many studies have revealed that the thermal environment in the classroom will affect the ability of students to grasp instruction. Herrington (1952) found that temperatures above 26.67 degrees (C) tend to produce harmful physiological effects that decrease work efficiency and output. Furthermore it is explained that poor ventilation interferes with heat loss from body surfaces produced from the effects of temperature, humidity and air movement. Manning and Olsen (1964), in their study, concluded that temperature control was considered to be the most critical factor in providing an optimum thermal environment for learning.

Peccolo (1962) is of opinion that ideal thermal classroom environments had an effect on the mental efficiency of students especially in situations where students were performing clerical tasks calling for quick recognition and response. In relation to mental efficiency and thermal conditions, Canter (1976) found that human beings work most efficiently at psychomotor tasks when the environment is at a comfortable temperature.

Based on a survey given to teachers, it is found that classroom conditions improved by air conditioning resulted in reduced annoyances, improved visual display and flexibility, and comfortable conditions. Teachers' attitudes and work patterns were significantly improved due to less fatigue. Likewise, student performance, attitude, and behavior improved in proper air conditioned climates making it easier to concentrate and making them feel less drowsy and fatigued. McDonald (1960) Sometimes it is felt, in a hot and humid type of climatic conditions that usually prevail in India, higher temperatures have a negative relationship with academic learning. In relation to this finding McCardle (1966) discovered that students in an ideal thermal environment made significantly fewer errors on tasks and required less time to complete the tasks than students in regularly controlled thermal environments. In similar studies on student's academic performance in relation to climate controlled classrooms Stuart and Curtis (1964) reported greater gains in academic achievement of students in climate controlled schools as opposed to those students in non-climate controlled schools.

Temperature and School Work Performance:

Several studies conducted in the 1950's and 1960's found that students have performed better in thermally conditioned classrooms than in classrooms without heating or cooling. However, there have been few studies of the influence of temperature in thermally-conditioned classrooms on school work performance or learning. In the late 1960s, six groups, each with six students, were brought to a climate-controlled chamber at Kansas State University. Each group of students performed simulated school work with chamber temperatures ranging from 16.67 to 33.33 °C. Error rates and speed of work were used as performance indicators. Two out of four performance measures, error rates and time required to complete assignments, were affected by temperature. The error rate was highest at 16.67 °C and lowest at 26.67°C; however, students worked most slowly at 26.67 °C and fastest at 20°C.

Similar studies were also performed in the 1960's by David Wyon and colleagues. Some of these studies performed in climate chambers, and other studies in actual classrooms, found reading speed, reading comprehension, and multiplication performance of school children to be poorer with temperatures of 27.22 to 30 °C, relative to 20 °C. In one study, the decrements in reading speed and reading comprehension at 27.22 °C, compared to 20 °C, were as large as 30%.

While the previous studies focused primarily on the effects of avoiding temperatures of 26.67 °C or higher, the influence of more moderately elevated temperatures on student performance was investigated more recently via field studies conducted in classrooms. Classroom temperatures were manipulated by turning cooling systems on and off, while keeping air circulation fans running so that noise levels were constant. All other factors were maintained constant to the degree possible, although, teachers opened windows "slightly more often when it was warm in the classroom". Performance tasks representing eight aspects of schoolwork, from reading to mathematics, were embedded into the normal school work. The speed and accuracy of task performance was assessed. The average speed of eight simulated school work tasks decreased by approximately 1.1% per each -17.22 °C as temperatures increased from 20 °C to 25 °C. The number of errors in school work was not significantly affected by temperature changes in this temperature range.

Ventilation Rates and School Performance: Four studies in schools have investigated the linkage of ventilation rates to objectively measured, as opposed to self-reported, school work performance. A Norwegian study performed in 35 classrooms located in eight schools used reaction times in a standard test to measure student concentration and vigilance. Reactions were 5.4% faster with a ventilation rate of 8.1 air changes per hour (ach) corresponding to 26 cfm per person compared to 2.6 ach (8 cfm per person). "An U.S. study in 5th grade classrooms from 54 schools, used student performance in standard academic tests as the measure of performance". "Performance in both math and reading tests increased with ventilation rate. Test scores increased about 13% from classrooms with the lowest ventilation rates (less than 4.5 cfm per student) to classrooms with the highest ventilation rates (greater than 9 cfm per occupant)". However, statistical tests indicated a 30%

probability that the increases in reading performance with ventilation rate were due to chance. In a Danish study performed within four classrooms, Wargocki and Wyon used performance tasks representing various aspects of schoolwork, from reading to mathematics that were embedded into the normal school work. "The speed and accuracy of task performance was assessed. This study reported an 8% increase in speed of school work tasks with a doubling of ventilation rate. There was no statistically significant influence of ventilation rate on the number of errors made by students". (Wargocki,Wyon,2006)

Ventilation Rates and Absences in Schools: In an elementary grade classroom study, on average, for each 100 ppm decrease in the difference between indoor and outdoor CO_2 concentrations there was a 1% to 2% relative decrease in the absence rate. Given the relationship of CO_2 concentrations with ventilation rates, for each 1 cfm per person increase in ventilation rate, it is estimated that the relative decrease in absence rates is approximately 0.5% to 2%.

This relationship applies over an estimated ventilation rate range of 5 to 30 cfm per person, and should not be applied outside those limits. Data relating building ventilation rates and absence rates are very limited.

Indoor Air Quality: Poor indoor air quality (IAQ) is widespread, and its effects are too important to ignore. The U.S. General Accounting Office has found that fifteen thousand schools suffer from poor IAQ, affecting more than eight million children or one in five children in America's schools (General Accounting Office 1995). The IAQ symptoms identified—irritated eyes, nose and throat, upper respiratory infections, nausea, dizziness, headaches and fatigue, or sleepiness—have collectively been referred to as "sick building syndrome" (EPA 2000).

Temperature and Humidity: Temperature and humidity affect IAQ in many ways, perhaps most significantly because their levels can promote or inhibit the presence of bacteria and mold. "For example, a study of Florida classrooms with relative humidity levels greater than seventy-two percent found visible mold growth on the ceilings and complaints of allergy symptoms associated with sick building syndrome" (Bates 1996). At the other end of the humidity scale, Leach (1997) reported "findings of a 1970 study done in Saskatoon, Saskatchewan, Canada, which found absenteeism was reduced in schools by twenty percent as relative humidity in the facilities was increased from twenty-two to thirty-five percent". Wyon (1991) showed that "student performance at mental tasks is affected by changes in temperature", and Fang et al. (1998) found that "office workers are most comfortable in the low end of temperature and humidity comfort zones". "These findings support the idea that students will perform mental tasks best in rooms kept at moderate humidity levels (forty to seventy percent) and moderate temperatures in the range of sixty-eight to seventy-four degrees Fahrenheit" (Harner 1974, Wyon, Andersen & Lundqvist, 1979).

Objective of the Study

The present research paper intends to know the following aspects, in Indian academic conditions:

- To know whether a climate controlled atmosphere is related to students' motivation towards studies.
- How much the classroom environment effects and plays instrumental in lowering common student maladies like bunking classrooms etc?
- To check the extent of influence of other factors like infrastructure on student productivity.
- To enumerate certain other factors responsible for student overall productivity.

Hypothesis

H_O 1: Air conditioned classrooms does not have any effect on student overall productivity.

H_O 2: Air conditioned classrooms lead to higher classroom productivity than quality of teaching.

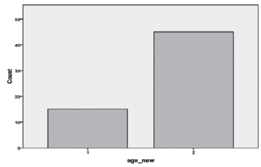
H_O 3: Technical teaching aids used inside the classrooms is instrumental for higher productivity.

Methodology

- **Design:** The design is in form of a descriptive research performed by the researchers.
- **Data:** Categorized data are taken in two parts, namely primary and secondary. Primary data are collected from different colleges. Secondary source is taken from different articles published related to topic and research.
- **Samples:** 60 samples are taken for the study.
- **Operationalisation of variables:** Total 10 variables are used in this research. The variables are grouped into following; 'increase in concentration power of students', 'high scoring of marks', 'less bunking of classes', 'reduction of mischievous activities', 'method of teaching plays an important role than air conditioned class room for student productivity', 'the knowledge of teaching faculty is instrumental in comparison to air conditioning environment', 'layout of classrooms is more important compared to quality of teaching', 'quality of teaching aids/materials provided by faculty is more productive than air conditioned environment for academic achievements', 'teaching aids such as projector used inside the classroom is helpful for high scoring of marks', 'understanding procedure is eased when teaching aids are used inside the classrooms'.

Data Analysis

Statistics		
Age		
N	Valid	60
	Missing	0
Mean		21.15
Std. Deviation		1.071
Minimum		19
Maximum		25



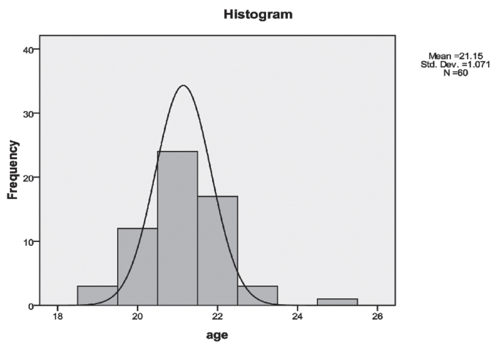
Graph for age_new

The age of the samples were divided into two parts to ease the complication of studies and the respective mean, standard deviation and maximum, minimum of its subsequent parts were found out.

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19	3	5.0	5.0	5.0
	20	12	20.0	20.0	25.0
	21	24	40.0	40.0	65.0
	22	17	28.3	28.3	93.3
	23	3	5.0	5.0	98.3
	25	1	1.7	1.7	100.0
	Total	60	100.0	100.0	

The above table shows the different range of ages taken in the survey.The frequency for 21 and 22 is the highest one and highest percentage too i.e. of 40 and 29 respondents respectively. The valid percentage and cumulative percentage is also found out and the histogram is drawn which is uniform and less scattered.



Histogram of Age

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
institute * age	60	100.0%	0	.0%	60	100.0%
course * age	60	100.0%	0	.0%	60	100.0%

The case processing summary shows the number of samples taken and valid percentage which comes out to be 100 % and hence none of the sample is outlined.

Institute * age Cross tabulation

Count

		Age						Total
		19	20	21	22	23	25	
Insti-tute	NIST	0	10	20	16	2	0	48
	C.V. RAMAN	3	1	4	0	1	1	10
	NMIET	0	1	0	1	0	0	2
Total		3	12	24	17	3	1	60

The above table shows the institute age cross tabulation between different ages of samples and their respective college.

Course * age Cross tabulation

		Age						Total
		19	20	21	22	23	25	
Cou-rse	B.TECH	3	12	23	16	1	0	55
	MBA	0	0	1	1	2	1	5
Total		3	12	24	17	3	1	60

The above table represents the cross tabulation of course pursued and respective age of samples.

Report			
Concentration power is enhanced in air conditioned classrooms			
High scoring of marks is seen in students when provided with an air conditioned environment	Mean	N	Std. Deviation
strongly disagree	2.00	3	1.732
Disagree	3.79	14	.802
can't say	3.86	14	.770
Agree	4.27	22	.767
strongly agree	4.57	7	.535
Total	3.98	60	.948

This is the number of mean answers between two questions as shown and their respective standard deviations which somehow is helpful in concluding that high scoring of marks is seen in students when provided with an air conditioned environment as the mean answers in agree and strongly agree are high compared to other cases.

The variables present in the left hand side are named as variable 1,2,3,4,5,6,7,8,9,10, respectively. Now the correlations of variables are calculated with each other. Variable 1 is highly correlated with variable 2 and vice versa too. Whereas it is not in correlation with any other variables, it clearly indicates that high scoring of marks and concentration power are somehow related to each other and can be concluded that both becoming dependent and independent variables in analysis affect the student productivity. Variable 2 is highly correlated to variable 1 and shows some correlation with variable 3 as well and is negatively in correlation with variable 5. The rest of the variables are no where correlated. Variable 3 is correlated with variable 2 and negatively correlated to variable 5. Rest is not in correlation. Variable 4 is not correlated with any of the variables. Variable 5 is negatively in correlation with variable 2 and 3 and in positively correlated with variable 8. Variable 6 is not in correlation with any of the variables. Variable 7 is negatively correlated to variable 8, rest is not in correlation. Variable 8 is positively correlated with variable 5 and negatively correlated with variable 7. Variable 9 and variable 10 are not correlated with any other variables.

One-Sample Statistics				
	N	Mean	Std. Dev.	SE
concentration power is enhanced in air conditioned classrooms	60	3.98	.948	.122
high scoring of marks is seen in students when provided with an air conditioned environment	60	3.27	1.103	.142
comfortable air conditioned classrooms leads to less bunking of classes	60	4.22	.958	.124
mischievous activities taking place inside the classroom is decreased when it is air conditioned	60	3.23	1.140	.147
method of teaching plays an important role than air conditioned classrooms for productivity	60	4.23	1.079	.139
the knowledge of teaching faculty is instrumental in comparison to air conditioning environment	60	3.75	1.129	.146
layout of classrooms is more important compared to quality of teaching	60	2.68	1.295	.167
quality of teaching aids/materials provided by faculty is more productive than air conditioned environment for academic achievements	60	4.02	.833	.108
teaching aids such as projector used inside the classroom is helpful for high scoring of marks	60	3.63	1.134	.146
understanding procedure is eased when teaching aids are used inside the classrooms	60	4.07	.899	.116

One-Sample Test						
	Test Value = 0					
	95% Confidence Interval of the Difference					
	T	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
concentration power is enhanced in air conditioned classrooms	32.560	59	.000	3.983	3.74	4.23
high scoring of marks is seen in students when provided with an air conditioned environment	22.948	59	.000	3.267	2.98	3.55
comfortable air conditioned classrooms leads to less bunking of classes	34.083	59	.000	4.217	3.97	4.46

mischievous activities taking place inside the classroom is decreased when it is air conditioned	21.961	59	.000	3.233	2.94	3.53
method of teaching plays an important role than air conditioned classrooms for productivity	30.381	59	.000	4.233	3.95	4.51
the knowledge of teaching faculty is instrumental in comparison to air conditioning environment	25.721	59	.000	3.750	3.46	4.04
layout of classrooms is more important compared to quality of teaching	16.047	59	.000	2.683	2.35	3.02
quality of teaching aids/materials provided by faculty is more productive than air conditioned environment for academic achievements	37.330	59	.000	4.017	3.80	4.23
teaching aids such as projector used inside the classroom is helpful for high scoring of marks	24.808	59	.000	3.633	3.34	3.93
understanding procedure is eased when teaching aids are used inside the classrooms	35.021	59	.000	4.067	3.83	4.30

The above table shows the result of T-test done and the value of T is very high as compared to normal value required for the test which means that there is a lot of differences in the variables which are taken. It also shows the other factors in the table such as difference, mean difference with upper and lower limits defined.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	.475	.225	.212	.841

Predictors: (Constant), high scoring of marks is seen in students when provided with an air conditioned environment. The R value shows that the variables are highly correlated and R square value shows a good impact on predictor.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	.058[a]	.003	-.014	5.411

a. Predictors: (Constant), concentration power is enhanced in air conditioned classrooms. Here R as well as R square values both shows that the variables are not at all correlated and have on impact.

Coefficients						
Model		Un-standardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.706	.865		4.286	.000
	concentration power is enhanced in air conditioned classrooms	.047	.106	.058	.446	.657

a. Dependent Variable: high scoring of marks is seen in students when provided with an air conditioned environment and the value of standardized and un-standardized coefficients is found out.

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
concentration power is enhanced in air conditioned classrooms	60	4.82	6.655	.859
high scoring of marks is seen in students when provided with an air conditioned environment	60	3.93	5.374	.694

The one-sample statistics shows the two variables which were studied in above tables individually as independent and dependent are jointly considered and mean, standard deviation, standard mean error are shown.

One-Sample Test						
	Test Value = 0					
	95% Confidence Interval of the Difference					
	T	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
concentration power is enhanced in air conditioned classrooms	5.606	59	.000	4.817	3.10	6.54
high scoring of marks is seen in students when provided with an air conditioned environment	5.670	59	.000	3.933	2.55	5.32

The T values of the two variables concentration power is enhanced in air conditioned classrooms versus high scoring of marks is seen in students when provided with an air conditioned environment and mean difference, lower and upper limits are defined too.

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
high scoring of marks is seen in students when provided with an air conditioned environment	60	3.93	5.374	.694
method of teaching plays an important role than air conditioned classrooms for productivity	60	4.23	1.079	.139

This is the one-sample statistics for the other two variables taken i.e. high scoring of marks is seen in students when provided with an air conditioned environment versus method of teaching plays an important role than air conditioned classrooms for productivity and mean, standard deviation, standard mean error are found out.

One-Sample Test						
	Test Value = 0					
	95% Confidence Interval of the Difference					
	T	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
high scoring of marks is seen in students when provided with an air conditioned environment	5.670	59	.000	3.933	2.55	5.32
method of teaching plays an important role than air conditioned classrooms for productivity	30.381	59	.000	4.233	3.95	4.51

Now in this table the same two variables is compared related to its T values and the mean difference along with the lower and upper limits are shown.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	.058[a]	.003	-.014	5.411

a. Predictors: (Constant), concentration power is enhanced in air conditioned classrooms, when this variable is considered as independent the R and R square values are very much low, consequently they are not at all correlated and impact factor is very low.

Coefficients						
Model		Un-standardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.706	.865		4.286	.000
	concentration power is enhanced in air conditioned classrooms	.047	.106	.058	.446	.657

a. Dependent Variable: high scoring of marks is seen in students when provided with an air conditioned environment, considering the independent as concentration power is enhanced in air conditioned environment and the standardized and unstandardized coefficients are calculated.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	.102[a]	.011	-.007	5.391

a. Predictors: (Constant), method of teaching plays an important role than air conditioned classrooms for productivity, the two variables are also not correlated anywhere and there is no impact too.

Correlations

		Teaching aids such as projector used inside the classroom is helpful for high scoring of marks	High scoring of marks is seen in students when provided with an air conditioned environment
Teaching aids such as projector used inside the classroom is helpful for high scoring of marks	Pearson Correlation	1	.013
	Sig. (2-tailed)		.924
	N	60	60
High scoring of marks is seen in students when provided with an air conditioned environment	Pearson Correlation	.013	1
	Sig. (2-tailed)		.924
	N	60	60

The correlations as shown between the above two variables selected are showing no correlations between them and hence we can conclude that impact factor is also null.

The correlations depicted here between teaching aids such as projector used inside the classroom is helpful for high scoring of marks versus high scoring of marks is seen in students when provided with an air conditioned environment and vice versa are not correlated anywhere and their impact is also close to null.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	.013[a]	.000	-.017	5.419

a. Predictors: (Constant), teaching aids such as projector used inside the classroom is helpful for high scoring of marks, R and R square values shows absolutely no correlations and impact on variables respectively.

Coefficients						
Model		Un-standardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.716	2.365		1.571	.122
	teaching aids such as projector used inside the classroom is helpful for high scoring of marks	.060	.622	.013	.096	.924

Dependent Variable: high scoring of marks is seen in students when provided with an air conditioned environment is seen in context with independent variable teaching aids such as projector used inside the classroom is helpful for high scoring of marks and standardized and un-standardized coefficients is found out.

Conclusion

The research process on "air conditioned classrooms and students productivity" was started way back in 2011 when the researchers felt its need, looking to student's discomfort due to rising of temperature in summer time. Classrooms in India are not still climate controlled so the students are exposed to varied temperature despite the unchanged class timings throughout the year. When the need of research arose, the researchers started reviewing the literature and shortlisted certain variables looking the conditions prevailing in Orissa classrooms. Then the samples were collected basically from Orissa colleges.

Objectives of the study were basically to find out the impact of air conditioning system. But in addition to it other highly relevant and related matters like 'impact assessment of teaching aids/quality on student productivity' is also included to see the multi-dimensional impact on student productivity. The initial variable intends to explore possible ramifications of natural temperature classrooms on student productivity. To check the "concentration on studies" by students was taken as measuring instrument. The respondents however are in favour of climate controlled classrooms. Result showed more than 70% respondents are in favour of climate controlled classrooms. So the objective of seeing the impact of temperature is fulfilled like this.

Other objectives like to see the relationship between climate controlled classrooms and student mischief also shows some interesting results. Nearly 50% respondents are in favour of presence of air conditioned classrooms to eradicate the common student menaces like inside mischief.

Third objective was answerable about the infrastructure playing any role in productivity. The samples were in favour of quality of teaching, it showed that around 60% said that 'layout' was merely a component but the 'role of faculty' was much more important if related with productivity. It was always seen throughout the survey that the emphasis was on quality of teaching for attaining any components of the student productivity scale. The quality of teaching plays more important play in productivity scale.

Last objective was to identify the different other factors that contribute to the student productivity. In the process of research the other factors such as teaching aids, teaching methodology was taken into consideration from literature review and placed in for survey process. The defined variable were, "method of teaching plays an important role than air conditioned classrooms" and "teaching aids used inside the classroom is helpful in high scoring of marks". In analysis part 66% of the samples went in the favour of above two enumerated variables and hence the two factors are effective component in result of student productivity. The samples readily answered in favour of method of teaching than air conditioned classroom via 5-point scale, air condition was important but when compared with method of teaching the statistics say that it had more weight age than air condition classrooms for productivity factor. There seemed to be one more factor which was defined as "method of teaching/materials provided by the teaching faculty", the lecture delivered in the classrooms is sometimes not enough from examination point of view and hence teaching lecturers provide some teaching aids helpful in scoring of marks and indirectly increasing productivity stated by 56% of the samples. Air condition classrooms may provide a comfortable environment but for more productive state the samples considered quality of teaching/ materials provided.

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Website

http://www.iaqscience.lbl.gov/performance-temp-school.html

http://www.epa.gov/iaq/schools/pdfs/student_performance_findings.pdf

■■■

Case Study Section

Noamundi Steel Plant Ltd. (NSP)

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In the corporate office of NSP (Noamundi Steel Plant) at sector V, Salt Lake, Kolkata, the board was having its 98th meeting on 25th November 2003, to take a final decision on renovation of the steel plant. Mr. Srinivasan, GM (Projects), the head of the committee for the upgradation, had submitted the report with all technical and financial data. The committee was formed in the last Board meeting with the unanimous decision of the Board to go for modernization of plant. The committee was to study the proposals, aimed at increasing capacity, incorporating state-of-art technology in the blast furnace including new skip system and modern technologies in peripherals. It was required to see the technical and financial feasibility of the upgradation of Blast furnace 1. The committee was comprised of Mr.Srinivasan, Mr. Dinesh Agrawal, GM(Finance) and three more technical persons. The Chairman of the company, Mr. Rajen Malhotra addressing the Board emphasized the need of modernization of the plant. He said:

"We are doing well partly because of the growing demand of steel for the last few years. But to keep the company competitive, as per the Board's decision in the last meeting we have to upgrade the plant. I would like to thank the committee for submitting the report. Now, I request Mr. Srinivasan to present the report to the Board".

Noamundi Steel Plant

NSP was established in year 1973-74, in an area spread over 6500 acres of land. The plant was originally designed for the production of 1.8 MT of crude steel and gradually increased to 4.5 MT capacity and producing a variety of flat products like HR plates, HR Steels, Cold Rolled Coils, Hot Rolled coils and Galvanized Plain and Corrugated(GP/GC) sheets, etc. The products were mostly consumed by industries like Automobiles, Railways, Defense, Heavy Engineering and Power & Energy and Real Estate etc.

The Steel Plant had 4 blast furnaces and the company was going to modernize the furnaces starting with the BF 1. The steel plant was extensively repaired in year 1994 and the second extensive repair was to be done in year 2005-06. Therefore the Board was interested to take a decision whether to go for upgradation or do the repair in the year 2005-06.

Committee Report:

In the presentation, committee recommended the renovation and modernization of plant. Few of the justifications given by the committee were stated below. It emphasized the need of modernization, keeping the world wide surge in steel demand and new plants established by companies around the world. Mr. Srinivasan read the following points to justify the approval of the project:

- The blast furnace to be repaired extensively in the year 2005-06, which could be avoided if the BF is upgraded and the repair cost of Rs.50 crore would be saved and the furnace would not required to be shut down for 3 months.
- The existing cooling system had become very old, which would be replaced by a state of art refractory and cooling system, having longer stack life matching with the hearth life.
- The existing dust extraction system had also become very old and was having high maintenance cost and energy consumption. It was no more environment friendly even.
- The existing Blast furnace was not operating at the same temperature for which it was designed.
- The new Blast furnace would result in improved furnace life of 25 years and enhanced production of 4200 tonnes per day.
- The projected Blast Furnace would have an advantage in technological parameters also(Exhibit 1)

Mr. Srinivasan told that the complete upgradation of BF1 project would take 18 months time including the plant shut down period of 150 days. The work was planned to start from April, 2004 and finish by September 2005.

Financial details and Project Financing

Mr. Agrawal, GM (Finance) informed the board about the capital cost of the project which was estimated at Rs.571.40 crore including the IDC (interest during construction) and appraised about the other financial benefits and the plan for raising the money for the project.

It was informed by Mr. Agrawal that due to the up gradation of BF1 there would be lots of benefits in the technical terms, which was converted into financial terms in the report. The upgradation would increase the productivity, consequently positively affect the contribution and lead to reduction in coke and steam consumption. Also, it would have additional benefits from power generation. But at the same time it would add little additional cost due to higher consumption of CDI Coal, power, oxygen, nitrogen and CO gas and repair & maintenance cost etc.

It was stated by the committee that no additional manpower would be required due to the upgradation, except some amount of training required to be given to the workers and supervisors, which would cost around Rs. 50 lakhs. It was informed to the board that the upgradation would meet all the stipulated norms of the State Pollution Control Board.

Mr. Agrawal appraised the board about the plan for generating financial resources for the investments to be made. He said that the project would be financed through internal resources and commercial borrowings. It was said that the company was having sufficient reserves for funding the internal resources. The reserves and surplus of the company was Rs.890.35 crore and the company was having a debt of Rs.35.08 crore from a commercial bank as per the last years balance sheet. The debt to internal resources was reported to be in the ratio of 1:1 for financing the project. The cost of borrowing projected was at 9% p.a. (little less than the cost of equity because of higher equity financing and the average cost of capital would come to be 10% p.a.). The loan was planned to be raised from a nationalized bank, which would be paid in 10 equal annual installments. It was suggested that 50% of the debt will be taken at the beginning of the project and rest after six months.

The project was to be implemented through seven packages within a period of 18 months and the life of the project was 20 years from the year of installation. So in the first year of construction there will be no production from BF1, in the second year it is assumed that the plant will works at 60% capacity(for a period of 6 months after commissioning), third year at 90% capacity, forth year onwards at 95% capacity, till the 22nd year(full year was to be considered). The depreciation would be charged @10% p.a on straight line method.

Going through the details presented, most of the board members agreed to the proposal but they had some apprehensions. One of the independent director, Mr. Kothari was not convinced with the figures projected. Therefore the board asked the committee for more detailed analysis of various aspects and to incorporate the apprehensions raised by the Board. Mr. Malhotra said Mr.Srinivasan and the team to study the viability of the project keeping a cut off rate of 15%, which is the regular practice of the company for the approval of the project and also to study the impact of the following uncertainties on the outcome of the report.

a) Financial implication of any delay in the completion of the project, say it takes another six months for completion.
b) If the investment cost over runs by 10%.
c) If the productivity decreases which reduces the contribution margin by 6% on additional pig iron.

The committee is expected to submit the report in another one week time, so that the board would be able to take a decision soon. The above points are independent from each other. Mr. Srinivasan handed over all the documents to Mr. Agrawal to do the necessary calculations and find out the NPV, IRR and the sensitivity analysis to justify profitability of the project.

Exhibit.1 Comparison of technical parameters

Parameters	Existing	After upgradation
Working volume (cum)	1750	2300
Hot Blast Temp.(^{0}C)	920	1200
Hot Blast Pressure (kg/cm^2 max.)	2.44	4
Blast volume (NM^3/min)	3000	3100 (with 5% Oxygen enrichment)
H.M. production(tpd)	2400	4200
Coke Rate(kg/thm)	540	375
Furnace top Pressure(kg/cm^2)	0.98	2.0

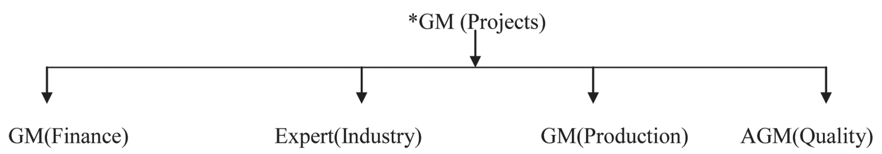
Source: Company Data

Exhibit 2: The broad break up of the capital cost is given below:

	Total cost (Rs. Crore)
Plant and Equipment	221.29
Structures	50.24
Refractories	55.29
Civil works	40.13
Erection and Commissioning cost	22.11
Engineering and Construction	34.00
Freight and Insurance	18.02
Taxes and Duties (including import duty)	90.08
Training and educating	1.22
Contingencies	25.07
Total Plant cost	557.45
IDC	13.95
Total Capital cost	571.40

Source: Company Report

Exhibit 3: Technical Committee



*GM- General Manager

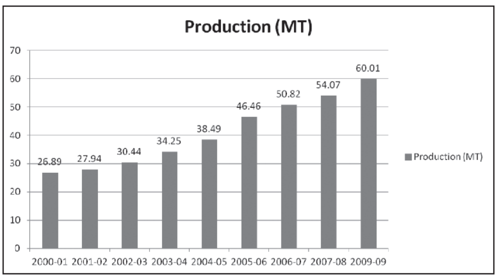
Exhibit 4: The above benefits and expenses are given below at 100% capacity utilization:

(Rs. Crore)

Benefits:	
Contribution on additional Pig iron	266.07
Saving due to less coke consumption	210.08
Savings in steam consumption	12.98
Additional power generation	13.55
Additional revenue from Gran. Slag	2.12
Total Benefits	504.80
Additional Expenditure:	
CDI coal	102.44
Electricity	3.78
Nitrogen	3.01
Oxygen	53.59
CO gas	12.04
Make-up water	0.56
Training and development	0.50
Repair and maintenance	15.05
Total additional Expenditure	190.97
Gross Margin	313.83

Source: Company Data

Exhibit 5: Production of steel in India (in Million Tonnes)



Source : Industry Data (Projected figures from 2004-05 onwards)

Exhibit 6: A typical Blast furnace

Source: http://www.sitesofnj.com/Bethlehemsteel/BethlehemSteelBlastfurnace1.html

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Smith, E. E. (2001). Internet term paper mills: The case for mandatory expulsion [Electronic version]. *Journal of Crime and Punishment, 6,* 123–139.

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