



Gavesana

# Journal of Management

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*Ph.D Thesis*

Management of Working Capital – A Case Study of National Newsprint and Paper Mills Ltd.

Adarsh Arora

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# EDITORIAL

Inevitable threats characterized by volatility, uncertainty, complexity and ambiguity (VUCA) are integral parts of the present competitive business world. These threats metamorphose as opportunities for those who can manage the VUCA environment. Business Schools are not insulated from these VUCA challenges. Academia is the supplier of talent to the industry and industry is the customer for academia. Hence they are the two sides of coin of human development. They need to realize the need for co-existence, as both are complementary and supplementary with each other. If industry disregards the significant role being played by academia in producing its talent, it may cause disequilibrium in the business eco-system. Similarly, if academia ignores the ever changing needs of industry in designing its curriculum, pedagogy etc., its survival can be at stake. Hence, understanding each other is the need of the hour.

When industry innovates products and processes to beat the competition, academia researches on innovative pedagogy, academic delivery, understanding student's mental health etc., in making them industry ready. Both should come together and cooperate with each other to reach win-win situation so that accusation and counter-accusation do not happen and the country becomes sustainable and powerful knowledge economy.

Academicians, Industrialists and other researchers are invited to contribute to scholarly research papers in this context.

**Editor**  
**Dr. Kamal Ghosh Ray**



# Identifying Key Enablers of Foreign Direct Investment through Interpretive Structure Modeling

Charu Rastogi\* and Sanjaykumar M. Gaikwad\*\*

## Abstract

Foreign direct investment (FDI) is an increasingly popular and preferred mode of globalization for developed and developing countries alike. In this context, this research study seeks to develop a theoretical model of key enablers or determinants of FDI. We have identified the key enablers (variables) and their relationships with each other from an extensive and in depth review of concurrent literature. Thereafter, interpretive structural modeling (ISM) has been used to construct a theoretical model for key enablers of FDI.

**Keywords:** Foreign Direct Investment, Enablers, Determinants, Interpretive Structural Modeling.

## Introduction

The pace of globalization has increased since the governments reduced policy barriers in the 1980s and 1990s. Globalization includes the cross-border exchange of goods and services via international trade, the establishment and operation of a firm in the foreign country by residents of the host country via foreign direct investment, labor services offered by residents of the host country to residents of the foreign country via labor migration. Foreign direct investment is an increasingly popular and preferred mode of globalization for developed and developing countries alike. In this context, this research study seeks to develop a theoretical model of key enablers or determinants of FDI.

We have identified the key enablers (variables) and their relationships with each other from an extensive and in depth review of concurrent literature. Thereafter, interpretive structural modeling (ISM) has been used to construct a theoretical model for key enablers of FDI.

## Literature Review: Key Enablers of FDI

### Foreign Direct Investment

As per the World Bank, Foreign Direct Investment (FDI) is the net inflow of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. Foreign direct investment (FDI) plays a vital role in the economic growth and development of a country (Choe, 2003; Li and Liu, 2005). As such many countries consider the attraction of FDI as a crucial element in their strategy for economic development.

A number of studies have been conducted to study the FDI-growth nexus and to determine the cost and benefits of FDI. The relationship between foreign direct investment (FDI) and economic growth has motivated voluminous empirical literature focusing on both industrial and developing countries. Neoclassical models of growth as well as endogenous growth models provide the basis for most of the empirical work on the FDI-growth relationship. The relationship has been studied by explaining four main channels: (i) determinants of growth, (ii) determinants of FDI, (iii) role of multinational firms in host countries, and (iv) direction of causality between the two variables (Chowdhury and Mavrotas, 2005). At present, the consensus view seems to be that there is a positive association between FDI inflows and growth provided receiving countries have reached a minimum threshold level of educational, technological and/or infrastructure development (Ozturk, 2007).

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According to the neoclassical growth theory, economic growth generally comes from two sources: factor accumulation and total factor productivity (TFP) growth (Felipe, 1999). These theories assume that FDI makes only limited, if any contribution to economic growth. On the other hand, the endogenous growth literature points out that FDI can not only contribute to economic growth through capital formation and technology transfers but also lead to augmentation of the level of knowledge through labor training and skill acquisition (de Mello 1997, 1999).

Apart from the above mentioned reasons, India is in dire need of foreign currency to meet its expenditure on ever expanding energy and gold requirements. Contrary to other capital flows, FDI is less volatile and does not show a pro-cyclical behavior. It has therefore become the “favorite capital inflows” for developing countries (Ozturk, 2007).

This sets an apt backdrop for determining the variables that act as key enablers of FDI.

## **Determinants of FDI**

The following enablers of FDI have been identified based on an in depth literature review:

### ***Variable 1: Foreign Direct Investment (FDI)***

The objective of this paper is to determine a theoretical model of key enablers of FDI. As such, FDI has been included as a variable.

### ***Variable 2: Market Size***

The market size (GDP) of the host country directly affects the expected revenue of FDI. In fact, one major motivation for FDI is to look for new markets (Shapiro, 1998). Other things remaining constant, market size is directly related to FDI; larger the market size, greater is the amount of FDI attracted to a country. Market size is generally measured by Gross Domestic Product (GDP), GDP per capita income and size of the middle class population. It is expected to be a positive and significant determinant of FDI flows. Several empirical studies have verified this proposition such as Kravis and Lipsey (1982), Blomstrom and Lipsey (1991), Lankes and Venables (1996), Resmini (2000), Duran (1999), Garibaldi et al (2002), Bevan and Estrin (2000), Nunes et al., (2006), Sahoo, (2006), Globerman and Shapiro (2002), Sun et al. (2002), Zhou and Lall (2005), Ang (2008). In contrast, Holland and Pain (1998) and Asiedu (2002) capture growth and market size as insignificant determinants of FDI flow.

There is a mutually reinforcing relationship between FDI and GDP growth. It's a virtuous cycle where growth attracts FDI and increased FDI leads to growth. Chowdhury and Mavrotas (2006) test the direction of causality between FDI and GDP growth for three major FDI recipients (Chile, Malaysia and Thailand) between 1969 and 2000. Their empirical findings suggest that GDP growth causes FDI in Chile and not vice versa, and in both Malaysia and Thailand, there is strong evidence of a bi-directional causality between GDP and FDI. Similarly, Hsiao and Shen (2003) argue the two way relationship between FDI and growth and support feedback relationship between FDI and GDP. Li and Liu (2004) find that it is an increasingly endogenous relationship between FDI and growth, especially since the mid-1980's.

### ***Variable 3: Human Capital Development***

Human capital refers to labor quality, skills, education, health, etc. De Mello (1997) lists two main channels through which FDI may be growth enhancing. First, FDI can encourage the adoption of new technology in the production process through capital spillovers. Second, FDI may stimulate knowledge transfers, both in terms of labor training and skill acquisition and by introducing alternative management practices and better organizational arrangements. As such importance of human capital cannot be overemphasized.

In the theoretical literature, Lucas (1990) and later Zhang and Markusen (1999) have advanced theories to argue that the absence of human capital has discouraged FDI inflow to developing countries. Noorbakhsh et al. (2001) note that the presence of skilled personnel is a requirement for ensuring capital flows. As per Dunning (1988), the skill and educational level of labor in a country can influence the volume and the extent to which FDI impacts on the recipient economy. On the empirical front, a growing number of studies have found a positive association between human capital and FDI (Iyanda and Bello (1976), Nataranjan and Miang, (1992), Dasgupta et

al., (1996), Carkovic and Levine (2002), Alfaro et al. (2004), Xie and Wang (2009). Also, Borensztein et al. (1998) and Li and Liu (2005) found significant positive relationship between FDI and growth, not only directly but also through its interaction with human capital.

Borensztein et al. (1998) showed that the FDI investment brings technology transfer and translated it into higher economic growth only when the host country has a minimum threshold of stock of human capital. Moreover, a recent study by Wijeweera et al. (2010) find that FDI inflows exert a positive impact on economic growth in the presence of a highly skilled labor but FDI by itself does not induce efficiency gains. A nation needs to have a well-trained and skilled labor force in place so that it can absorb the advanced technology that accompanies FDI inflows. Finally, Ranis et al, Stewart and Ramirez (2000) point out that there exists a strong connection between economic growth and human development: economic growth provides the resources to permit sustained improvements in human development while improvements in the quality of the labor force are important contributors to economic growth.

However, studies by Root and Ahmed (1979), Schneider and Frey (1985), and Narula (1996) have found that human capital is not a significant determinant of FDI inflows to developing countries.

#### ***Variable 4: Trade Openness***

Trade openness is considered to be a key determinant of FDI as represented in the previous literature; much of FDI is export oriented and may also require the import of complementary, intermediate and capital goods. In either case, volume of trade is enhanced and thus trade openness is generally expected to be a positive and significant determinant of FDI. This has been corroborated by a number of studies such as Lankes and Venables (1996), Holland and Pain (1998), Asiedu (2002), Sahoo (2006), Nunes et al. (2006). Usually, trade openness is proxied as the ratio of the Export plus Import divided by GDP (Nunes et al. (2006), and Sahoo (2006). Sun et al. (2002) and Fujita and Hu (2001) found that a significant relationship between the degree of openness – as defined by the percentage of states owned enterprises (SOE's) and FDI.

#### ***Variable 5: Infrastructure***

Well established and quality infrastructure is an important determinant of FDI flows. A positively significant relationship between FDI and Infrastructure is expected. Coughlin et al. (1991), Braunerhjelm and Svensson (1996), Resmini (2000) amongst others found that the level of infrastructure quality was positively related to the FDI in a particular country. For a sample of Chinese regions, Cheng and Kwan (2000) also found similar results. Wheeler and Mody (1992), however, discriminated the relationship between FDI and infrastructure quality. They concluded that infrastructure quality mattered for developing countries seeking investment from the USA, whereas it was relatively insignificant for developed countries because of already available developed infrastructures.

#### ***Variable 6: Labor Cost***

Higher labor cost would result in higher cost of production and is expected to limit the FDI inflows; therefore, we expect the negative and significant relationship between labor cost and FDI. Labor cost can be proxied by wage rate (Lankes and Venables (1996), Nunes et al (2006). There are few studies which find labor force determining FDI flows positively, (see: Wheeler and Mody, 1992; Kumar (1994), Kucera (2001), Sahoo (2006). Bhagwati and Srinivasan (1983), Coughlin et al. (1991), Wang and Swain (1995) all found a significant relationship between wage or labor cost, and FDI. However, labor cost may have a negative correlation. Multinational firms tend to hire quality workers who earn higher wages as a possible reflection of this higher labor quality. Hence, wages in those regions that attract more FDI may be higher.

#### ***Variable 7: Lagged FDI***

Many econometric studies have included the lagged change in the dependent variable; FDI. There are three reasons behind this (Noorbakhsh et al., 2001). Firstly, past FDI inflows contain information on operating conditions and general business climate in a host country. This information shapes perception about a country leading investors

to view particular location favorably (Kinoshita and Mody, 1997). Secondly, investors tend to favor familiar countries and regard other countries as risky (Johanson and Weidershiem- Paul, 1975). Thirdly, some companies tend to stagger investments in newly opened markets before committing full amount of capital funds (Pfeffermann and Madarassy, 1992). Thus FDI flows are likely to require time to adjust to desired levels, depending on specific issues faced by a multinational company.

## **Interpretive Structural Modeling (ISM) Methodology and Model Development**

ISM methodology helps impose order and direction on the complexity of relationships among elements of a system (Sage, 1977). It is interpretive as the judgment of the group decides whether and how the variables are related. It is structural as on the basis of relationship, an overall structure is extracted from the complex set of variables. It is a modeling technique as the specific relationships and overall structure are portrayed in a graphical model. ISM is especially useful for problems where there is a lack of prior research work. It can also be extended to problems where a lot of research work is available. ISM helps identify relevant variables through group problem solving techniques or review of literature and construct a theoretical model through the following steps:

- Identifying variables or elements which are relevant to the problem.
- Establishing a contextual relationship between elements with respect to which pairs of elements would be examined
- Developing a structural self-interaction matrix (SSIM) of elements which indicates pair-wise relationship between variables
- Developing a reachability matrix from the SSIM
- Partitioning of the reachability matrix into different levels
- Based on the relationships given above in the reachability matrix, drawing a directed graph
- Converting the resultant digraph into an ISM-based model by replacing element nodes with the statements; and
- Reviewing the model to check for conceptual inconsistency and making the necessary modifications.

The variables and their relationships were identified through in-depth literature review as already mentioned. Then, the above-mentioned steps were followed to create the ISM based model of key enablers of FDI. The details are as below:

### **Structural Self Interaction Matrix**

The nature of contextual relationships among the variables was deduced from the literature review. The following four symbols have been used to denote the direction of relationship between the variables:

**V** - Variable i leads to variable j;

**A** - Variable j leads to variable i;

**X** - Variables i and j lead to each other; and

**O** - Variables i and j are unrelated

<b>Table1: Structural Self Interaction Matrix</b>							
<b>Variable No.</b>	<b>Variable Description</b>	<b>Variable No.</b>					
		<b>7</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>
<b>1</b>	Foreign Direct Investment	A	A	A	A	A	X
<b>2</b>	Market Size	O	V	O	O	X	-
<b>3</b>	Human Capital	O	V	O	O	-	
<b>4</b>	Openness and Govt. Support	O	O	O	-		
<b>5</b>	Infrastructure	O	O	-			
<b>6</b>	Cost of Labor	O	-				
<b>7</b>	Lagged FDI	-					

**Reachability Matrix**

The SSIM has been converted into a binary matrix, called the initial reachability matrix by substituting V, A, X and O by 1 and 0 as per the following rules:

<b>Table 2: Rules for Entry</b>		
<b>SSIM Notation</b>	<b>Reachability Matrix</b>	
	<b>(i, j) entry</b>	<b>(j, i) entry</b>
<b>V</b>	1	0
<b>A</b>	0	1
<b>X</b>	1	1
<b>O</b>	0	0

Variable No.	Variable Description	Variable No.							Driving Power
		1	2	3	4	5	6	7	
1	Foreign Direct Investment	1	1	0	0	0	0	0	2
2	Market Size	1	1	1	0	0	1	0	4
3	Human Capital	1	1	1	0	0	1	0	4
4	Openness and Govt. Support	1	0	0	1	0	0	0	2
5	Infrastructure	1	0	0	0	1	0	0	2
6	Cost of Labor	1	0	0	0	0	1	0	2
7	Lagged FDI	1	0	0	0	0	0	1	2
	<b>Dependence Power</b>	<b>7</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	

The driving power and the dependence of each variable have also been calculated. The driving power for each variable is the total number of variable (including itself), which it may help achieve. Dependence power is the total number of variable (including itself), which may help achieve it.

### Level Partitions

The next step is to find the reachability and antecedent set for each variable from the binary reachability matrix (Warfield, 1974). The reachability set consists of the element itself and the other elements which it may help achieve, whereas the antecedent set consists of the element itself and the other elements which may help in achieving it. Thereafter, the intersection of these sets is derived for all the variables. The variables for which the reachability and the intersection sets are the same occupy the top level in the ISM hierarchy. The top-level element in the hierarchy would not help achieve any other element above its own level. Once the top-level element is identified, it is separated out from the other elements. Then, the same process is repeated to find out the elements in the next level. This process is continued until the level of each element is found. Determining the level of each variable helps in building the digraph and the final model.

Variable No.	Reachability Set	Antecedent Set	Intersection Set	Level
1	1,2	1,2,3,4,5,6,7	1,2	I
2	1,2,3,6	1,2,3	1,2,3	-
3	1,2,3,6	2,3	2,3	-
4	1,4	4	4	-
5	1,5	5	5	-
6	1,6	2,3,6	6	-
7	1,7	7	7	-

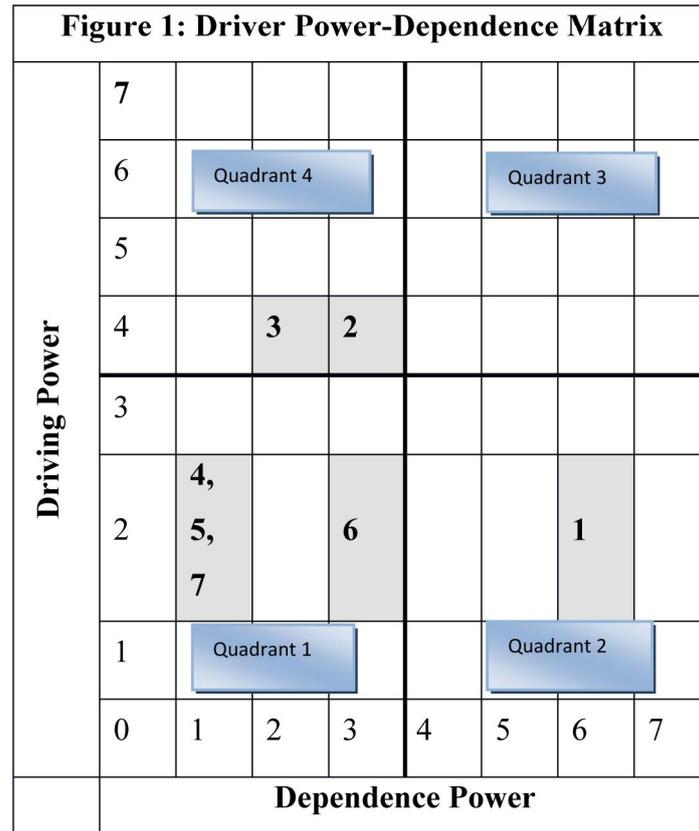
<b>Table 5: Level Partitions: Iteration no. 2 of Reachability Matrix</b>				
<b>Variable No.</b>	<b>Reachability Set</b>	<b>Antecedent Set</b>	<b>Intersection Set</b>	<b>Level</b>
2	2,3,6	2,3	2,3	-
3	2,3,6	2,3	2,3	-
4	4	4	4	II
5	5	5	5	II
6	6	2,3,6	6	II
7	7	7	7	II

<b>Table 6: Level Partitions: Iteration no. 3 of Reachability Matrix</b>				
<b>Variable No.</b>	<b>Reachability Set</b>	<b>Antecedent Set</b>	<b>Intersection Set</b>	<b>Level</b>
2	2,3	2,3	2,3	III
3	2,3	2,3	2,3	III

**Classification of Variables**

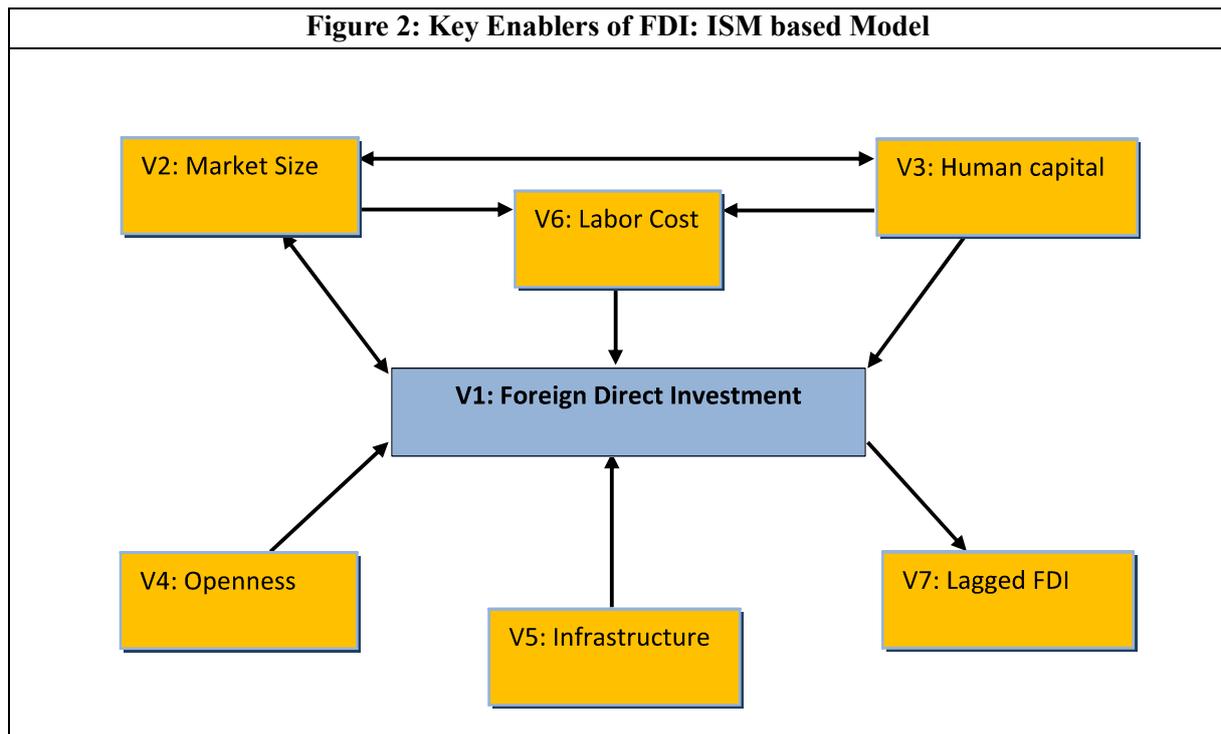
Variables can be plotted in the Driver Power-Dependence Matrix, based on the scores obtained in reachability matrix. The objective behind the classification of variables is to analyze the driving power and dependence power of the variables. All variables have been classified, based on their driving power and dependence power, into four categories as independent variables, dependent variables, linkage variables and driver variables.

Quadrant 1 represents independent variables. These variables have weak driving power and weak dependence power. Variable 4, 5, and 6 have emerged as purely independent variables. Quadrant 2 consists of dependent variables that have weak driving power and strong dependence power. As expected, variable 1; FDI is the sole dependent variable. Quadrant 3 consists of linkage variables that have strong driving and dependence power. Any action on these variables will have an effect on the other variables and also a feedback effect on themselves. In this case, there are no linkage variables. Quadrant 4 comprises driving variables that have strong driving power and weak dependence power. Variable 2 and 3 have emerged as driving variables.



**Formation of ISM Digraph and Model**

Based on the above analysis, ISM digraph/model has been depicted below:



## Discussion and Policy Implications

In-depth literature review and ISM modeling revealed that trade openness, infrastructure quality and behavior of FDI in the past (lagged FDI) are independent variables driving FDI inflows into a region. A bi-directional relationship between market size and FDI inflows and between market size and human capital exists. Both market size and human capital development influence labor costs in a region. Market size and human capital development act as drivers or moderating variables for FDI inflows.

Although the model is yet to be empirically tested, it has several policy implications. Firstly, host country governments desirous of attracting FDI must focus on human capital development concentrating on enhancing primary and secondary school enrollment and tertiary skill development. Human capital development not only increases market size but also acts as a driver for drawing FDI. Secondly, infrastructure quality and trade environment must also be improved.

## Conclusion and Future Direction

The purpose of this study was to develop a theoretical model for key enablers of FDI for a destination. Seven variables and their inter relationships were identified through an in-depth literature review. The variables included FDI, market size of the host country, human capital development, trade openness, infrastructure, labor cost and lagged FDI. Thereafter, interpretive structural modeling was used to develop a theoretical model for identifying key enablers of FDI. Future research directions include empirical testing and validation of the model.

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# Proposal of a Composite Index of Leading Indicators for Indian Business Cycle

Rajendra Narayan Paramanik\*

## Abstract

This paper attempts to construct a monthly CILI (Composite Index of Leading Indicator) for Indian business cycle from the time period April-1994 to December-2013. Cyclical component of Index of Industrial Production (IIP), generated using Baxter-King band pass filters is considered as a reference series for Indian business cycle analysis. A set of indicator variables pertaining to different sectors of the economy are chosen based on their strong correlation with respect to the reference series at different lead months. Weights of different leading variables/indicators are assigned on the basis of Principal Component Analysis (PCA) to construct the CILI. Performance of the CILI is verified with the help of in-sample turning point analysis. Empirical findings suggest that CILI can predict two major troughs of Indian business cycle with six and eleven months leads.

**Keywords:** Business cycle, Composite Index of Leading Indicator, Principal Component Analysis.

## Introduction

Economics literature defines business cycle as recurring and fluctuating levels of economic activity that an economy experiences over a long period of time. The periods of high activity has been called upswings or expansions whereas periods of low activity are named as recessions or downswings. In between, there arises phases like recovery which links the consecutive peaks and troughs of a business cycle. Unlike physical science, the cycles of economic activities are uneven and not smooth enough to show regularity in terms of periodicity over a long horizon of time. There are several approaches to this definitional notion of business cycles. According to Mitchell (1927) business cycle is characterized by a “sequence of expansions and contractions particularly emphasizing turning points and phases of the cycle”. Lucas (1977) defined business cycle as the statistical properties of the co-movements of deviations from the trend of various economic aggregates with those of real output. Kydland and Prescott (1982) described business cycles as recurrent nature of events. These definitions underscore the recurrence of upturns and downturns around the trend of macroeconomic aggregates. J. M. Keynes (1936) writes, “A trade cycle is composed of periods of good trade characterized by rising prices and low unemployment percentage with periods of bad trade characterized by falling prices and high unemployment percentage.” Theoretical evolution of business cycles paves way for development of a wide range of affiliated economic literature. In the context of recent globalization, prediction of business cycle movement becomes increasingly important since unanticipated shocks of different origins, global as well as domestic, play significant role in shaping the business cycle movement of an economy. Macroeconomic policies of an economy largely affect crucial components of an economy like, output, inflation and employment and at an aggregate level the business cycle fluctuations. Empirical exercise for predicting recession or economic downturn of these components or aggregate output in advance becomes the first and foremost priority of economists. There are three major approaches to analyze and business cycle movements, namely, Classical cycles, Growth cycles and Growth rate cycles.

The Classical business cycle measures the simultaneous upswing and downswing in the absolute levels of any economic activities in an economy. Generally *Coincidental Index* is constructed covering different sectors of the economy to represent the current economic activities. The movement in the absolute level of this coincidental index indicates different phases of an economy. One of the most popular determinants of recession is *an absolute decline in the level in the coincidental index for two successive quarters*.

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A growth cycle tracks the upswings and downswings through deviations of the actual growth rate of the economy from its long-run trend of growth. If growth in economic activity is higher (lower) than the long-run trend, the corresponding phase is called economic boom (recession). But calculation of long run trend is a problematic issue. Generally, methods like the Hodrick-Prescott (HP) filter and Phase-Average-Trend (PAT) are widely used to estimate the trend component from a time series. However, these estimates are subject to some crucial shortcomings like end-point bias.

Owing to the above limitation, growth rate cycles approach replaced growth cycle method. Growth rate cycles are cyclical upturns and downturns in the growth rate of economic activities. The most common forms of the growth rates are the month-to-month (quarter-to-quarter) changes in any time series. Though monthly data contains more noise than quarterly series, it is preferred to the latter for enriched information. An alternative way to estimate the growth rate cycle is the *six-month smoothed growth rate* which is used by the Economic Cycle Research Institute (ECRI), which is the ratio of the latest month's figure to its average over the preceding twelve months.

In business cycle analysis, identification of a benchmark or reference series is very important since it represents the whole or major part of the economy. Consideration of a suitable proxy as represented by a single series or as a combination of several series is major exercise for policy makers. According to Moore (1982), "No single measure of aggregate economic activity is called for in the definition because several such measured appear relevant to the problem, including output, employment, income, and trade, and no single measure is either available for a long period or possesses all the desired attributes". This is why economic activity may be represented under broad four sectors – output, employment, income and trade. GDP (Gross Domestic Product) can be treated as a single series which covers all these sectors and represent them at an aggregate level. An alternative way to capture wholesome representative of the economy is to make a composite index for the economy by considering important factors pertaining to different sectors of the economy. This new composite indicator series can be classified broadly into three groups, namely, leading, coincidental and lagging indicators. Leading Indicator is an economic time series that precedes the reference series in terms of its fluctuating behaviours and can forecast recessionary phase in advance. The coincidental indicator moves in tandem with the reference series. The cyclical component of the lagging indicators turns after the turns of the reference series which is important to analyze the past behavior of the reference series. Among all these three indicators, composite index leading indicator (CILI) is the most important tool for macroeconomic policy makers since it predicts business cycle fluctuations in advance.

## Empirical Studies in India

Most of the empirical works on Indian economy's business cycle are based on the growth cycle approach. Few studies concentrated on other two methods. Chitre (1982) empirically constructed an economic indicator comprising 15 variables from different sectors ranging from industry to finance and had shown the synchronized movement of five growth cycles for the Indian economy during the period from 1951 to 1975. Dua and Banerji (1999) determined dates of the classical business cycle and growth rate cycles for the Indian economy by modifying National Bureau of Economic Research (NBER) method. They constructed a Coincidental Index which incorporates five major economic indicators – real GDP at factor cost, Index of Industrial Production (IIP), wages to workers in the factory sector, registered unemployment and industrial production of consumer goods. Their findings support existence of six recessions and five recovery phases for Indian business cycle with average span more than six-years. Mall (1999) analyzed Indian business cycle and proposed that Non-Agricultural GDP can be considered as the reference series in this regard. He formulated CILI with the help of 14 major factors and predicted IIP- manufactured product over the period 1989:Q1 to 2000:Q1 with a lead period of two quarters. Later, Chitre (2001) constructed five leading indicators on the basis of three different techniques, viz., the Diffusion Index, the Composite Index and the First Principal Component. He used 94-monthly indicators to study the business cycles in India for the period 1951- 1982. Finally eleven indicators were chosen from different sectors of the economy and empirical findings showed similarity in predicting reference series and its cyclical pattern. Five leading indicators, namely, production of pig iron, electricity production, cheque clearance, ratio of manufactured product prices to industrial raw materials prices, aluminum production, production of capital goods and motor cycle production were identified as the main driving force for Indian business cycle boom.

In another paper, Dua and Banerji (2001) constructed a CILI which covered three major sectors of the Indian economy, *namely*, monetary, construction and the corporate sectors. This CILI, on an average can predict upswing of Indian economy with a lead of three month but coincides with troughs.

Mohanty, *et al.* (2003) developed a monthly CILI for the Indian economy based on 14 economic indicators. These indicators consist of deposits of commercial banks, non-food credit of commercial banks, currency demand, money supply growth, prices of industrial raw materials, prices of manufactured products, yield on 91-day treasury bills, stock prices, freight loading of the railways, cargo handled at the major ports, non-oil imports, exports and US GDP. The CILI is found to have an average lead period of six-months approximately for both peaks and troughs of the reference series.

Organisation for Economic Co-operation and Development (2005) proposed a CILI for Indian business cycle fluctuation with reference to the monthly industrial production. This indicator comprises eight economic indicators, *viz.*, business Confidence Index, imports, money supply, exchange rate (Indian Rupee per US Dollar), deposit interest rate, stock prices (Bombay Stock Prices–30 script), production of basic goods and production of intermediate goods and is found to have median lead of one month at all turning points over the reference cycles since 1995.

Reserve Bank of India (2006) has drafted a detail report of leading indicator for Indian business cycles. This report analyzed Indian business cycle on the basis of quarterly as well as monthly data. In both the contexts monthly as well as quarterly data series, six indicators, *viz.*, narrow money, non-food-credit, WPI-raw materials, production of aluminium, rails good traffic originated and production of coal are identified as leading indicators for Indian business cycle for April 1993 to December 2000. Monthly growth rate cycle of industrial output is analyzed with the help of two non-linear techniques, *namely*, Probit model and Artificial Neural Network method. Empirical findings suggests that the average duration of expansion and recession phases are of 16 months and 14 months respectively and the yield on Treasury Bills with residual maturity of 15-91 days in the secondary market is found to be the best economic indicator to forecast the future movement in the economic business cycle. Though there are some research contributions, very few of them are devoted in developing a monthly CILI for analysis of Indian business cycle. This is why this paper attempts at constructing a monthly CILI of Indian business cycle which can predict turning points of the reference series in advance. Apart from domestic factors causing business cycle downturn in India, global economic disorders like recent financial crisis played havoc on Indian business cycle behaviour. So, formulating a suitable and inclusive CILI which possesses predictive power to forecast such recessionary phases of Indian business cycle is always a contribution to the literature which is the main objective of this paper.

## **Data and Methodology**

This section covers the empirical exercise and each subsection narrates the description of different steps to develop the CILI. At the outset, all variables are de-seasonalized by X12-ARIMA (Autoregressive Integrated Moving Average) method developed by US Census Bureau. Then the Baxter-King (BK) filter is applied to two different sets of variables for de-trending and extraction of the cyclical component from each time series. The suitable parameters of business cycle length for each filter are considered on the basis of standard definition of Burn and Mitchell (1946). Burns and Mitchell (1946) had prescribed 2-8 years as the duration of business cycle. Corresponding duration for monthly data will be 24-96 months.

In the next step, all variables are expressed in their standardized format, *i.e.* ratio of their deviation from corresponding mean and standard deviation is taken. Standardization of each variable will trim the possible over-influence (under-influence) of some variable over other due to scale difference. Construction of CILI is based on two different statistical methods, *namely*, Principal Component (PC) and regression analysis which are discussed in the following sub-sections.

### **Selection of Reference Series**

Construction of a leading composite indicator for business cycle analysis starts with selection of an appropriate reference series which is a suitable representative of the whole economy. Since this paper aims at

formulating a monthly CILI for Indian business cycle fluctuations, data for reference series should be available on monthly basis. Though industrial sector accounts for a small proportion of total GDP in India, it has 25% contribution in Non-Agricultural GDP (NAGDP). In many research papers NAGDP is considered as reference series. Since data for NAGDP cannot be compiled at monthly level, IIP data is considered as reference series for Indian business cycle. But a reference series should possess similar cyclical properties like a standard business cycle indicator. Since data for no other macroeconomic variable is available for India on monthly basis, empirically accepted and standard amplitude adjusted OECD composite leading indicator is used for comparing the IIP cycle. Cyclical fluctuation of IIP is extracted from deseasonalized IIP data with the help of Baxter-King filter.

Spectral analysis is employed to check the similarity of cyclical behavior of these two series. Stationarity of both series is a prerequisite for cross-spectral exercise. Result of unit root tests are reported in table 1. Both the tests confirm stationarity of two series since obtained test statistic value for both tests are more than the critical values for corresponding tests at 5% and 10% level of significance.

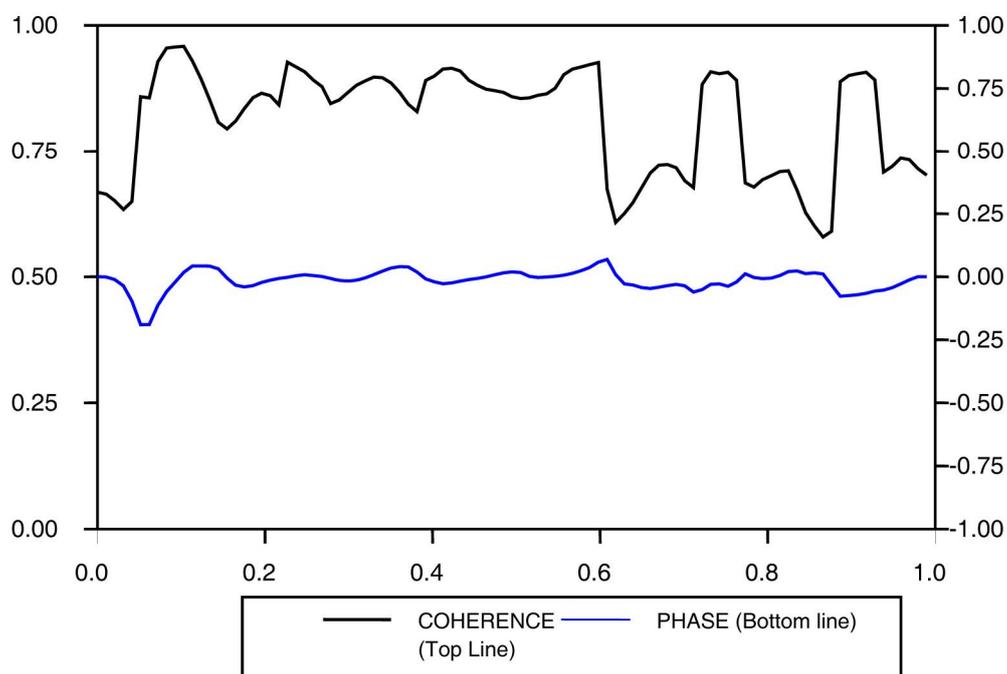
**Table1: Results for Unit Root Tests**

Variables	Augmented-DF statistic	Zivot-Andrews test statistic
IIP-cycle	-3.612	-6.398
OECD-CILI	-7.007	-4.947

\* Critical values for ADF test are -2.969, -2.679 at 5% and 10% level of significance respectively

\*\* Critical values for Zivot-Andrews test is -4.80 at 5% level of significance.

**Graph-1: Cross-Spectrum of IIP-cycle and OECD-CILI**

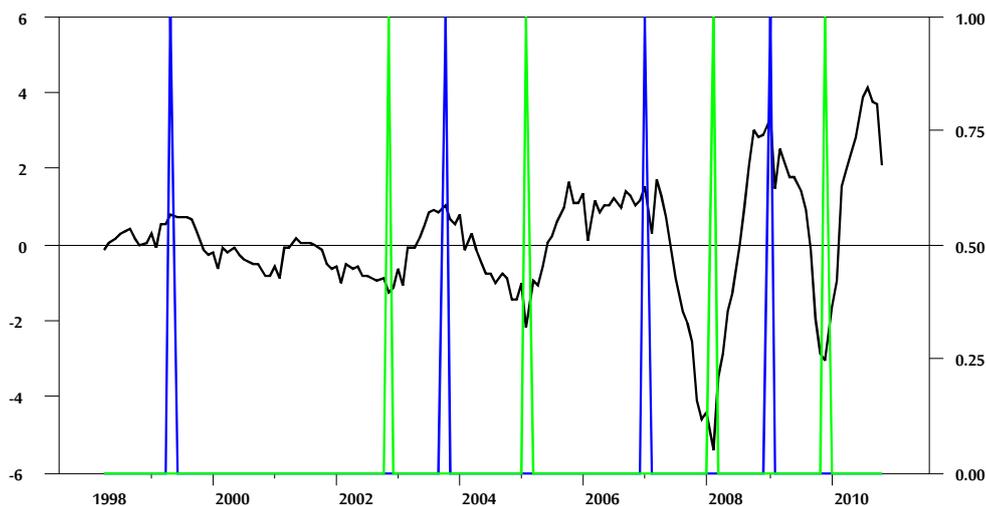


Cross-spectrum of these two stationary series is shown in the graph 1. Low phase value with very little fluctuation signifies that both the variables move together in the long run. The phase statistic measures the lead-lag relationship between two variables at each frequency and this conception is similar to the notion of Granger causality used in the time series analysis. Similarly, high coherence value at different frequency signifies greater degree of association of these two cycles. These findings suggest to adoption of IIP-cycle as a reference series for analysis of monthly business cycle fluctuation in India.

### Construction of First CILI with Principal Component Analysis

In this section, cyclical features of Indian business cycle are analyzed. Baxter-King filter is used to extract the cyclical component of IIP time series for the monthly data ranging from April-1996 to December-2013. Chronology of the cyclical component of the IIP is shown in the following two graphs. Graph-2 depicts peaks and troughs of business cycle as suggested by Bry-Broschan (1971) procedure. Subsequently in the graph-3, the business cycle turning points are shown by using Harding and Pagan (2002) method. Due to similarity in algorithm of these procedures, they provide similar results.

**Graph-2: Peaks and troughs of Business cycle (Bry-Boschan Method)**



**Graph-3: Peaks and troughs of Business cycle (Harding and Pagan Method)**

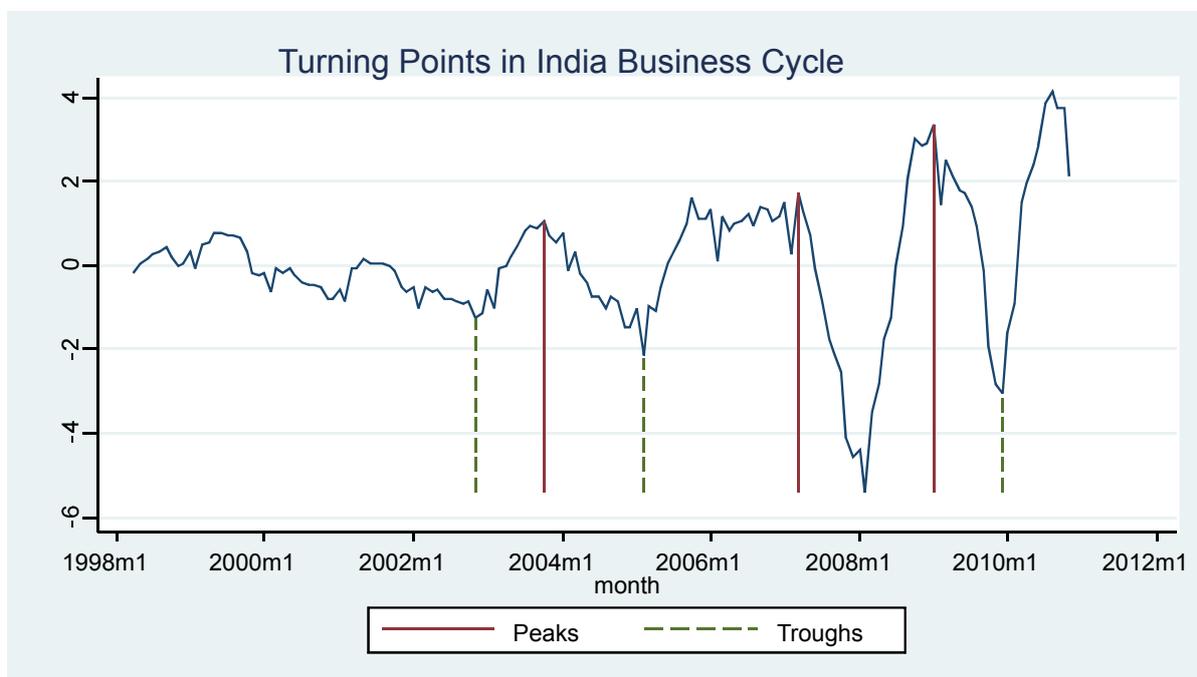


Table-2 presents the chronology of the business cycles in the industrial production, determined by the rules defined in the Bry-Broschan and Harding and Pagan procedure. Three business cyclical phases are identified during the time period under consideration. Both the methods identify very similar turning points. Expansion phase varied within the range of 11 to 25 months whereas recession phase persists for 11 to 16 months. Duration of Indian business cycle is found to vary between 17 and 36 months. Average and median values for business cycle in India are calculated as 25 and 22 months respectively.

**Table-2: Turning Points in Indian Business Cycle**

Peaks		Troughs		Expansion (Trough to Peak)		Recession (Peak to Trough)		Cycle Duration (Trough to Trough)	
BB	HP	BB	HP	BB	HP	BB	HP	BB	HP
May-1998	-----	November-2002	November-2002	----	----	-----	-----	-----	-----
October-2003	October-2003	February-2005	February-2005	11 months	11 months	16 months	16 months	17 months	17 months
January-2007	March-2007	February-2008	February-2008	23 months	25 months	13 months	11 months	34 months	36 months
January-2009	January-2009	December-2009	December-2009	11 months	11 months	11 months	11 months	22 months	22 months

\*BB and HP signify Bry-Boschan and Harding- Pagan methods respectively

### Selection of Indicator Variables for Construction of CILI

Second stage of construction of the leading composite indicator to predict Indian business cycle movement necessitates selection of appropriate indicators. Based on the criteria of availability of monthly data from RBI (Reserve Bank of India) and OECD (Organization for Economic Co-operation and Development) database for all the variables, time period is selected from April 1996 to December 2013. Initially a number of variables, pertaining to different sectors of the economy were considered for construction of a CILI. Finally, the following eleven indicator variables from five major sectors, namely, monetary, banking, financial, real and external are selected on the basis of strong correlation with reference series. List and details of all the variables is given in the appendix.

**M1 or narrow money** is considered as a proxy for money supply. Increase in nominal money supply may have two conflicting effects on output. It may lead to output growth whereas it may also cause inflation which in turn hampers output.

**Interest rate spread (SPREAD)**, the difference between the yield on long term securities and the yield on short term securities is taken into consideration. The proxy for long security is 91 day treasury bill and the proxy for short term security is the treasury bill with 15 days remaining maturity in secondary market. Declining interest spread signifies prosperity of economy since lower spread generates lower return for investors but during recessionary phase increased spread leads to high demand for risk premium.

Third indicator variable, **wholesale price index (WPI)** comes from real sector. Inflation and output nexus is a well established fact in economic policy domain. Supply-side argument supports positive relation between these two variables since rise in price is an incentive for higher production but it may drag down demand.

**Non-food credit (NFC)** is also observed to bear strong impact on output growth. Dua and Banerjee (1999) had established non-food credit-output causality for Indian economy. Pro-cyclicality of industrial credit with reference to business cycle phases is empirically verified fact in post-liberalization period.

**Real effective exchange rate (REER)**, defined as a weighted average (36 countries and export based) of nominal exchange rates adjusted for relative price differentials between domestic and foreign prices is considered as a part of external sector. Similarly performance of INR (Rs.) against US (\$) is also considered for analysis. Increase in exchange rate (EXC) influences output in two possible ways. It may lead to export competitiveness and boosts output but it may also fuel high import cost and adversely affect industrial output.

**BSE Sensex (BSE-30)**, Bombay Stock Exchange Stock Index is chosen as an indicator variable from financial market since it considers thirty major companies and is the representative of Indian financial performance.

From external sector two variables are chosen. These are import (IMP) and export (EXP) of goods as they are the major components of India's output. In the context of liberalizing capital account and increasing globalization, effect of US and EURO-area business cycle performance, as captured by OECD leading indicator are also included for construction of CILI of Indian business cycle since India still has considerable macroeconomic dependence on these two economies.

All variables except BSE-30 stock price, CILI of US and EURO area are filtered with the help of Baxter-King method to extract out cyclical component from each time series. Return of BSE -30 stock index is considered by taking first difference of logarithmic values. CILI of US and EURO are already expressed as amplitude adjusted cycles. Then all the cycles are standardized by subtracting their corresponding mean and taking ratio with respect to respective standard deviation. Following table confirms the stationarity of all Indicator variables under consideration which is a crucial prerequisite for statistical analysis of any time series.

**Table 3: Unit Root Tests for Indicators**

Variables	Augmented Dicky-Fuller test statistic (Without trend)	KPSS test statistic (Without trend)
M1	-7.163 (1)	.155
SPREAD	- 5.838 (1)	.146
WPI	-2.289 (4)	.0365
NFC	-1.856 (13)	.0657
REER	-4.555 (2)	.137
EXC	-7.308 (1)	.123
BSE-30	-7.269 (1)	.162
IMP	-9.753 (2)	.0529
EXP	-7.043 (2)	.0762
US-CLI	-3.383 (5)	.047
EURO-CLI	-2.078 (5)	.0603

\* Figures in parentheses signify optimal lag-length for ADF test as suggested by Schwarz information criterion.

**Construction of the CILI**

In this section construction of the CILI for predicting cyclical fluctuation of Indian business cycle is discussed. At first lead-lag relationship between each of the indicator variable series and the reference series is established on the basis of correlation analysis and then CILI is constructed with the help of PCA.

For the consideration of a good leading indicator, most important feature to be satisfied is that it should have high correlation with reference series at specified lead. In the following table, correlation values at specific lead/lag for all the indicator variables are shown.

**Table-4: Correlation Coefficient of Indicator Variables with reference to Reference series at Different Lead Length**

Variables	Maximum Correlation Coefficient	Lead Length
M1	0.5984	3
SPREAD	0.5707	6
WPI	0.3743	5
NFC	0.6061	10
REER	0.5684	5
EXC	-0.3874	8
BSE-30	0.3000	4
IMP	-0.7748	8
EXP	-0.5353	9
US-CILI	0.5932	2
EURO-CILI	0.6409	2

All the variables bear strong correlation with the reference series at specific lead. In the next step CILI will be constructed with the help of these indicator variables. Weighted average of all these series will generate CILI which should predict the fluctuations of Indian business cycle in advance. Assigning weights to each indicator variables is the crucial exercise since each component has different impact on reference series. Simply assigning equal weights to each series is not an appealing way of construction of a good CILI. That is why PCA method is adopted for assignment of appropriate weights to each component.

The PCA involves the construction, from an original set of variables  $X_j(j=1, 2, \dots, k)$ , of a new set of variables  $P_i(i=1,2,\dots,k)$  called principal components (PCs). These new variables are linear combinations of the X's:

$$P_1 = a_{11}X_1 + a_{12}X_2 + \dots + a_{1k}X_k$$

$$P_2 = a_{21}X_1 + a_{22}X_2 + \dots + a_{2k}X_k$$

.....

$$P_k = a_{k1}X_1 + a_{k2}X_2 + \dots + a_{kk}X_k$$

The weights applied to the original series ( $a_{ij}$ ) in the construction of the PCs are known as factor loadings. They are chosen so that the PCs satisfy the following conditions: (i) they are uncorrelated (orthogonal), in other words, there is zero multicollinearity among the PC's and (ii) the first PC will account for the maximum possible proportion of the variance of the set of X's, the second PC accounts for the maximum of the remaining variance and so on until the last the PC absorbs all the remaining variance not accounted for by the preceding components. In practice, the first principal component usually captures sufficient variation to be an adequate representation of the original set. Based on the result of eigenvalues of the eleven calculated PCs and their proportional explanatory contributions applied to the reference series, contribution of first two components are observed to be more than 75%. So factor loading (eigenvector) corresponding to second PC is considered as weights for different indicator variables. Finally, the CILI is constructed with all the weights attached to different indicator variables bearing different lead length with respect to the reference series. The equation of the CILI assumes the following form-

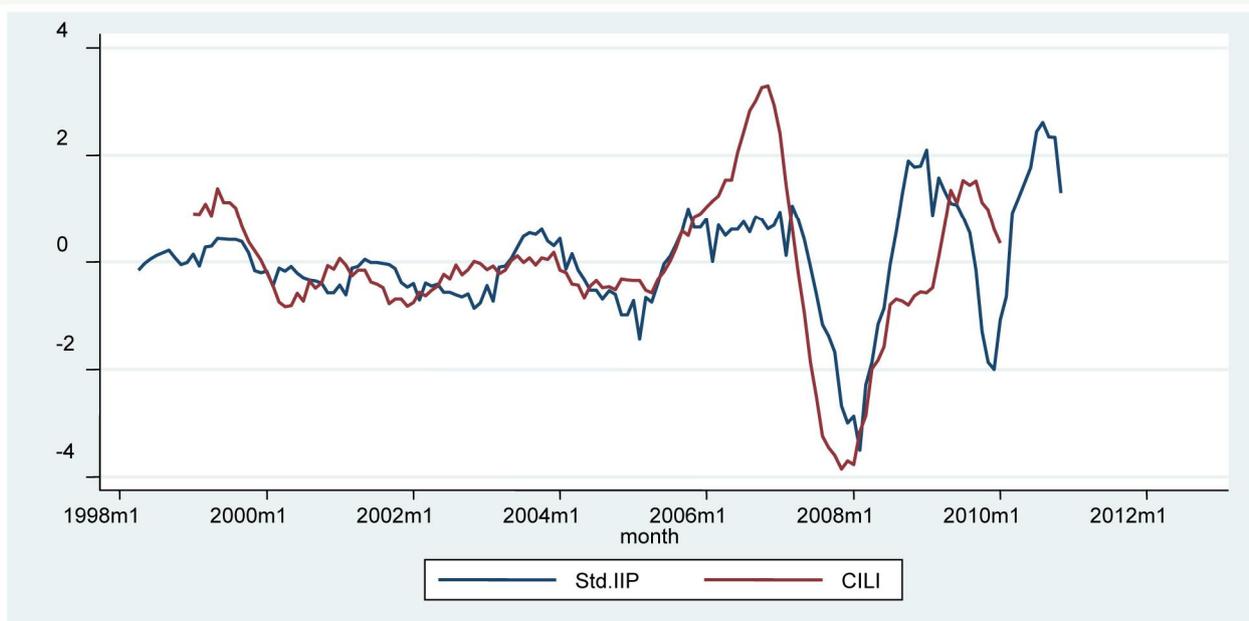
$$\begin{aligned}
 \text{CLI}(t) = & 0.0073 * \text{M1}(t + 3) + 0.3618 * \text{SPREAD}(t + 6) + 0.3160 * \text{WPI}(t + 5) + 0.2929 * \text{NFC}(t \\
 & + 10) + 0.2956 * \text{REER}(t + 5) - 0.2545 * \text{EXC}(t + 8) + 0.1120 * \text{BSE30}(t + 4) \\
 & + 0.3591 * \text{IMP}(t + 8) + 0.4050 * \text{EXP}(t + 9) + 0.3372 * \text{USCLI}(t + 2) + 0.3392 \\
 & * \text{EUROCLI}(t + 2) - - - - - (1)
 \end{aligned}$$

Where (t+i) symbolize lead length of each series with respect to standardized IIP cycle.

**Performance of the CILI:**

This section briefed the performance of the newly constructed CILI. An ideal CILI should possess the power to predict the turning points, especially troughs of the reference series in advance. In the following graph as well as in the table, performance of two series, namely, standardized IIP-cycle and newly constructed CILI is compared to examine the predictive power of the CILI. For example, recent financial crisis of mid-2008 is predicted in November-2007 by the CILI. Similarly other trough is also predicted in December, 2001, 11 months before trough realized in IIP-cycle. On the other hand, three different peaks are also predicted in advance. Out of sample forecast by the constructed CILI is difficult since application of Baxter-King filter with a parameter for lead-lag length specification causes sacrifice of few terminal points from each time series.

**Graph-4: Comparison of standardized IIP-cycle and CILI**



Comparison of turning points of CILI and the reference series, i.e. standardized IIP-cycle is given in the following table.

**Table: 5: Comparison of Peaks and Troughs of Reference Series and CILI**

Peaks(IIP-cycle)		Troughs (IIP-cycle)		Peaks(CILI)		Troughs(CILI)	
BB	HP	BB	HP	BB	HP	BB	HP
May-1998	-----	May-1998	-----		----	----	-----
October-2003	October-2003	October-2003	October-2003	January, 2001	January, 2001	December, 2001	December, 2001
January-2007	March-2007	January-2007	March-2007	December, 2003	December, 2003	April, 2005	April, 2005
January-2009	January-2009	January-2009	January-2009	November, 2007	November, 2007	November, 2007	November, 2007

### Conclusion

This paper attempts to chronicle different phases of Indian business cycle for the period of April, 1994 to December, 2013 and specially focuses to construct a monthly composite leading indicator for forecasting business cycle fluctuations. In this regard, two sets of variables are chosen from different sectors of the economy for which monthly data is available. All deseasonalized variables are passed through band-pass filters namely, Baxter-King for the extraction of the cyclical components from each series. Later, selected number of variables are chosen on the basis of strong concordance and simple correlation at different lead months with respect to monthly business cycle of India and then a weighted average of these variables is considered to construct a leading indicator. This index considers Baxter-King filter for extraction of business cycle component. CILI has a good in-sample predictive power and involves PCA method for assignments of weights to different variables. From the point of view of policy analysis, this index is of immense importance. The index keeps track of the fluctuation of the monthly business cycle and incorporates only eleven variables for its construction and calculation of in-sample behaviour of the business cycle and helps the policy makers take necessary decision to combat undesired consequence for the economy beforehand. Prediction of forthcoming recession can be very instrumental in shaping the future course of action for government as well as for the revision of expectation for different economic entities like investors, banks and consumers.

<b>APPENDIX</b>	
<b>List of Indicator Variables</b>	
<b>Indicator</b>	<b>Definition</b>
Car	Number of Car sold
Cement	Cement production (Million Tonnes)
CPI-IW	CPI –Industrial Workers
Export	Export (Rs. Billion)
Non-Pol	Non-Poll-Expenditure (Rs. Billion)
Cap	Capital Goods Import (Rs. Billion)
Rail	Rail-Traffic (Million Tonnes)
M	M0/ Narrow Money (Rs. Trillion)
Non-Food	Non-Food- Credit of Banks (Rs. Trillion)
Bank	Commercial Bank credit (Rs. Trillion)
US	INR-US exchange rate
US-CILI	US-CILI
Euro-CILI	Euro-CILI
REER	Real Effective Exchange Rate
Sensex	Sensex
Gold	Gold Price (INR per 10 gms.)
Port	Port Traffic (Million Tonnes)

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# Student Engagement and Its Predictors among MBA Students: An Exploratory Study

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## Abstract

Student engagement is a widely studied topic in the English-speaking countries as well as in Europe. Research evidence shows that student engagement is positively correlated with learning and performance as well as personal development of the students. For reasons unknown, there are practically no studies on this subject in India. The research investigation on which this paper is based is an exploratory study that seeks to ascertain the level of student engagement and its predictors in one of the Indian business schools. The results show a fairly high degree of engagement among the MBA students which are influenced by both personal attributes of the students as well as certain aspects of the institutional climate.

**Keywords:** Student Engagement, SelfEfficacy, Need for Achievement, Institutional Climate, Dimensions of Engagement, Predictors of Engagement.

## Introduction

Student engagement has been variously defined by different scholars. Some view it in terms of the time and energy students devote to educationally purposeful activities inside and outside of the classroom (Kuh, 2003). According to Finn (1989), student engagement refers to a student's level of participation in extracurricular activities offered to them by their school. Willms (2001) defined it as a disposition towards learning, working with others, and functioning in a social institution, which are expressed in students' feelings that they belong to school and in their participation in school activities. Taking into account the views of these and many other authors, we shall consider student engagement in terms of effective and behavioural involvement of students in the process of learning as well as commitment to the institution.

It is important to study student engagement because several studies have found that it positively affects students' learning, personal development, and success during college (Astin, 1993; Schulman, 2002; Handelsman et al., 2005; Kuh et al., 2008; Floyd et al, 2009). Similar positive outcomes of student engagement have been found among elementary, middle and high school students (Connell et al, 1994; Marks, 2000) and a negative relationship has been found with school dropout (Alexander et al, 1997) and also with absenteeism (Connell et al., 1995).

On the other hand, Willms (2001) has argued that students may withdraw from school because of low achievement. In other words, student engagement or disengagement may have a reciprocal relationship with academic achievement.

The subject of student engagement is a nascent field of research in India. Therefore, before undertaking any theoretically sound and methodologically rigorous study on this subject, it is necessary to carry out a number of exploratory studies. The study on which this paper is based is a modest attempt in that direction. It is a part of a series of such studies to ascertain the level of engagement of MBA students. The second objective is to identify a set of potential drivers or predictors of student engagement in the field of management education. In this connection, the role of both personal attributes and institutional policies and practices will be examined in order to determine their relative importance in influencing student engagement.

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## Review of Literature

The variety of ways in which student engagement has been conceptualized by different scholars shows that it is a multi-dimensional construct. However, there is as yet no agreed upon set of dimensions of student engagement. For example, this is how some researchers have described the dimensions of student engagement: (1) Leithwood and Jantzi (1999): (a) Participation in school activities (b) Identification with school (2) Fredricks et al. (2004): (a) Cognitive engagement (b) Emotional engagement (c) Behavioural engagement (3) Handelsman et al. (2005): (a) Skill engagement (b) Emotional engagement (c) Interaction engagement (d) Performance engagement (4) Robinson & Hullinger (2008): (a) Academic challenge (b) Active and collaborative learning (c) Interaction with faculty (d) Enriching educational experience.

Most of the studies of student engagement are guided by the assumption that it is influenced by the teachers and shaped by the school policies and practices. Porter (2006) has argued that, in addition to the experiences on campus and characteristics of the institution, it is the human, social and cultural capital that students bring to the college that also affects student engagement. For example, Beck (2005) has argued that, if the students are disinterested, learning will not be effective even with an appropriate material and pedagogy. On the other hand, Willms (2001), maintains that engagement is not an unalterable trait of an individual that stems solely from his genetic make-up or his experiences at home. Rather, it entails attitudes and behaviours that can be affected by teachers (as well as parents) and shaped by school policies and practices.

In a major study using a sample of 1,762 teachers and 9,941 students from one large school district in Canada, Leithwood and Jantzi (1999) studied the effect of principals' and teachers' leadership on student engagement with school conditions as the mediating factor and educational culture of the family as the moderator. The study concluded that partnership between school professionals and students' families is required for any worthwhile progress of children. In another study, Porter (2006) found that students who are more engaged than their counterparts are females, Blacks, Hispanics, campus residents and those on financial or full-time students. Kuh and Gonyea (2003) have found that Hispanic, Latins and Black students use library more frequently as compared to Whites, and those who have easy and ready access to a computer.

Terenzini et al. (1996) have reported that living on campus, as opposed to commuting to college, is positively related to student engagement. Although both personal characteristics of students and situational factors are found to be vital predictors of student engagement, their background characteristics generally account for only one to five percent of the variance in the level of engagement (Pike, 1999 & 2000; Pike and Killian, 2001; Pike et al., 2003). On the other hand, institutional policies and practices are found to play a more vital role and hence receive greater attention in studies of student engagement (Pike and Kuh, 2005). Institutions differ in how they try to engage their students and no institution is found to be uniformly high or low across all measures (dimensions) of engagement (Pike and Kuh, 2005).

The Canadian study of a large school district already described revealed that a higher level of engagement was found in higher level classes, in classes with lesser number of students, and in class rooms with more problem based learning (Leithwood 1999). An Australian survey revealed that the level of student engagement varied significantly between schools and was found to be higher in six single schools, small schools, and in schools with students from higher levels of socio-economic status (Fullarton, 2002).

To sum up, student engagement has been characterized in literature by a myriad of meanings and a complicated set of results of research that are difficult to compare because definitions are often re-configured from one study to the other (Dickie, Kayani and Dickie, 2010). Though considered to be an important precursor to student learning and predictor of student achievement, few researchers have attempted to consolidate a reliable measure of student engagement. As Steele and Fullagar (2009) have argued, there is no consensus on conceptualization of the student engagement construct. The various definitions lack a strong conceptual foundation and often confuse the antecedents and outcomes of engagement with the facets of engagement.

## Methodology

This study is based on responses of postgraduate students of management to a 69-item structured questionnaire. The questionnaire was developed to gather data pertaining to three broad topics: (1) Student Engagement (35 Items) (2) Personality Characteristics (19 Items) (3) Institutional Policies and Practices (15 Items). Each of the 69 items was in the form of a positively-worded statement and response to it was sought on a four-point scale (0-Not at all true; 1-Somewhat true; 2-Largely true; 4-Absolutely true).

Student engagement was sought to be measured in terms of three dimensions: (a) Emotional Engagement (15 Items); (b) Behavioural Engagement (15 Items); and (3) Commitment to the Institution (5 Items).

The 15 items used to measure emotional engagement were taken from the 17-item scale of student engagement developed by Schaufeli et al. (2002). The 17-item scale developed by these authors was built around three components: (a) vigour (6 items); (b) dedication (6 items); and (c) absorption (5 items); In an earlier similar study of student engagement, the same 15 items were used and subjected to factor analysis (Sharma and Bhaumik, 2012). Since exploratory factor analysis of the 15 items did not support the three-dimensional measure suggested by Schaufeli et al. (2002), we have decided to use this item pool as a composite measure of emotional engagement.

Behavioural engagement was measured with the help of 15 statements, each tapping some concrete activity of the student. These statements were adopted from various sources including some of our own. To measure commitment to the institution, we adapted five items developed by Sharma and Joshi (2001) which were originally meant to measure organizational commitment. Thus, our measures of three dimensions of student engagement had altogether 35 items.

To measure personality characteristics, we used the following two scales: (a) a 10-item scale to measure "Self Efficacy" and (b) a 9-item scale to measure "Need for Achievement." And, finally, the institutional policies and practices were measured with the help of 15 items, each of which is a concrete actionable measure and intended to be studied as a single-item potential predictor of student engagement. All 69 items were presented in the questionnaire in a random sequence to conceal any pattern suggesting the constituents of the variables.

Except for the 15 single-item measures of institutional climate, the remaining five variables are to be used as multi-item measures. Before using the latter, it was decided to verify their reliability. The following procedure was employed to determine the reliability of the five variables.

- (a) Inter-item correlation matrix for all items was calculated for each variable to check whether all correlations in the matrix were indeed positive and statistically significant at the level of at least five percent ( $p < .05$ ).
- (b) Cronbach alpha was calculated for each variable using all items. Next, alpha was recalculated by deleting one of the items at a time to determine whether each item really belonged to the variable. If by deleting one or more item (s) from the original set of items, the value of the reliability coefficient (alpha) improved, that item (or items) was dropped.

As a result of the procedure just described the following picture emerged for the five multi-item variables:

**Table 1**

Sl. No.	Variable	Original No. of Items	Alpha	No. of items dropped	Reduced No. of Items	Alpha
1	Emotional Engagement	15	0.77	3	12	0.79
2	Behavioural Engagement	15	0.80	2	13	0.81
3	Commitment to the institution	5	0.80	-	5	0.80
4	Self Efficacy	10	0.74	1	9	0.75
5	Need for Achievement	9	0.72	2	7	0.75

## Sample

The study was carried out at an Institute of Management established in 2008, as a constituent of a group of institutions offering B.Ed., B.Tech. and MBA courses through affiliation with one of the State Universities. The management institute under study has well-designed, spacious and air-conditioned classrooms, auditorium, gymnasium and a sports club. There are separate hostels for boys and girls offering a range of facilities and it claims to be a 24x7 wi-fi campus.

Though established in 2008, the institute admitted its first batch of MBA students in 2009. The sample for the present study comes from the second batch of MBA students who joined the course in 2010 and were in the second year of their course when this study was carried out. In all, there were 64 students in the class and we were able to cover 60 of them for this study. The questionnaire was completed by these students in the presence of one of the authors.

None of the students in the sample had any previous work experience. Since all of them had joined the MBA course soon after completing their undergraduate degree courses, they differed from one another in terms of age within a narrow range of 21 to 24 years. Over three-fourth of them (78.33 percent) were males. Exactly three-fourth of the students hailed from big cities/metros, while the proportion of those coming from villages/small towns was only 25 percent. Since management education is a multi-disciplinary field, it attracts students from a variety of disciplines.

When it comes to the level of education of students' fathers, 61.67 per cent of them has postgraduate or graduate degrees. Such a high level of educational attainments of students' fathers coupled with the fact that they hail from big cities or metros indicate that the student population under study belongs to the urban middle and upper-middle classes. The students were asked to indicate their own perception about the socio-economic status (SES) of their family. Their perceptions shown below confirm the fact that indeed they belong to the middle and upper-middle class strata of the Indian society:

Further details about the background profile of the sample are provided in the appendix. Barring minor exceptions, the background of these students is in general agreement with the background of their counterparts in other business schools in the National Capital Region (Sharma, 2009 and 2010; Sharma and Chandra, 2009).

## Results

Table 2 provides in a summary of the main findings of the study. Each of the three dimensions of student engagement has more or less the same mean score in terms of a percentage (56-57 percent). Thus, there is no discordance between how the students feel and how they behave or how committed they are to the institute. In terms of each of these parameters, their level of engagement is slightly above average.

In terms of personality attributes too, the students have scored equally high on self efficacy (65 percent) and need for achievement (64.19 percent). It is only in the area of institutional climate that the students' perceptions of various dimensions of climate differ remarkably. With a mean score of 50.67 per cent, the student's rating of IT facilities at the institute may be considered as about average. Out of the remaining 14 dimensions, seven each are rated above average and below average.

The climate dimensions rated above average are related mostly to teaching, which includes teaching pedagogy, library collections, help from faculty and staff, faculty inputs and classroom facilities, in a descending order. Also included in this category are good hostel facilities and tuition fee being perceived as reasonable. The seven dimensions of institutional climate falling in the below average category are related mostly to the non-academic matters. These include facilities for extracurricular activities, grievance-handling system, facilities for both final as well as summer placement and canteen facilities, in that order. Also included in this category are two academic matters: inadequacy of syllabus and not-so-good faculty-student ratio.

In our search for the predictors of student engagement, as a first step, we present in Table 4 zero order correlations between each of the 17 potential predictors and each of the three dimensions of student engagement.

The two personality attributes have emerged as very strong correlates of all three dimensions of student engagement. Ten out of the 15 aspects of institutional climate are found to be significantly correlated with some or the other dimension of student engagement, as shown below:

**Table 2**  
**Mean Score, Standard Deviation and Other Details of each Measure of Student Engagement and of its Predictors (N=60)**

Sl. No.	Variable	No. of items	Score Range	Alpha	Mean Score	Standard Deviation	X Score as %
<b>Student Engagement</b>							
1.	Emotional Engagement	12	0-36	.79	20.17	5.621	56.03
2.	Behavioural Engagement	13	0-39	.81	22.17	5.872	56.85
3.	Commitment to Instn.	5	0-15	.80	8.52	3.447	56.80
<b>Personality Attributes</b>							
4.	Self Efficacy	9	0-27	.75	17.55	4.127	65.00
5.	Need for Achievement	7	0-21	.75	13.48	3.606	64.19
<b>Institutional Climate</b>							
6.	Teaching Pedagogy	1	0-3	-	1.90	0.752	63.33
7.	Library Collections	1	0-3	-	1.88	0.958	62.67
8.	Hostel Facilities	1	0-3	-	1.85	0.936	61.67
9.	Help from Faculty & Staff	1	0-3	-	1.83	0.942	61.00
10.	Faculty Inputs	1	0-3	-	1.75	0.876	58.33
11.	Classroom Facilities	1	0-3	-	1.75	1.035	58.33
12.	Reasonable Tuition Fee	1	0-3	-	1.70	0.962	56.67
13.	IT Facilities	1	0-3	-	1.52	0.892	50.67
14.	Adequacy of Syllabus	1	0-3	-	1.40	1.061	46.67
15.	Good Faculty-Students Ratio	1	0-3	-	1.38	0.958	46.00
16.	Facilities for Extra-Curricular Activities	1	0-3	-	1.30	1.013	43.33
17.	Grievance-Hdlg. System	1	0-3	-	1.23	0.909	41.00
18.	Facilities for Final Placement	1	0-3	-	1.13	0.812	37.67
19.	Facilities for Summer Placement	1	0-3	-	0.85	0.860	28.33
20.	Placement Canteen Facilities	1	0-3	-	0.50	0.834	16.67

**Table 3**

<b>Sl. No.</b>	<b>Climate Dimension</b>	<b>Significantly Correlated with Student Engagement</b>
1.	Good Faculty-students Ratio	With all 3 dimensions
2.	Facilities for Final Placement	
3.	Hostel Facilities	
4.	Faculty Inputs	With 2 out of 3 dimensions
5.	Grievance Handling System	
6.	Facilities for Summer Placement	
7.	Library Collections	With one of the 3 dimensions
8.	Teaching Pedagogy	
9.	Classroom Facilities	
10.	Facilities for Extracurricular Activities	

Without implying a causal connection, it is clear from the evidence presented in Table 4 that both personal attributes of students and certain institutional policies and practices are significantly associated with student engagement. This association is more pronounced in the case of emotional engagement than for behavioural engagement.

Table 4

Zero-Order Correlations between each Measures of Student Engagement and each of the potential Predictors (N=60)

Sl No.	Potential Predictors	Emotional Engagement		Behavioural Engagement		Commitment to the Institution	
		r <sub>xy</sub>	p	r <sub>xy</sub>	p	r <sub>xy</sub>	p
	<b>Personality Attributes</b>						
1.	Self Efficiency	.422	.001	.677	.001	.267	.05
2.	Need for Achievement	.539	.001	.632	.001	.366	.01
	<b>Institutional Climate</b>						
3.	Adequacy Syllabus	.131	n.s.	.068	n.s.	-.044	n.s.
4.	Library Collections	.523	.001	.100	n.s.	.172	n.s.
5.	Faculty Inputs	.315	.050	.170	n.s.	.403	.001
6.	Teaching Pedagogy	.373	.010	.180	n.s.	.190	n.s.
7.	IT Facilities	.246	n.s.	.135	n.s.	.116	n.s.
8.	Reasonable Tuition Fee	-.144	n.s.	-.090	n.s.	-.004	n.s.
9.	Classroom Facilities	.092	n.s.	.308	.050	.165	n.s.
10.	Grievance Hdlg. System	.404	.001	.221	n.s.	.513	.001
11.	Good Faculty-Students Ratio	.369	.010	.305	.050	.365	.010
12.	Help Faculty & staff	.165	n.s.	.204	n.s.	.121	n.s.
13.	Facilities for Final Placement	.437	.001	.322	.050	.350	.050
14.	Canteen Facilities	.235	n.s.	-.142	n.s.	.198	n.s.
15.	Facilities for Extra-Curricular Activities.	.229	n.s.	.216	n.s.	.324	.050
16.	Hotel Facilities	.279	.050	.400	.010	.329	.010
17.	Facilities for Summer Placement	.345	.010	.143	n.s.	.364	.010

Note: "n.s. stands for "not significant".

Going beyond bivariate analysis of data, linear multiple regression analysis was carried out to identify a combination of predictors which together explained maximum variance in each measure of student engagement. The results of this multivariate analysis are presented in Table 5.

For each of the three dimensions of student engagement, a set of three predictors emerged as critical. The personality attribute "need for achievement" is found to be the only predictor of all three dimensions of engagement. This shows that for a student to be seriously engaged in the process of learning and to feel attached to the institution, he/she must be driven, among other things, by a felt need to achieve some goal(s) in life. The stronger this need, the more engaged the student is likely to be in his studies and in his attachment to the institution.

The second most important predictor is found to be "facilities for summer placement," which is related to both emotional engagement and commitment to the institution. Interestingly, final placement is not found as a predictor in any of the three regression outputs reported in Table 5. Apparently, the students view summer placement as a part and parcel of their training to become a manager and, therefore, it is summer placement (instead of final placement) that drives them to be engaged in studies and with the institution. Each of the remaining four predictors is found to influence only one of the three forms of student engagement. The highest multiple correlation ( $R^2$ ) is found to be for emotional engagement (0.64), closely followed by behavioural engagement (0.55), while commitment to the institution ranks a distant third ( $R^2 = 0.39$ ). All of these multiple correlations are statistically significant as per beta coefficients reported in Table 5.

**Table 5**  
**Independent Variables that emerged as the Critical Predictors of Student Engagement (N=60)**

	Emotional Engagement			Behavioural Engagement			Commitment to Institution		
	Std.Beta Coeff.	r <sub>xy</sub>	Individual Contribn.	Std.Beta Coeff.	r <sub>xy</sub>	Individual contribn.	Std.Beta Coeff.	r <sub>xy</sub>	Individual Contribn.
1. Need for Achievement	0.517 <sup>***</sup>	0.539 <sup>***</sup>	0.2787	0.323 <sup>*</sup>	0.632 <sup>***</sup>	0.2041	0.299 <sup>**</sup>	0.366 <sup>**</sup>	0.1094
2. Facilities for Summer Placement.	0.321 <sup>***</sup>	0.345 <sup>**</sup>	0.1107	-	-	-	0.235 <sup>*</sup>	0.364 <sup>**</sup>	0.0855
3. Library Collections	0.477 <sup>***</sup>	0.523 <sup>***</sup>	0.2495	-	-	-	-	-	-
4. Self Efficiency	-	-	-	0.450 <sup>***</sup>	0.677 <sup>***</sup>	0.3047	-	-	-
5. Facilities for Extracurricular Activities	-	-	-	0.200 <sup>*</sup>	0.216 <sup>ns</sup>	0.0432	-	-	-
6. Grievance Handling System	-	-	-	-	-	-	0.376 <sup>**</sup>	0.513 <sup>***</sup>	0.1929
	Total (R <sup>2</sup> ): Significance:	F-Ratio: P<.001	.6389 33.026 P<.001	Total (R <sup>2</sup> ): F-Ratio Significance:		.5520 23.014 P<.001	Total (R <sup>2</sup> ): F-Ratio: Significance:		.3878 11.823 P<.001

\*\*\* P<.001      \*\*P<.01      \*P<.05      ns =not significant

Note: The degree of freedom (d.f.) for each of the three F-Ratios is 3,56.

**Table 6**  
**Association between Students' Background and Student Engagement (N=60)**

Sl.N o.	Background Variable	Emotional Engagement			Behavioural Engagement			Commitment to Institution					
		Mean Score	SD	t Value	P	Mean Score	SD	t Value	P	Mean Score	SD	t Value	P
1.	<b>Gender</b> Male (N=47) Female (N=13)	20.32	5.49	0.397	n.s.	22.32	6.19	0.380	n.s.	9.04	3.14	2.330	P<.05
		19.62	6.29			21.62	4.70			6.62	3.95		
2.	<b>Educational Background</b> Commerce/ BusinessAdmn. (N=40) Science/Arts (N=20)	19.85	5.39	-0.614	n.s.	21.70	5.82	-0.869	n.s.	7.83	3.43	-2.275	P<.05
		20.80	6.16			23.10	6.01			9.90	3.13		
3.	<b>Rural-Urban Background</b> Village/Town (N=15) City/Metro (N=45)	20.40	4.94	0.184	n.s.	23.07	7.61	0.682	n.s.	9.60	2.75	1.418	n.s.
		20.09	5.88			21.87	5.24			8.16	3.61		
4.	<b>Father's Education</b> Less than Gradn.(N=23) Gradn./Postgradn.(N=37)	20.83	5.00	0.713	n.s.	21.30	5.52	-0.895	n.s.	9.57	2.76	1.898	n.s.
		19.76	6.01			22.70	6.09			7.86	3.70		
5.	<b>Socio-economic Status</b> LMC/MC (N=40) UMC/UC (N=20)	20.38	5.85	0.403	n.s.	22.73	5.27	1.042	n.s.	8.95	3.09	1.388	n.s.
		19.75	5.26			21.05	6.93			7.65	4.02		

\* LMC = lower middle class      MC= middle class      UMC = upper middle class      UC = upper class

Note: The notation "n.s." stands for "not significant"

## The Role of Students' Background

In addition to various independent variables already reported in this paper as the potential predictors of student engagement, we now turn to certain aspects of the students' background to find out whether or not student engagement is influenced by the latter. The role of background variables could not be examined alongside the other independent variables because of the differences in the scales of measurement in the two cases. The background variables could be measured by using only nominal or ordinal scale of measurement, viz., (1) Gender (male vs. female); (2) Undergraduate Education Background (commerce/business admn. vs. science/arts); (3) Rural-Urban Background (village/town vs. city/metro); (4) Father's Education (less than graduation vs. graduation/post-graduation); and (5) Perceived Socio-economic Status (lower middle/middle class vs. upper middle/upper class).

To determine whether or not a student's background was related to his level of engagement, a series of difference-of-means tests were performed. With five dichotomous background variables and three dimensions of student engagement, altogether 15 t-tests were performed. The results of these tests are reported in Table 6. Out of the 15 tests carried out, only two revealed a significant association at the five per cent level. Both of them relate to the third dimension of student engagement-namely, commitment to the institution.

Students' background characteristics examined in this section have to a very large extent failed to show a significant association with student engagement. This finding is in general accord with the findings of some earlier studies which too have reported that background accounts for a very low percent (one to five percent) of the variance in student engagement (Pike et al., 2003). However, this does not mean that student engagement is influenced by the situational factors alone and that personal attributes of the students have no role to play in this respect.

In Tables 4 and 5 we have shown that two personality attributes (self efficacy and need for achievement) do play a significant role in influencing student engagement. Among the personal attributes, therefore, demographic background apparently plays a less important role than personality attributes as predictors of engagement. In previous studies on the subject, researchers have by and large relied only on the demographic background of students.

## Summary and Conclusion

This is an exploratory study of student engagement, a topic on which practically no research effort has been invested in India. It was, therefore, necessary to rely on foreign literature to conceptualize the construct and to develop instruments for its measurement. The present study was carried out in a privately managed institute of management. The MBA programme of this institute is affiliated to one of the State Universities. From the total strength of 64 second-year MBA students of the institute, 60 were covered by this exploratory study. We have treated these 60 students as a sample from the large population of MBA students in India.

The level of student engagement in this particular institute is found to be slightly above average (between 56 and 57 percent) in terms of all three dimensions of engagement. In terms of the two personality attributes, the students scored almost equally high on both self efficacy (65 percent) and need for achievement (64.19 percent). As far as perceived institutional climate is concerned, there is tremendous variation in the way the students have rated the 15 dimensions of climate, ranging between the highest score of 63.33 percent (teaching pedagogy) and the lowest score of 16.67 percent (canteen facilities).

In our search for the predictors of student engagement, we found mixed results. The two personality attributes were found to be consistently and significantly correlated with all three dimensions of engagement. On the other hand, the correlations between the 15 dimensions of institutional climate and student engagement were found to be neither consistent nor always significant across all three dimensions. Turning to the background variables, it can be concluded that the five measures of background used in this study have practically no role to play in influencing student engagement.

The outcome of multiple regression analysis shows that all together only six out of the 17 independent variables studied have emerged as the critical predictors of student engagement. Only one of these six predictors (namely, need for achievement) is found to have a consistent and highly significant influence on all three dimensions of engagement. A different combination of three predictors is found to explain variance in each dimension of student engagement.

Being one of the exploratory studies of a virgin territory (student engagement), it is not possible to generalize the outcome of the study summarized in the preceding paragraphs. The universe for this study is much too large whereas the sample on which this study is based consists of just 60 students from a single institution. But this study does show that the instruments used to generate data for the study are quite reliable and that, by using these and other such instruments, it is possible not only to ascertain the level of student engagement but also to identify the predictors thereof. Needless to say that many more studies of the kind reported in this paper are required before attempting any generalizations on the subject.

**APPENDIX**  
**Profile of the Students**

<b>S.No.</b>	<b>Background Variable</b>	<b>No. of Students</b>	<b>Percent</b>
<b>1</b>	<b>Age (Years)</b>		
	21	18	30.00%
	22	22	36.67%
	23	13	21.67%
	24	7	11.67%
	<b>Total</b>	<b>60</b>	<b>100.00%</b>
<b>2</b>	<b>Gender</b>		
	Male	47	78.33%
	Female	13	21.67%
	<b>Total</b>	<b>60</b>	<b>100.00%</b>
<b>3</b>	<b>Rural-Urban Background</b>		
	Village/Town	15	25.00%
	City/metro	45	75.00%
	<b>Total</b>	<b>60</b>	<b>100.00%</b>
<b>4</b>	<b>Undergraduate Educational Background</b>		
	Commerce	26	43.33%
	Business Admn.	14	23.33%
	Arts	13	21.67%
	Science	5	8.33%
	Other	2	3.33%
	<b>Total</b>	<b>60</b>	<b>100.00%</b>
<b>5</b>	<b>Father's Education</b>		
	Less than High School	4	6.67%
	High School	15	25.00%
	Less than Graduation	4	6.67%
	Graduation	24	40.00%
Post Graduate	13	21.67%	
	<b>Total</b>	<b>60</b>	<b>100.00%</b>
<b>6</b>	<b>Socio-Economic Status</b>		
	Lower Class	-	-
	Lower Middle Class	4	6.67%
	Middle Class	36	60.00%
	Upper Middle Class	15	25.00%
	Upper Class	5	8.33%
	<b>Total</b>	<b>60</b>	<b>100.00%</b>

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# Employee Engagement and Job Satisfaction: An Empirical Study

Sunita Verma\*

## Abstract

Employee Engagement emerged as a buzzword and extremely popular topic in today's competitive marketplace. The challenges for organizations are not only just retaining their talented workforce but also to engage them in different activities as employee engagement brings competitive advantage. In this research paper, a questionnaire consisting of 20 variables was administered to Telecom officers in Rajasthan and factor analysis & regression analysis were applied to select study the impact of employee engagement practices on job satisfaction. Five factors are extracted namely, Align Efforts with Strategy, Empowerment, Team Work, Support & Recognition and Satisfaction & Development. The study revealed the significant impact of employee engagement on Job satisfaction.

**Keywords:** Employee Engagement, Align Efforts with Strategy, Empowerment, Team Work, Support & Recognition and Satisfaction & Development.

## Introduction

In today's challenging environment, employee engagement is gaining importance and has emerged as a popular organizational concept in recent years (Saks, 2006; Bakker and Schaufeli, 2008). But at the same it is very difficult for the organizations to keep their employees motivated, dedicated, more focused, loyal, committed and productive. The academic literature has shown heightened interest towards engagement over the last few years. Even many studies conducted in the past revealed that if employees are engaged, they contribute significantly to the organizational performance. But if employees are disengaged organizations experience decline in all these areas as well as they will be reluctant to put maximum efforts into their job.

Employee engagement is the level of commitment and involvement an employee has towards his organization and its values. An engaged employee is aware of business context, and works with colleagues to improve performance within the job for the benefit of the organization. The organization must work to develop and nurture engagement, which requires a two-way relationship between employer and employee. Thus, Employee Engagement is a barometer that determines the association of an employee with the organization.

Many organizations are now focusing on engagement strategies that will help them in improving organizational performance. With more and more players entering the industry, retaining the best talent is emerging as a major focal area for organizations in general and HR Managers in particular. However, one of the primary areas of concern for the telecom sector is the spiraling attrition rate that is currently hovering around the 25% mark.

The challenges of market saturation, slow uptake of new services, and the economic downturn in telecommunication sector of India may require companies to focus on employee engagement strategies capable of improving the company's performance. Theoretically, dimensions of employee engagement have been used earlier by other researchers (Wellins, 2004) but empirically this has not been tested so far in Indian context. To fill this gap researcher makes an attempt to explore factors empirically with reference to telecom sector and their impact on Job satisfaction.

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## Literature Review

### Employee Engagement

Employee Engagement has been defined in many ways. Engagement at work was conceptualized by Kahn (1990) as the "harnessing of organizational members selves to their work roles". Harter et al (2002) described it as "the individual's involvement and satisfaction with as well as enthusiasm for work".

The publication of the conference Board of the USA (2006) describes employee engagement as "a heightened emotional connection that an employee feels for his or her organization that influences him or her to exert greater discretionary effort to his or her work". It is the degree of commitment towards the hub which employees perform and till how long they remain with the organization as a result of their commitment. Stockley (2006) defined 'engagement' as "the extent that an employee believes in the mission, purpose and values of an organization and demonstrates that commitment through their actions as an employee and their attitude towards the employer and customers".

Mone and London (2010) defined employee engagement as "a condition of employee who feels involved, committed, passionate, and empowered and demonstrates those feelings in work behavior". Towers (2010) defines engagement along three dimensions: Rational - How well employees understand their roles and responsibilities, Emotional - How much passion they bring to the work and their organizations and Motivational - How willing they are to invest discretionary effort to perform roles well.

Karsan and Kruse (2011) defined it as, " the extent to which employees are motivated to contribute to organizational success and are willing to apply discretionary effort to accomplishing tasks important to the achievement of organizational goals". Employee engagement is fundamentally a motivational concept that represents the active allocation of personal resources toward the task associated with a work role (Christian et al., 2011).

### Job Satisfaction

Different authors have defined job satisfaction in different ways using different approaches. Statt (2004) defined Job Satisfaction as, " the extent to which a worker is content with the rewards he or she gets out of his or her job, particularly in terms of intrinsic motivation". Kaliski (2007) defined it as, "the key ingredient that leads to recognition, income, promotion, and the achievement of other goals that lead to a feeling of fulfillment".

The term job satisfaction refers to the attitude and feelings people have about their work. Positive and favorable attitudes towards the job indicate job satisfaction. Negative and unfavorable attitudes towards the job indicate job dissatisfaction (Armstrong, 2006).

George et al (2008) in their study have defined job satisfaction as, "the collection of feeling and beliefs that people have about their current job. People's levels of degrees of job satisfaction can range from extreme satisfaction to extreme dissatisfaction".

Job satisfaction refers to the feeling of pleasure and achievement which you experience in your job when you know that your work is worth doing or the degree to which your work gives you this feeling (Cambridge Dictionary, 2012).

### Employee Engagement and Job Satisfaction

Various studies in the past have indicated positive relationships among employee engagement and job satisfaction. Saks (2006) found that work engagement had a positive relationship with employees' job satisfaction and a negative relationship with turnover intention.

Kamalanabhan et al (2009) have studied how employee engagement affects perceived job satisfaction in IT Industry. Using the primary data collected from 159 IT Professionals and analyzing the data using correlation, they have come with the results that the age, sex, job tenure, and marital status, employee engagement had a significant

and positive correlation with job satisfaction. Numerous studies have indicated the positive impact of employee engagement factors like empowerment (Akbar et al, 2011; Spatz, 2000), team work (Cox, 2003; Rafferty *et al*, 2001; Gifford *et al*, 2002; Collette, 2004), recognition (Dessler, 2007), Development plans (Scarpello and Campbell, 1983; Kalleberg and Rognes, 2000) and Satisfaction and Loyalty (Ali et al, 2011) on Job Satisfaction. Thus, the following hypotheses are formulated:

H<sub>1</sub>: Align Efforts with strategy has a positive impact on Job Satisfaction

H<sub>2</sub>: Empowerment has a positive impact on Job Satisfaction

H<sub>3</sub>: Team Work has a positive impact on Job Satisfaction

H<sub>4</sub>: Development plans have a positive impact on Job Satisfaction

H<sub>5</sub>: Support and Recognition have a positive impact on Job Satisfaction

H<sub>6</sub>: Satisfaction and Loyalty have a positive impact on Job Satisfaction

## Research Methodology

### Sampling

The data was collected from class-II officers of Telecom employees in Rajasthan to measure employee engagement practices in their organization. A total of 150 questionnaire were circulated and 100 were found fit after the survey and were further analysed.

### Survey

A scale comprising of 20 items measures the Employee Engagement practices. The survey instrument used in this study was a structured questionnaire for the empirical study. The respondents' view on these items was taken on 5 point Likert scale. The anchors used included: a) 1= strongly disagree, b) 2=disagree, c) 3= neither agree nor disagree, d) 4= agree, e) 5= strongly agree. DDI's E3®, which measures engagement, has 20 survey items which have been used in the study to find out and assess employee engagement practices. Job Satisfaction was measured using 3 items by Cammann et al (1983).

### Data Analysis

The Statistical Package for the Social Science (SPSS 17.0 version) was used for the statistical analysis. In addition, Cronbach Alpha coefficients were computed to investigate the consistency and reliability of the instrument. For analyzing the data, factor analysis was applied through the principal component and Varimax with Kaiser Rotation.

### Reliability

According to Hair et al (2007), "if the repeated application of a survey instrument results in consistent scores, we can consider it reliable". They also state: "reliability is concerned with the consistency of the research findings". In other words, a research can be considered reliable, if its measuring procedure yields the same results on repeated trials (Saunders et al, 2009, p. 156). In this research, Cronbach's alpha has been used to measure the reliability of the items.

**Table 1 - Reliability**

S.No.	Label of Factor	No. of Variables	Cronbach's Alpha
1	Align Efforts with strategy	5	0.890
2	Empowerment	2	0.704
3	Team Work	3	0.576
4.	Support & Recognition	3	0.554
5	Satisfaction & Development	5	0.554

In Table 1, five factors (separately) with number of variables was put to reliability test. Application of reliability test for these factors gives Cronbach's Alpha values of 0.554 and more, showing the reliability of data for analysis.

## Results

### Factor Analysis

The variables used for the study are 20 in number (Table 2)

**Table 2: Statements used in the Study**

S. No.	Items
ee1	In my work group my ideas and opinions are appreciated.
ee2	People trust each other in my work group.
ee3	My job provides me with chances to grow and develop.
ee4	In my work group people are assigned tasks that allow them to use their best skills.
ee5	My work group makes efficient use of its resources- time and budget.
ee6	I get sufficient feedback about how well I am doing.
ee7	In my work group people are held accountable for low performance.
ee8	Overall I have a good understanding of what I am supposed to be doing in my job.
ee9	People in my work group quickly resolve conflicts when they arise.
ee10	I am kept well informed about changes in the organization that affect my work group.
ee11	In this organization different work groups reach out to help and support each other.
ee12	People in my work group understand and respect the things that make me unique.
ee13	In my work group meetings are focused and efficient.
ee14	People in my work group cooperate with each other to get the job done.
ee15	I find personal meaning and fulfillment in my work.
ee16	I can make meaningful decisions about how I do my job.
ee17	In my work group people try to pick up new skills and knowledge.
ee18	I am satisfied with my job.
ee19	I would recommend employment at my organization to my friends or family.
ee20	I feel a sense of loyalty to this company.

The scale comprising of 20 items was put to reliability test, the obtained value of Cronbach's alpha of the scale was 0.902, which is considered satisfactory. The determinant of the correlation matrix (R-matrix) tests for multicollinearity or singularity, which should be greater than 0.00001 (Field, 2000). In this study, the value of R-matrix determinant is 0.0000108. So it is proved that multicollinearity is not a problem for these data. Now the next step is checking the correlation pattern of the relationship between the entire variables (Table 2). The significance value and identified variable which have the majority of values greater than 0.05 needs to be checked. One variable (V14) having low correlation was eliminated. Again factor analysis was applied.

**Table 3: Inter-item Correlation Matrix**

	ee1	ee2	ee3	ee4	ee5	ee6	ee7	ee8	ee9	ee10	ee11	ee12	ee13	ee14	ee15	ee16	ee17	ee18	ee19	ee20
ee1	1.000	.430*	.604*	.420*	.291*	.343*	.314*	.439*	.250*	.222*	.336*	.229*	.102	-.010	-.133	.282*	.214*	.328*	.303*	.273*
ee2		1.000	.402*	.233*	.271*	.234*	.319*	.126	.189*	.181*	.046	.256*	.368*	.087	.096	.228*	.139	.142	.275*	.245*
ee3			1.000	.612*	.588*	.501*	.511*	.358*	.575*	.525*	.510*	.260*	.275*	.191*	.069	.438*	.290*	.520*	.641*	.308*
ee4				1.000	.632*	.354*	.408*	.158*	.441*	.467*	.528*	.225*	.353*	.046	.066	.400*	.217*	.474*	.442*	.137
ee5					1.000	.389*	.531*	.099	.470*	.342*	.348*	-.059	.199*	-.012	.141	.450*	.377*	.679*	.520*	.404*
ee6						1.000	.495*	.257*	.427*	.561*	.412*	.109*	.273*	-.027	.257*	.547*	.555*	.508*	.437*	.232*
ee7							1.000	.359*	.678*	.575*	.563*	.323*	.280*	-.007	.342*	.565*	.618*	.568*	.381*	.239*
ee8								1.000	.401*	.148	.168*	.253*	.029	-.160*	.053	.251*	.239*	.393*	.216*	-.043
ee9									1.000	.444*	.423*	.283*	.226*	-.118	.191*	.499*	.496*	.509*	.438*	.264*
ee10										1.000	.421*	.408*	.407*	.120	.189*	.455*	.465*	.372*	.581*	.084
ee11											1.000	.320*	.223*	.068	.303*	.353*	.413*	.294*	.276*	.265*
ee12												1.000	.107	.284*	.249*	.232*	.183*	.019	.128*	-.002
ee13													1.000	.019	.260*	.198*	.203*	.176*	.210*	.030
ee14														1.000	.136	.067	-.140	-.149	.051	-.083
ee15															1.000	.290*	.360*	.136	-.054	.166*
ee16																1.000	.584*	.661*	.525*	.292*
ee17																	1.000	.496*	.298*	.361*
ee18																		1.000	.607*	.310*
ee19																			1.000	.338*
ee20																				1.000

Note: \*=correlation is significant at 0.05 level.

Table 3 depicts that statements used under this are correlated except variable 14 which has been dropped for further analysis. Further result of correlation matrix found all the statements correlated with each other.

**Table 4: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.775
Bartlett's Test of Sphericity	Approx. Chi-Square	1049.947
	df	171
	Sig.	.000

The result of Kaiser – Meyer – Olkin (KMO) measure of sampling adequacy of statements under study is 0.775 showing that statements can be subjected to factorability. Significance level of Bartlett's test of sphericity is 0.00, which reveals that the variables are significantly correlated and fit for factor analysis.

**Table 5: Principal Component Analysis****Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared			Rotation Sums of Squared		
				Loadings			Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.297	38.405	38.405	7.297	38.405	38.405	4.669	24.573	24.573
2	1.675	8.817	47.222	1.675	8.817	47.222	2.711	14.270	38.843
3	1.517	7.983	55.206	1.517	7.983	55.206	1.967	10.353	49.196
4	1.294	6.809	62.014	1.294	6.809	62.014	1.962	10.326	59.521
5	1.133	5.965	67.980	1.133	5.965	67.980	1.607	8.458	67.980
6	.992	5.220	73.200						
7	.851	4.479	77.678						
8	.747	3.930	81.609						
9	.605	3.184	84.792						
10	.544	2.862	87.655						
11	.476	2.503	90.158						
12	.388	2.040	92.198						
13	.357	1.880	94.078						
14	.270	1.419	95.497						
15	.253	1.329	96.826						
16	.215	1.131	97.957						
17	.165	.866	98.823						
18	.131	.691	99.514						
19	.092	.486	100.000						

Factor Analysis gave five factors explaining 67.98% of variance (Table 5). The eigen values explain the variation associated with each factor (linear components) before extraction, after extraction and after rotation (Field, 2000). Before extractions there are 19 components which are all variables listed. Under the Extraction Sums of Squared Loadings only factors with eigenvalues bigger than 1 are listed, and the result shows only 5 factors. Factor 1 explains 38.40 % of total variance, factor 2 explains 8.82%, factor 3 explains 7.98%, factor 3 explains 6.81% and factor 5 explains 5.97%. In the last part of the table the eigenvalues of the factors after rotation are displayed. After rotation, factor 1 accounts for only 24.57% of variance.

**Table 6: Factor Analysis of the Variables**

<b>S. No.</b>	<b>Factor Labels and Variables</b>	<b>Rotated Factor loadings</b>
F1	<b>Align Efforts with Strategy</b>	
ee8	Overall I have a good understanding of what I am supposed to be doing in my job.	0.804
ee10	I am kept well informed about changes in the organization that affect my work group.	0.796
ee5	My work group makes efficient use of its resources, time, and budget.	0.766
ee13	In my work group, meetings are focused and efficient.	0.670
ee7	In my work group, people are held accountable for low performance.	0.653
F2	<b>Empowerment</b>	
ee16	I can make meaningful decisions about how I do my job.	0.778
ee15	I find personal meaning and fulfillment in my work	0.747
F3	<b>Team Work</b>	
ee14	People in my work group cooperate with each other to get the job done.	0.808
ee11	In this organization, different work groups reach out to help and support each other	0.579
ee 9	People in my work group quickly resolve conflicts when they arise.	0.560
F4	<b>Support and Recognition</b>	
ee 6	I get sufficient feedback about how well I am doing.	0.705
ee13	In my work group, my ideas and opinions are appreciated.	0.603
ee1	People in my work group understand and respect the things that make me unique.	0.570
F5	<b>Satisfaction and Development</b>	
ee3	My job provides me with chances to grow and develop.	0.799
ee17	In my work group, people try to pick up new skills and knowledge.	0.611
ee18	I am satisfied with my job.	0.575
ee20	I feel a sense of loyalty to this company.	0.566
ee19	I would recommend employment at my organization to my	0.565

In Table 6 on the basis of Principal Component Analysis, five factors were extracted. It depicts that statements with factor loading more than 0.550 were considered significant. Factor 1 has higher factor loading for statements ee8 (0.804), ee10 (0.796), ee 5 (0.766), ee13 (0.670), ee7 (0.653), and is labelled as *Align Efforts with Strategy*. Factor 2 has higher loading for statements ee16 (0.778), ee15 (0.747), and is labelled as *Empowerment*. Similarly factor 3 has higher loading for statements ee14 (0.808), ee11 (0.579), ee1 (0.560) and hence labelled as *Team Work*. Factor 4 has higher loadings for ee6 (0.705), ee13 (0.603), ee1 (0.611) and is labelled as *Support & Recognition*. Factor 5 has higher loadings for ee3 (0.799), ee17 (0.611), ee18 (0.575), ee20 (0.566) and ee19 (0.565) and is labelled as *Satisfaction and Development*. One of the statements named ee11 (value less than 0.4) is not present in this table as it was set up not to display values less than 0.4. Steven (in Field, 2000) suggested for setting a cut off point of 0.4 factors loading for each factor which is considered to be appropriate for interpretative purposes. So in this table one variable is reduced based on the values. Now the total variables remained as 18 out of which five factors are extracted.

### Regression Analysis

Multiple Regression analysis was done to investigate the impact of employee engagement factors on job satisfaction.

**Table 7: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.754 <sup>a</sup>	.568	.545	.37407	.568	24.714	5	94	.000	2.019

**Table 8: ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	17.291	5	3.458	24.714	.000 <sup>a</sup>
Residual	13.153	94	.140		
Total	30.444	99			

**Table 9: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	1.840	.501		3.673	.000	.845	2.835
Factor 1	.470	.094	.517	5.011	.000	.284	.656
Factor 2	.259	.090	.286	2.873	.005	.080	.439
Factor 3	.116	.075	.119	1.557	.123	-.032	.265
Factor 4	-.142	.098	-.101	-1.455	.149	-.336	.052
Factor 5	-.151	.083	-.136	-1.814	.073	-.316	.014

Results of regression analysis show that the R square value is 0.568 and  $F = 24.714$  ( $p = 0.000$ ). This reveals that 56.8 percent of total variance in Job Satisfaction is explained by five dimensions of Employee Engagement. According to the table, Align Efforts with Strategy ( $t = 5.011$ ;  $p = 0.000$ ), Empowerment ( $t = 2.873$ ;  $p = 0.000$ ), emerged out as the significant dimensions in explaining the variance in Job Satisfaction. Thus  $H_1$  and  $H_2$  are accepted. On the other hand factors like Team Work ( $t = 1.557$ ;  $p = 0.123$ ), Support and Recognition ( $t = -1.455$ ;  $p = 0.149$ ), Satisfaction and Development ( $t = -1.814$ ;  $p = .073$ ) emerged out as insignificant dimensions in explaining the variance in Job Satisfaction. Thus  $H_3$ ,  $H_4$ ,  $H_5$  and  $H_6$  are rejected. Align Efforts with Strategy had the strongest effect on Job satisfaction with a standardized beta of 0.517.

## Conclusion

Thus based on the results two factors namely Align Efforts with Strategy and empowerment have positive impact on Job Satisfaction. Employees are satisfied with their job if they have a good understanding of what they are supposed to do in their job, well informed about changes in the organization that affect their work group, make efficient use of its resources, time, and budget, meetings are focused and efficient, people are held accountable for low performance and they find 'personal meaning and fulfillment in my work'.

These findings have important implications for Telecom managers to focus more on those practices where employees are found to be less engaged. This will help them in formulating strategies to make employees more engaged so that they can contribute for organization success. Future research could expand on this work where comparison of employee engagement between public and private sector in Indian Telecom industry can also be made.

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# Social Networking Sites - Emerging as Effective Tools for Attracting Talent

Poonam Jindal\* and Mohsin Shaikh\*\*

## Abstract

Social media activity rose rapidly in recent years and the bigger platforms touch people's lives multiple times every-day, but using social media to find and source talent is still relatively new for many employers, HR managers and recruiters. In the era when HR function receives strategic importance, there is a need for achieving cost effectiveness and ensuring timely decision of appointing the right person at the right time in the right job. The paper proclaims that social media is an effective tool to achieve the said objective. This paper aims at developing a model of social media recruitment for attracting the right talent and ultimately helping in talent management. Social Media is a great tool to source and secure candidates and build brand as an employer. If done properly, it's more cost effective than using job portals. We can attract better candidates and find them faster. Surveys reveal that there is an impact on the recruiters' attitude about the effectiveness of social media recruiting.

**Keywords:** Social Media, Social Networking Sites, Recruitment, HR Function

## Introduction

Social media is a common place where people meet each other, share information and interact. Social media refers to the means of interactions among people in which they create, share and exchange information and ideas in virtual communities and networks. Social Media depends on mobile and web-based technologies to create highly interactive platforms through which individuals and communities share, co-create, discuss, and modify user-generated content. It introduces substantial and pervasive changes to communication between organizations, communities and individuals. Social media differentiates from traditional/industrial media in many aspects such as quality, reach, frequency, usability, immediacy and permanence.

## Evolution of Social Media

Social Media was emerged in 1950s, with phone long before using Skype or internet for connecting. Using social network is a kind of mimicry of real life as we have friends, professional groups, societies etc. Social media is a combination of strategy and technology. Social media networking sites began with launch of Friendster in 2002. The site was launched in Sydney, Australia, and grew rapidly among young audience. By the end of 2009, Friendster had approximately 115 million registered members. This statistic shows a timeline with the worldwide number of active Facebook users from 2008 to 2014. As of the third quarter of 2014, Facebook had 1.35 billion monthly active users. Mark Zuckerberg founded Facebook in February 2004. Facebook's first major growth as a social network has been attributed to the introduction of Facebook Applications. It grew 32% from May to August 2007. LinkedIn is to help the professionals to organize and display their resumes online. At the end of 2009, this network had 50 million users on site. It is a business-only network and has been eagerly adopted by the recruitment industry. LinkedIn enables the recruiters to put the jobs on the site and display them to job seekers. It was the start of the social media networks and now many network sites are available to enter onto this world of social networking. Social Networking Sites (SNS) are perhaps the most socially significant of the Web 2.0 applications, particularly as the number of users continues to escalate and as they converge a range of other Web 2.0 phenomena (Beer and Burrows, 2007). Social media have created a new connectivity, or platform, for the global community to communicate online (McAfee,

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2005). Social media can be classified into weblogs, micro-blogging, wikis, podcasts, SNS, internet forums, social bookmarking and photographs, videos ratings like Youtube.com etc.

## **Is social media the right choice or not for recruitment?**

The role of social media for recruitment has been a topic for discussion in the past few years. There is a debate on whether the recruitment through social networking sites can provide the right candidate or not. Rashmi Chanduraj, Director of Talent Acquisition, TGC Global says that companies are not using traditional methods now but earlier the tracking of applicant was easy as they were applying through newspapers and campus. Now so many channels are there and it is difficult to know how applicant got to their webpage and applied for the job. Timesjobs.com as a part of its Mumbai edition of “Boardroom Dialogues”, held a discussion with leading experts from the HR fraternity on the use of social media for recruitment process. All HR experts tried to find out the pros and cons of using social networking platforms for recruitment of fresh as well senior profiles. Few of the experts felt that the use of social media as only a recruitment source and but the assessment by traditional methods of selection is the best option, but few felt differently. HCL Technologies recently created a Twitter campaign to try to attract employees who think out of the box. They interviewed candidates over Twitter, and had more than 86,000 people take part in the process. Participants were excited, and the campaign trended across Twitter for more than four days.

## **The Objective and Methodology:**

- To observe the effective use of social media in the recruitment process
- To analyse the contribution of social media in attracting and recruiting talent and thereby to the strategic importance of talent management
- To understand the factors to be considered while adopting social media for recruitment
- To develop a model for social media recruitment for attracting the right talent, and how the attraction of right talent will help in talent management, based on the thorough literature review

Study is primarily based on the secondary sources of data collected from the existing literature from academic research papers, online resources (websites), few newspapers articles, and books etc.

## **Social Media Recruiting**

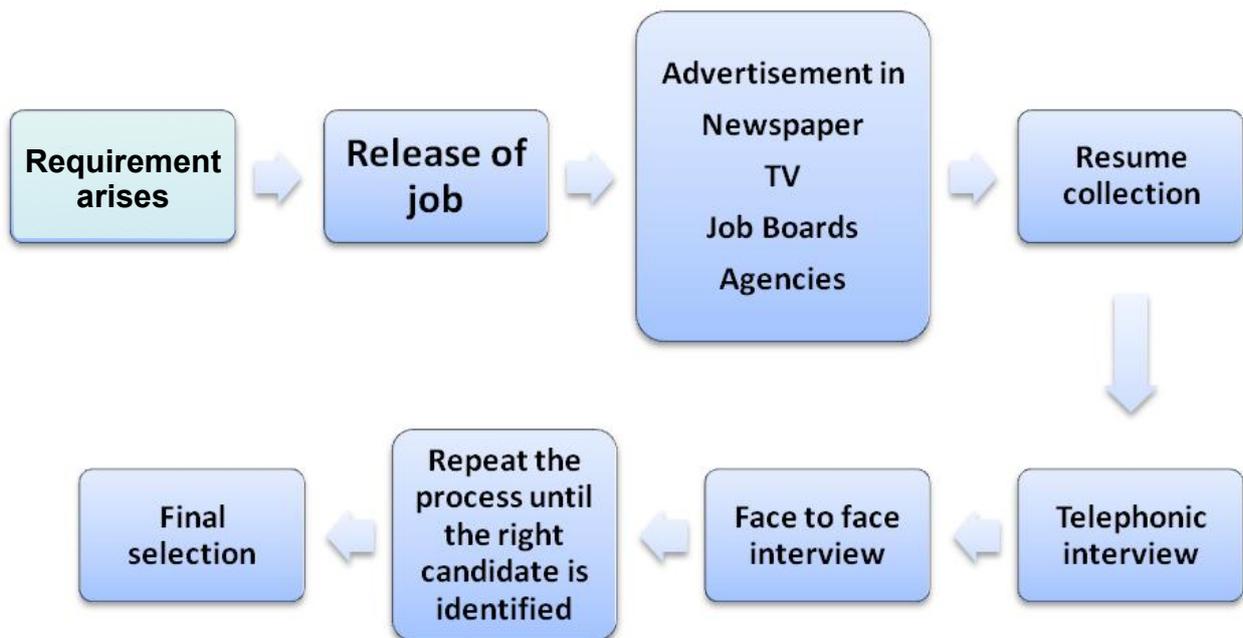
Social networks cover the entire world, linking people together and because of their wide member base, they can be used as an excellent advertising tool for recruitment. Social Networking Sites act as a platform for recruiters as well as job-seekers. A recruiter can have access to the most qualified, talented, and largest pool of applicants. Human resources can leverage social media to tap the potential recruits. Thus, social recruiting is about using social media tools to source and recruit talent. The significance of social media for recruitment is that people can check whether the job profile matches with the requirement and hence there is no scope for 'push marketing'. The traditional methods of recruitment involves lengthy and expensive process; giving advertisement in newspaper, screening candidates for interview, calling people for interview, and taking screening interview and then if person is not suitable, rejecting that profile. Whereas through Social Networking Sites, organizations can conduct research based on the profile of applicants and see referrals upfront. As most people feel that pre-screening frequently happens through social media, a quick search reveals personal information of a candidate on his social media profile. Similarly, the job seekers can research companies before applying for them. Companies find candidates that fit their culture while job seekers find companies that suit their personality. In this digital era, most companies are interested in hiring tech-savvy generation and at the same time, the tech-savvy generation would appreciate being found where they spend most of their time. Pictures 1.0 and 2.0 explain the difference in traditional recruiting and social media recruiting.

## Social Networks for Recruiting

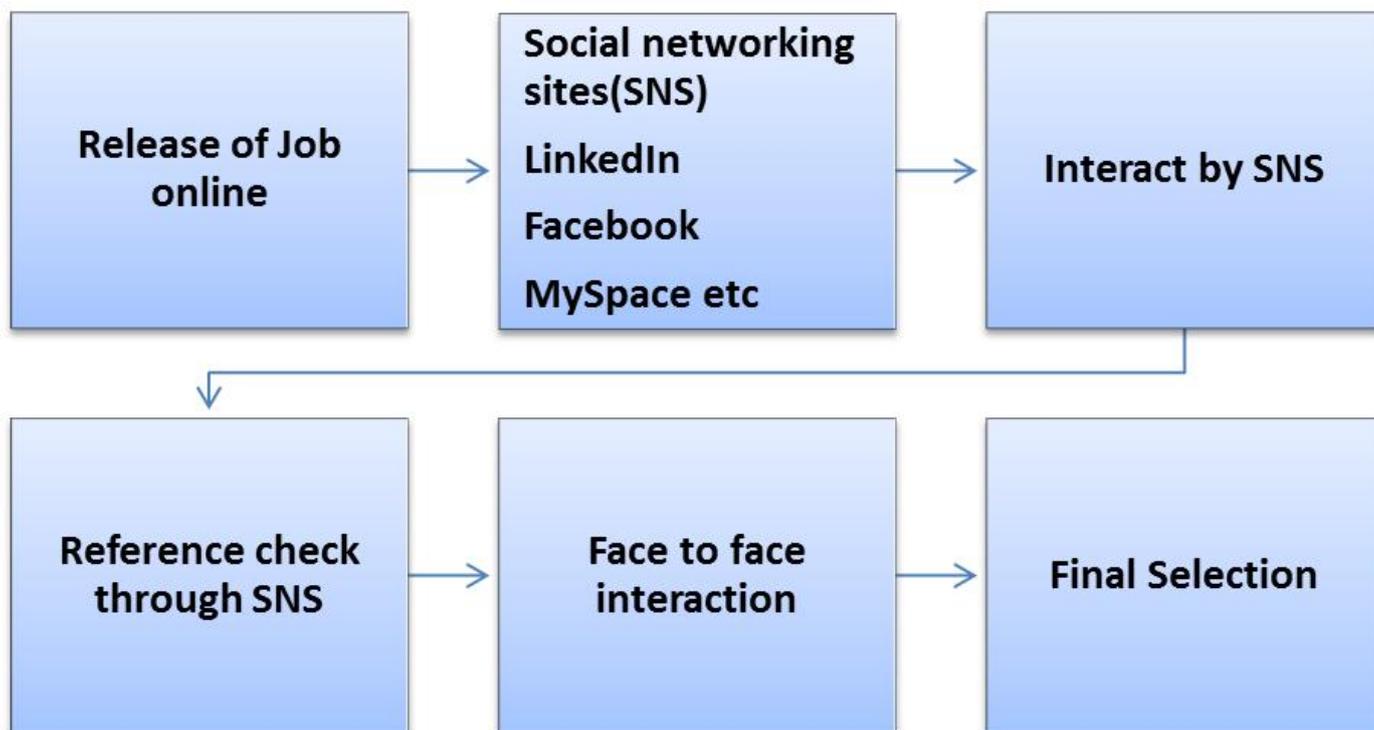
**Twitter:** The audience for Twitter is vast and engaged, with users sending out more than 175 million tweets a day. When recruiting on Twitter, there is a need for ensuring the continuous presence on the platform. It is important to make sure your jobs are not merely being tweeted out, but they are reaching your target job seeker audience.

**Facebook:** This is where a lot of talent spends time. Not only does Facebook have the most members of any social networking service, its members spend an average of 405 minutes per month on the site. Facebook is a giant network, so it is important to carve out your own company space. Having a dedicated careers tab on your company page makes it easy for candidates to find your open positions.

**LinkedIn:** The power of LinkedIn is in the ability to leverage the networks of your company, colleagues, employees and their connections to find the best talent. With 161 million professional profiles and more than 2 million company pages, LinkedIn is the biggest social media destination for professional networking. A good way to engage with candidates who are passionate about your industry and your company is to develop a community of qualified individuals who follow your company page on LinkedIn.



Picture 1 – Traditional Recruitment Process



Picture 2 – Social Networking Recruitment Process

### Literature review

The use of social media for recruitment purposes is becoming increasingly popular because social networking sites enable recruiters to maintain constant connectivity and communication (Wandel, 2008). However, there is a notion among the recruiters that social media is the last option in term of achieving cost effectiveness in recruitment.

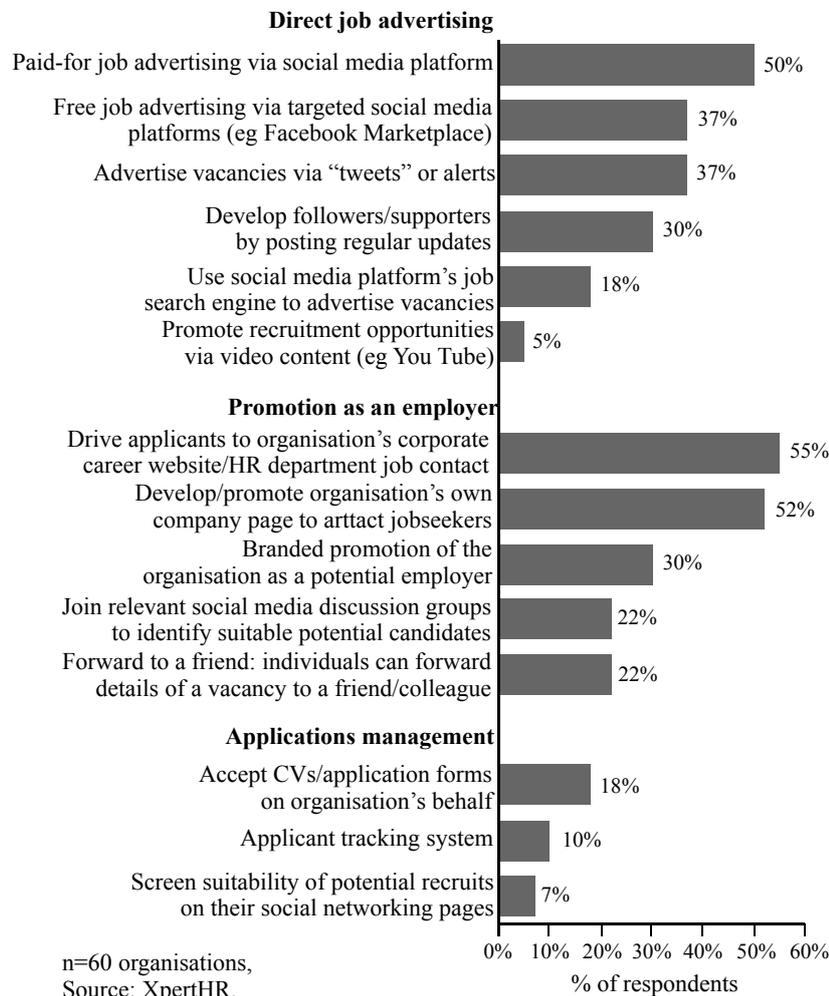
Beer and Burrows (2007) introduce the idea of Web 2.0 to a sociological audience as a key example of a process of cultural digitization that is moving faster. Their paper also gives definition, a schematic overview and a typology. It provides examples of wikis, folksonomies, mashups and social networking sites (Beer and Burrows, 2007). Few studies explain that Social media allow users to share content, creations, thoughts, views, information and personal details (Baumann, 2006; Beer and Burrows, 2007; O'Reilly, 2005). Initially internet applications were created only by experts. Now by simplifying and sharing web technologies, social media allows user-generated content (Beer and Burrows, 2007; Tapscott and Williams, 2007), that collaboration plays a key role in creating an “open and collectively spirited community” (Khor and Marsh, 2006). Social media users are commonly referred as Generation C, where C stands for content, creation, consumption and connectivity (Dye, 2007). Social Networking Sites allow users to create an online profile and a visible, virtual network of their friends (boyd and Ellison, 2007; Scott, 2007). People who are using SNS, are uploading a profile picture and providing descriptive information including their name, age, location, favorite movies/tastes/books/music and hobbies (boyd, 2007a; boyd and Ellison, 2007). This information is valuable to the companies.

Handerson and Bowley (2010), in their study to explore the experiences of select not-for-profit organisations about the authenticity of social networking for recruitment campaign, found that an organisation attempted to re-position its identity to appear “authentic” to potential young stakeholders, and to use social media to build a dialogue that would attract new recruits to the industry. The paper further discusses the challenges and opportunities experienced by the not-for-profit organization in this recruitment campaign. As per the survey by Xpert HR, the use of social media is still not high in recruitment. According to the research, employers that took part in the 2013 XpertHR survey on using digital recruitment, only 46% use social media to recruit. 89% of recruiters who participated in the survey use their corporate websites and 82% use job boards to attract and recruit candidates. 82% of those employers that use social media to recruit, said they manage the process themselves. LinkedIn is the

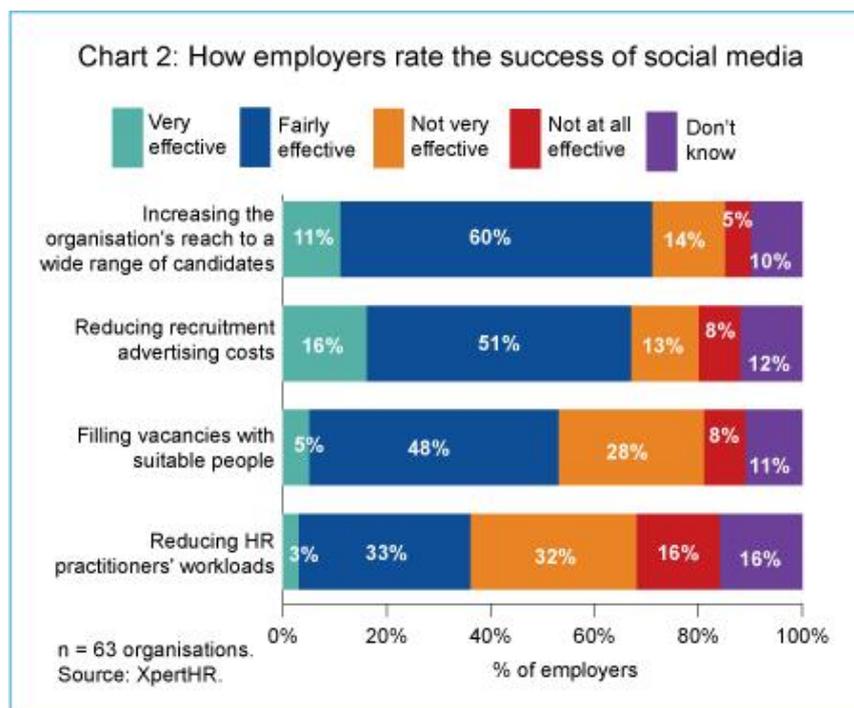
most popular platform, used by 78% employers that recruit using social media. This is followed by Twitter (48%), Facebook (37%), YouTube (10%) and Google+ (6%). XpertHR's findings showed that employers tend to use social media right from the early candidate-attraction stage of recruitment not just for managing applications.

There are different ways of using social media for recruitment; job advertisement, employer branding to attract the best talent, application management etc. In XpertHR survey of 60 organizations on the use of social media, 50% of employers were found to use social media as paid advertising job platform. There is a negligible evidence of any employers using video contents like Youtube.com for recruitment. Many employers are using even free job advertising platforms like Facebook for recruitment. Employers are using social media for employer branding to attract the talent. Employers are able to drive the applicants to the organization's corporate website with help of employer branding through social media. The other way of using social media is for managing applications for positions. Screening and evaluating the suitability of candidates can be done from the information posted on the social networking sites. Though survey says that the use of social media for application management is very less by employers, but it is more than the use of promoting recruitment opportunities through video content.

**Chart 1: How social media is used for recruitment**



The survey also highlighted recruiters' attitudes on the effectiveness of using social media for recruitment. If they were asked how they rate the success of social media use for recruitment, they preferred it for reaching to the candidates. The highest percentage of employer feels that social media is a good tool to reach to the potential candidates. They also believe that it decreases the cost involved in recruitment. But very less recruiters feel that it reduces HR practitioners' workload (XpertHR, Personneltoday.com)



The Jobvite Social Recruiting Survey conducted in 2014 results say that 73% employers are planning to increase their investment in social networking recruitment sources. And the same survey reveals that 94% employers use LinkedIn as SNS for recruiting which is the top recruiting source according to the survey, whereas facebook is on the second level as 66% of employers are using that for recruitment purpose. Employers are using SNS to search for candidates, to contact candidates, to keep tabs on potential candidates and to post jobs. 44% employers feel that the quality and the quantity of candidates have improved after using SNS. But still only 18% of employers feel that they are expert in SNS recruiting.

Getting involved in social networks is not about job seeking or job opportunities. It's about creating the curiosity in the minds of applicants what a company is doing. Companies try to create the curiosity in the minds of right talent so that they go to their websites and that will be more of an employer branding for the company and not only the source of recruiting.

Recruitment agencies use integrated social media data to help companies find the right hires. Few companies are now also aware that to find the top talent Social media can be a great source for discovering passive candidates - those who are employed but 'open' to changing jobs for the right opportunity and they represent nearly half of all currently employed talent. Because the desired opportunities rarely exist on job boards, and job seekers are participating in communities all over the web (for example, sites like LinkedIn for talent), social media can become a fascinating place for employers to find talent that they may not be able to find otherwise. Agencies simplify this process even further by first identifying this talent through social networking sites and then connecting this talent with those who have best match against specific job criteria.

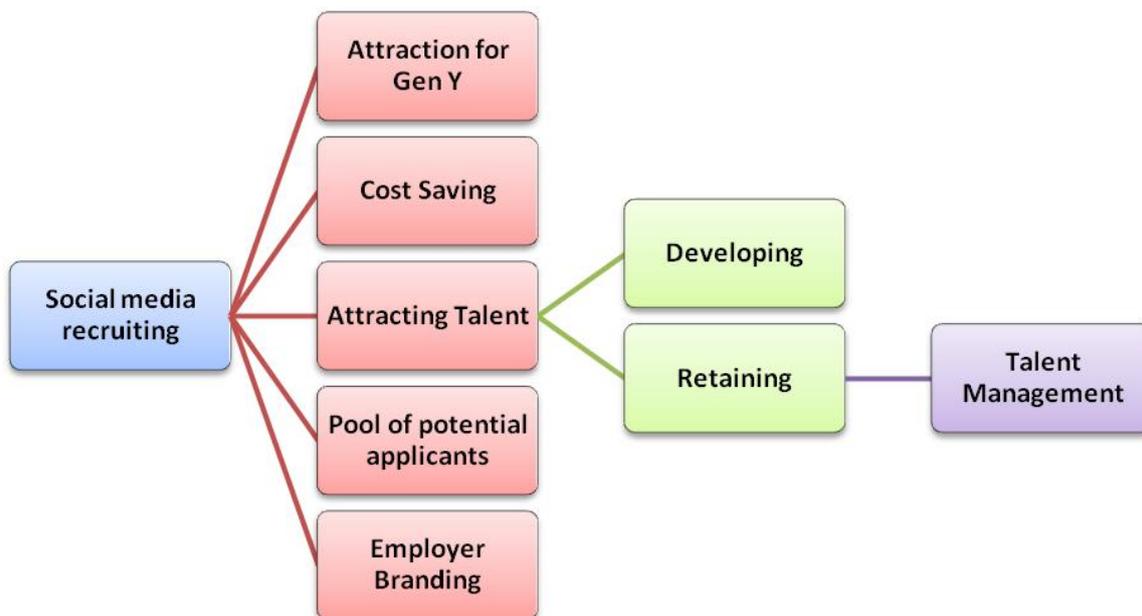
Earlier people used to rely only on word documents, but now if there is potential candidate, recruiter would go and look up for his profile on LinkedIn instead and would go through his recommendations and see how well he networks within the social media. In fact companies would be surprised if the candidate does not have his profile on a professional networking site.

These can make realize the importance of the use of social media for recruitment. Organizations are expecting from the candidates to be updated on social networking site, which can make their work easy. Generally all HR experts feel that recruiter may not always get the right picture if the large part of assessment is based on social networks profiles, however it can be used for the screening of the potential talents.

Social media is not only the tool of recruiting but the use of social media for attracting talent is the requirement of businesses today. According to experts, referrals and recommendations are every important tool to

do screening of employees. Mostly organizations are opening their group pages and getting involved in discussions through blogs about the brands and products of their company with applicants. Though social media is a major channel in talent acquisition, organizations find it difficult to keep up with the susceptibility of candidates to use social media. According to the quarterly research done by HCI on talent acquisition, only 56 percent of organizations agree that social media recruiting is manageable for their recruiters. Likewise, only 61 percent report that they are able to effectively connect with candidates through social media, and 55 percent agree they are able to effectively interact with candidates through social media. There is a clear disparity between the tendency to use social media and the efficiency of organizations using this channel (HCI report, 2014).

To get the best from social media as recruitment tool employer should start early. The information should be given to the applicants before they are even thinking about you as an employer. Employer should know who are the potential applicants or people suitable for the job and company before approaching them. Social media can be successful if you are using it in a creative and innovative manner because your target applicants are mostly from Gen Y (millennials). Employer should know how to show the presence on social media to attract the applicants, which can be done with the advice of experts in using social media for recruiting. Employer should have some sort of web traffic analytics system on his/her website. If not, an easy one to start with is Google Analytics which is free.



**Picture 3- Model of Social media recruiting**

## Conclusion

This literature review helped the author to find out that social media is not only the tool of recruiting but the use of social media for attracting talent is the requirement for businesses today. (www.wamda.com) Ninety-two percent of organizations say they use one of the big three social media sites (Twitter, Facebook, and LinkedIn). Likewise, 14.4 million people in the United States have used social media to search for a job and 73 percent of organizations say they have made successful hires using social media (HCI report, 2014). Social media is helping organizations connect and interact with candidates to a stronger degree than ever before. Social media gives organizations the ability to generate content outside of traditional job postings, such as blogs, news stories, and online workshops. Eighty percent of professionals say the primary reason for using social media is the ability to recruit passive candidates who otherwise might not be able to initiate contact with the organization. Social media is becoming more relevant than traditional channels of recruitment. In a survey of professionals, 40 percent believe traditional job posts will be outdated. Likewise, job referrals and social media were ranked above career pages and job boards as the most important channels of recruitment. As social media continues to transform the landscape of talent acquisition and becomes increasingly important to organizations, it is deemed necessary to explore how

companies are managing and utilizing this channel for recruitment. According to Forbes, more than 50 percent of job seekers use social media to land a job these days, and they also use it to research potential employers. Gen Y employees are typically the ones who use social media in their job search. They use it to find job postings and recruiting information([www.forbes.com](http://www.forbes.com)). Companies that have made the switch to recruiting employees with social media are amusingly surprised by the results. It's an effective way to attract and get talented employees (HCI report, 2014 [www.work4labs.com](http://www.work4labs.com)). Model developed by the author reveals that social media is not only used for recruitment but it is also used attracting the Gen Y talent, attracting the right talent, creating the brand as employer and ultimately it helps to manage the talent in the era of war for talent. There is a scope of study to prove the model through empirical research.

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# A study on the sequential interaction of Emotional Demand and Job Demand and their impact on Emotional Exhaustion

J. Anitha\* and Preetha F James\*\*

## Abstract

Emotional Exhaustion is a chronic state of physical and emotional depletion of an employee and has significant impact on one's performance. The study aims at understanding the level of emotional demand and job demand among employees in the automobile sector; the impact of coping strategies on emotional demand; the moderating effect of the lack of resources and conservation of resources in the relationship between job demand and emotional exhaustion; to arrive at a comprehensive model that explains the relationship between emotional demand, job demand, emotional exhaustion and role of emotional labour strategies. In addition to that, the availability of resources that assist one to deal with exhaustion was also intended to be studied. Hence, the conservation of resources and lack of resources were also measured as variables, to study their moderating effect on the relationship between job demand and emotional exhaustion. Random sampling was used to choose the sample and survey method was adopted. Descriptive statistics and regression analysis were used in the analysis. The study has developed a model explaining the sequential interaction of emotional demand and job demand and their impact on exhaustion and validated the same. This would help the practitioners leverage on the resources availability and help employees balance job demands and emotional demands so as to minimize emotional exhaustion.

**Keywords:** Emotional exhaustion, Emotional Demand, Job Demand, Emotional Labour Coping Strategies.

## Introduction

Many organizations have increased their focus on service as 'when competition in price is out, competition in service is in' (Hochschild, 1983; p. 92). The organisational policies hence reflect strong customer service emphasis. This calls for employees' service to satisfy the customers and in the process, it is noticeable that employees are demanded of certain display rules that satisfy their customers. Hence, employees are bound to act and react in ways desirable rather than expressing their authentic feelings and behaviour. Here arises the concern of emotional exhaustion. The thought of being invaded or exhausted by one's work and deprived of physical and emotional resources is referred to emotional exhaustion (Maslach et al., 2001). In order to thrive in the competition in service, organizations in all sectors are improving their service interactions with the customers. Customer interactions such as friendliness, smiling, empathy are associated with customer outcomes such as recommend the store to others, intention to come back etc. These interactions are essential to employee performance called employee labour. Employee should have a face to face interaction with customer. Increased interaction leads to the exploration of emotional labour. It is a challenge when facing an unpleasant customer. This study shows the impact of various factors on emotional exhaustion of employees, and in particular the sequential interaction of emotional demand and job demand on emotional exhaustion.

An organization shapes employees' emotion and emotional display, which is known as emotional demand. Service employees follow a script, which includes the acceptable and expected expressions that require the expression of specific emotions leading to emotional demands (Glomb, Kammeyer-Mueller & Rotundo 2004, Grove & Fisk, 1989). In service jobs the emotions need to be controlled to have certain job performance standard.

Emotion is the feeling of sensing the energy which drives the life in a positive or negative direction. Emotions are differentiated based on the frequency of energy. Emotions are contagious and influence person to

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person. Emotions are otherwise called as 'affect'. Emotions are influenced by social, cultural, interpersonal and situations conditions (Martin, 1999). Whatever happens in the organization is the outcome of emotion management. Emotion is an integral part of work, people being the emotional conductors. The management of workplace emotion to comply with the occupational or organizational norms is referred as emotional labour. This term was first coined by Hochschild (1983) and their two emotional labour strategies: deep acting and surface acting. In deep acting, employees' change their expression and feeling as per the situation hence aligning with the situation. In surface acting, the emotions are expressed as per the organizational display rules without actually feeling it. The emotional labour strategies also effect the emotional exhaustion of an employee, which is also explored in this study.

## **Review of Literature**

The literature review focuses on the various constructs of study. Emotional exhaustion is the main dependent variable and research has evolved in different forms in this area from job burn out to stress to emotional exhaustion. The following section deals with studies focusing on the concept of emotional exhaustion and its relationship with job demand which is one of the major sources of exhaustion. Apart from job demand, the review also concentrates on studies involving the emotional demand and the emotional labour strategies associated with it that causes exhaustion. Based on the literature review, a model that explains various exogenous variables and moderators having an influence on the endogenous variable emotional exhaustion has been developed. Therefore, from the studies reviewed, a model is developed that explains the sequential interaction of the concepts of emotional demand and job demand with emotional exhaustion. The review also supports to assume the emotional labour strategies to have a moderating effect on the relationship between emotional demand and emotional exhaustion. The model also depicts the moderating effect of resources availability in the relationship between job demand and emotional exhaustion.

## **Emotional Exhaustion**

Emotion is a continuous process that develops from the ones' personal situation (Schutz and DeCuir, 2002). Emotion is a major factor in the life of people and is linked with the well-being of employees. The emotional categories such as love, joy, fear, anger, shame, sadness, and sometimes happiness, surprise, pride, anxiety, and boredom are considered universal set of emotions which serve as the building blocks of emotional experience (Weiss, 2002), and will be referred to as the basic emotions. Every individual expresses emotions while interacting with customers. But when these expressions are regulated by an organization it leads to emotional exhaustion. Emotional exhaustion of an employee is a subject of importance. The well-being of employees is required for the optimal functioning of the organization. Every employee is required to have resources for accomplishment of job demand, and depletion of his/her resources leads to exhaustion at work and in return affects the well-being of an employee. Emotional exhaustion is an important component of burnout that causes depersonalization and reduced personal accomplishment (Maslach, 1982; Maslach et al., 2001). Emotional exhaustion causes one to distance oneself emotionally and cognitively from one's work and leads to complaints, depression and continuous stress. When there is lack of resources for an employee to perform, it can increase one's job demands and hence emotional exhaustion. A resource is any object, characteristics, energy which is of value to an individual and may help in the achievement of the expectations. The resource will also help in coping with the job demand and will even go unnoticed as the demands are seen as challenges.

Research carried out shows there is interrelation between job demand and emotional exhaustion (Cordes and Dougherty, 1993). When emotional exhaustion increases it leads to negative attitude towards the source which causes emotional exhaustion (Leiter and Maslach, 1988). The effect of job demand on emotional exhaustion can be increased or decreased based on the resources which act as a moderator in this study. The study by Mulki et al (2006) showed that employees who are emotionally exhausted due to lack of resources such as abusive supervision, role conflict, role ambiguity, work family conflict resulted in a negative behaviour. According to Leiter and Maslach's process model of burnout (1988), the excessive job demand leads to increased emotional exhaustion.

Studies have shown that emotional demand is related to exhaustion (Brotheridge and Grandey, 2002). Some studies have also shown that emotional labour is related to emotional exhaustion (Abraham, 1998;

Brotheridge and Lee, 1998; Hochschild, 1983; Morris and Feldman, 1996). Emotional labour literature (Abraham, 1998; Hochschild, 1983; Morris and Feldman, 1996) argues that alienation of emotions is the main cause of emotional exhaustion. Studies have been done on the relationship between emotional demand and emotional exhaustion which is mediated by emotional labour strategies (Daniels and Harris, 2005; Daniels, 1999; Ito and Brotheridge, 2003; Latack et al., 1995).

The researcher would like to find the effect of job demand and emotional demand on emotional exhaustion in the presence or absence of resources as moderators. Before discussing on the conservation of resources and the lack of resources, a few more literature on emotional demand and job demand is discussed.

### **Job Demand**

Factors taken into consideration to refer to Job demand in this study are: the time pressure, work load, and target set by the organization. Job demand has to be maintained to meet the productivity goals. Under such circumstances an employee's emotional level may suffer due to the job demand leading to emotional exhaustion. Employees react to such demand in two ways. First, employees can increase their resources and maintain their performance level to compete the negative effect of job demand. Second, the depletion of resources is likely to reduce the production level and may not be able to compete with the negative effect of job demand. The relationship between job demand and emotional exhaustion will be inversely or directly proportional based on the resources. When the resources like Motivation Social Support, Cohesiveness, Empathy, Supervisory support, Self efficacy collectively referred as Conservation of resources (COR) are high, increased job demand has decreased effect on emotional exhaustion. When abusive supervision, role conflict, role ambiguity, work family conflict collectively referred as Lack of Resources (LOR) is low, increased job demand has increased effect on emotional exhaustion. The study expects the Conservation of resources to otherwise decrease the assumed negative effect of job demand on emotional exhaustion. The combination of job demand and LOR leads to emotional exhaustion whereas the jobs in which both job demand and COR are high leads to the feeling of competence and productivity, and accomplishment. Motivation is an energy resource that buffers the resource loss and gains of other resources. Resources are considered as a quench of candle or fire; if the fire does not receive adequate resources, it will quench after a while.

Empathy, frequency of exposure, social support, cohesiveness and self-efficacy has been detected as the moderators in the process of emotional exhaustion. Self-efficacy is the confidence that an employee has to successfully complete a particular task which increases employee performance. Cohesiveness is the extent to which people interact frequently and intensively. When the team or colleagues provide support to exhausted individual the process creates contagion effect. Social support is a double edge sword. Kozlowski and Klein (2000) argued that it's difficult for an individual to impact a group than the group to influence the individual. High level of cohesiveness and social support is known to have negative effect of job demand on emotional exhaustion.

Studies (Bakker et al. 2003; Calnan et al. 2000; Heuven and Bakker 2003) have also considered workload and time pressure as job demand. According to Leiter and Maslach's (1988) process model of burnout, excessive job demand will lead to increase in employees' emotional exhaustion. The job demands-resources model of burnout also concludes that excessive job demand increases emotional exhaustion (Demerouti et al., 2001). Studies also show that high job demand and a few resources influence the well-being of an employee (Bakker et al. 2003; Calnan et al. 2000; Heuven and Bakker 2003; Van Vegchel et al. 2001). As per the study of Demerouti et al. (2001) job demand affected emotional exhaustion in the all work groups – service, transport, and industry. But the study of Borritz et al. (2005) and Söderfeldt et al. (1996) states that emotional demand is more common in service sector. According to COR, psychological imbalance is caused by the depletion of resources through job demands (Baumeister, Vohs, and Tice, 2007). This depletion needs to be replenished; otherwise it will result in chronic emotional exhaustion (Hobfoll & Freedy, 1993).

The study is intended to explore the positive and negative effect of resources as moderators between job demand and employees' emotional exhaustion.

## Emotional Demand

With the change in the nature of work there is a change in the demand: emotional and psychological demands have increased. If the nature of work is service oriented, the concept of emotional demand is important as there is a need for emotional interaction between the employee and the customer. Emotional demand can be defined as a kind of pre-script to action. Hochschild (1983) calls this script as “feeling rules”. In emotional demand, what is not felt is to be expressed or not to express what is felt. The response of emotional demand is based on how people perceive the job (Ashforth and Humphrey, 1993). When work is perceived as meaningful, an employee will accept the emotional demand and perform the jobs as per the standards set by the organization. An employee also has to maintain the organizational standards while handling an abusive customer. If the emotional demand is for the benefit of the organization, it may have a negative impact on an employee causing emotional exhaustion. The demand rule tells an employee how to feel, when to feel, what to feel, where to feel, how long to feel. So why does an employee accept jobs which will give bring a negative effect? Hochschild (1983) suggests that emotional demand is “sold for a wage and therefore has exchange value”. The service personnel are always required to display positive emotions to promote goodwill while keeping to themselves negative feelings. Bill collectors and police interrogators are always required to display negative emotions to gain over the suspects and debtors.

This research proposes to study the sequential interaction of emotional demand, job demand and emotional exhaustion. As explained earlier job demand is influenced by either COR or LOR. Similarly emotional demand is influenced by display rules otherwise referred to as emotional labour. EL is defined as managing emotions to perform a job adequately. This calls for modifying one's emotion according to the demanding situation. Individuals adapt to different modes of emotional labour based on their coping strategies. There are basically two approaches to display rules namely surface acting and deep acting. The first approach pretends to be the character for the benefit of organization, which becomes stressful and leads to emotional exhaustion. It is “faking in bad faith” (Rafaeli & Sutton, 1987). The employees modify their emotions without shaping their inner feelings. The emotions are bottled leading to draining of resources and a counterproductive workplace behaviour. But the second approach is “deep acting or method acting”. The employee becomes the character. So it is healthier and is less stressful. It is acceptable to the audience and is “faking in good faith” (Rafaeli & Sutton, 1987) and is carried out only by those who know how to control the emotions. These two approaches are dramaturgically modifying the emotions as per the display rules.

From the above literature, the following relationships are observed. Job demand is influenced by Conservation of Resources and Lack of Resources. Emotional demand is influenced by the coping strategies: surface acting and deep acting. Emotional demand is experienced by the employees due to their service motive and job demand is experienced by the employees for their productive purpose.

The researcher is intended in identifying the impact of emotional demand on job demand and further impact on emotional exhaustion of the individuals. The model is based on the fact that job demand not only develops strain with the absence of resources but also develops the feeling of competence with the presence of resource.

## Objectives

Emotional demand is a pre-script for the emotions to be expressed and is related to emotional exhaustion. The relationship is moderated by emotional labour strategies. The study aims at showing if there is any significant impact of emotional labour on emotional demand and job demand. Past study has suggested that emotional demand influences the emotional exhaustion. This study investigates the effect of emotional labour strategies on emotional demand and emotional exhaustion.

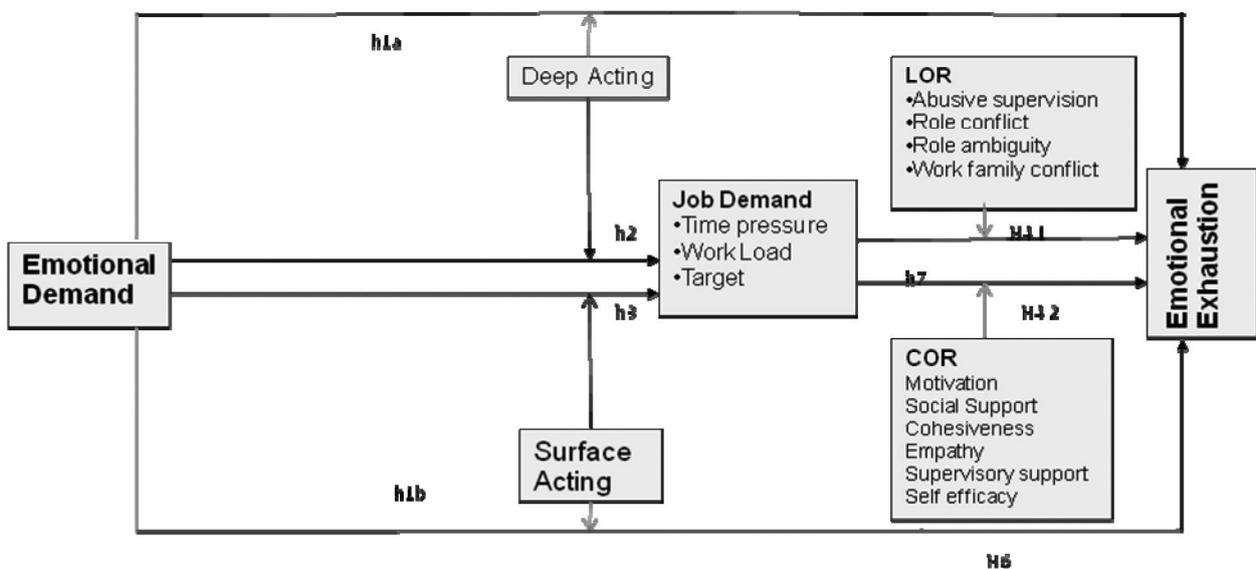
Deep acting is an emotional labour strategy where individuals get involved with their roles and display what is expected of them with complete consonance. Surface acting is an emotional labour strategy where one pretends to be a character for the benefit of the organization, which becomes stressful. The study aims at identifying if deep acting and surface acting has any significant influence on emotional demand and job demand.

Depletion of resources causes the influence of job demand on emotional exhaustion to increase. Increase or conservation of resources lowers the effect of job demand on emotional exhaustion. This study aims at finding if

there is any significant influence of resources on job demand and emotional exhaustion. The analysis also focuses on the impact of job demand on emotional exhaustion in the absence of resources.

Therefore, the objectives of this study are

1. To review in detail the factors influencing emotional exhaustion with specific reference to emotional demand and job demand and analyse the prevalent level of these factors in the respondents
2. To study the impact of coping strategies on emotional demand
3. To study the moderating effect of the lack of resources and conservation of resources in the relationship between job demand and emotional exhaustion
4. To arrive at a comprehensive model that explains the relationship between Emotional Demand, Job Demand, Emotional Exhaustion and role of Emotional labour strategies and Resources as moderators in this relationship and validate the same



**Fig -1 Proposed Model Showing sequential process of Emotional exhaustion with moderators**

This conceptual framework of the proposed model based on literature shows the sequential interaction among the proposed constructs of emotional demand and job demand. And the effect of LOR and COR as moderators on emotional exhaustion is also shown.

## Methodology

The study is descriptive in studying the level of existence of job demand, emotional demand and emotional exhaustion among employees. A thorough literature review on these constructs was made and a questionnaire was developed taking cues from a number of studies. Seven-point scale was used and 65 questions were formulated in total. The questionnaire was tested for content validity where expert opinion was sought from both academicians and industry experts regarding the statements under each construct. The questionnaire was administered to about 40 respondents who work as sales executives in automotive sector. This data was used to validate the questionnaire; the process of purification helped in removing 15 questions from the questionnaire to arrive at a final validated instrument. Two stage random sampling method was used to select the samples. The final data collection was done with 240 respondents of similar profile. The data was used to test if the coping strategies and availability of resources had any impact on emotional demand and emotional exhaustion using correlation and regression.

## Instrument Development and Validation

The study used literature review and pre-validated questionnaires to develop instruments that measure the

required constructs of this research. The final questionnaire developed was validated using a pilot data of 40 respondents.

Emotional Demand was measured by subscales from Frankfurt Emotion Work Scales – E (FEWS; Zapf et al., 2001). Surface Acting was assessed using scale developed by Diefendorff, Croyle, and Gosserand (2005), which originated with Kruml and Geddes (2000), Brotheridge and Lee (2003). Deep Acting was measured by subscales from Maslach Burnout Inventory, Diefendorff et al. (2005). These items were adapted from Kruml and Geddes (2000), Brotheridge and Lee (2003), and Brotheridge and Lee (2002). Job Demand was measured by subscales from a Dutch questionnaire on organizational stress (Vragenlijst Organisatie Stress-Doetinchem; Bergers, Marcelissen, & De Wolff, 1986; range 1–4).

Conservation of Resources was measured by items from Demerouti (1999), (Eisenberger et al., 1997, 1990; Shore & Tetrick, 1991; Shore & Wayne, 1993, Moway et al., 1979). Lack of Resources was measured by subscales from a Eisenberger et al. (1986), Brotheridge and Lee (2003). Emotional exhaustion was measured by subscales from a Maslach Burnout Inventory (Maslach et al., 2001).

Responses from 40 respondents were used for the pilot study. These constructs were tested for validity and reliability with a pilot data using SPSS, where the irrelevant items were eliminated for the final study and the model was validated for further research. Purification was carried out by examining the corrected-item total correlation (CITC) score of each item with respect to a specific dimension of a construct. The CITC score is a good indicator of how well each item contributes to the internal consistency of a particular construct as measured by the Cronbach's alpha coefficient (Cronbach 1951). Items were deleted if their CITC scores were below 0.5, unless there are clear reasons for keeping the items in spite of low item total correlation. On the other hand, certain items with CITC scores above 0.5 may also be removed if their deletion can dramatically improve the overall reliability of the specific dimension.

The reliability co-efficient values are listed in Table 1 below after purification.

**Table 1 – Reliability Coefficient**

<b>Constructs</b>	<b>Reliability coefficient (<math>\alpha</math> value)</b>
Emotional Demand	.816
Surface Acting	.649
Deep Acting	.800
Job Demand	.550
Conservation of Resources	.745
Lack of Resources	.900
Emotional Exhaustion	.880

## **Results**

### **Analysis of Mean values of the constructs measured**

The key constructs were studied in general for their prevalent levels among the respondents and the same are represented in Table 2. Emotional exhaustion has got a mean score of 5.19, Emotional Demand 5.84 and Job Demand 5.55 in a scale of 1 to 7, and hence it can be observed that the respondents do experience demand and exhaustion at a considerable level. However Job demand has a wider standard deviation that shows the difference in perception of Job demand by different individuals. The coping strategies of Surface acting and Deep acting have obtained a mean score of 5.63 and 5.52 respectively which again signifies that individuals do adopt to coping strategies in a substantial manner to manage their demands. The constructs with respect to resources expressed as

lack of resources (LOR) and conservation of resources (COR) show that COR is 5.9 and LOR is 5.41 but has a higher level of standard deviation that indicates that employees perceive the unavailability of resources differently, with the minimum score as low as 2.33 to a maximum score of 7.00. Though all the constructs were perceived in the range 5 to 6 on an average, the standard deviation indicates the wideness in views especially in case of Job Demand and Lack of resources.

	Minimum	Maximum	Mean	Std. Deviation
EmotionalDemand	3.71	7.00	5.85	.9104
SurfaceActing	4.00	6.71	5.64	.6884
DeepActing	2.80	7.00	5.53	1.1038
JobDemand	2.00	7.00	5.56	1.1690
LackofResources	2.33	7.00	5.42	1.1416
EmotionalExhaustion	2.69	6.52	5.20	.9365
Conservation ofResources	4.44	6.71	5.90	.6090

### **Analysis of the association between related constructs**

From the literature mentioned above, the construct emotional exhaustion is related to emotional demand, job demand and the coping strategies of surface acting and deep acting. Similarly the availability of the resources as LOR and COR are found to have an impact on Job Demands. Hence it was of interest to study the association between these factors.

It was found that (Table 3), Emotional Exhaustion was statistically significantly correlating with Emotional demand ( $r=0.581$ ) and Job demand ( $r=0.605$ ) that clearly states that these demands cause physical and emotional depletion among the individuals. However surface acting and deep acting don't seem to have any significant correlation with emotional exhaustion. This may be due to the fact that individuals decide consciously on how to present themselves to their customers, either through surface acting or deep acting and hence these display of emotions do not actually cause emotional exhaustion. But surface acting ( $r= 0.564$ ) and deep acting ( $0.413$ ) are found to have statistically significant correlation with emotional demand as these are the coping strategies that individuals adopt to manage their emotional demands.

Lack of resources construct is significantly correlated with emotional demand ( $r = 0.639$ ) and job demand ( $r= 0.692$ ). When there is lack of resources or support in an organisation, it is quite natural to impact the emotional demands and job demands. These demands are likely to go high as much as the resources are unavailable or inaccessible. It can also be observed that deep acting correlates significantly with COR ( $r= 0.472$ ) and emotional demand ( $r= 0.413$ ). When the individual is able to conserve resources, it helps him involve in meeting his demand at work, hence enabling him to deep act as required in his work situation. For instance when an employee is supported by his superior or motivated or is self efficacious, it helps him involve with the work and hence deep act as required by the situation with less efforts thus not getting exhausted. Also when emotional demand is high, one realises the need for involvement and gets more adapted to the situations. Hence the deep acting gets associated with the emotional demand, which actually reduces the stress of the person to deal the situation.

**Table 3 - Correlation**

	ED	SA	DA	JD	LOR	EE	COR
Emotional Demand	1						
Surface Acting	<b>.564**</b>	1					
Deep Act	.413*	.186	1				
Job Demand	.337	.291	.204	1			
Lack of Resources	<b>.639**</b>	.333	.185	<b>.692**</b>	1		
Emotional Exhaustion	<b>.581**</b>	.192	.332	<b>.605**</b>	<b>.556**</b>	1	
Conservation of Resources	.322	.346	.472*	.151	.234	.125	1

\* Corresponding significantly at 5% level of significance

\*\* Corresponding significantly at 10% level of significance

**Impact of factors on emotional exhaustion**

As seen above, the constructs studied show significant correlation and also have significant mean values that indicate their importance in the context of a healthy work environment. Therefore it was intended to study what are the impact and the strength of relationship between these constructs. Hence regression analysis was performed to identify the predictors of emotional demand, job demand and emotional exhaustion.

**Predictors of Job Demand**

Regression analysis was also performed using job demand as the dependent variable and LOR and COR as independent variables. It was intended to see the level of impact that lack of resources and conservation of resources would have on job demands.

**Table 4 – Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.680 <sup>a</sup>	.462	.419	.90823
a. Predictors: (Constant), Conservation of Resources, Lack of Resources				

**Table 5 – Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.831	1.756		1.043	.307
	Lack of Resources	.704	.156	.682	4.518	.000
	Conservation of Resources	-.016	.295	-.008	-.056	.956
a. Dependent Variable: Job Demand						

\* Corresponding significantly at 5% level of significance

\*\* Corresponding significantly at 10% level of significance

Table 5 shows that the lack of resources has a  $\beta$  value of 0.682 ( $p=0.000$ ) which indicates that about 68% of job demands arise due to LOR. Hence the impact of lack of resources (LOR) is statistically significant on Job demand. Though the impact of conservation of resources is not statistically significant ( $\beta= -0.008$ ,  $p = 0.956$ ), it can be observed that it is negatively related to job demand, signifying that conservation of resources would reduce job demand.

**Predictors of emotional demand**

Literature (Daniels and Harris, 2005; Daniels, 1999; Ito and Brotheridge, 2003; Latack et al., 1995) has shown that the coping strategies of individuals influence emotional demand. The data was tested using regression to study the level of impact of surface acting and deep acting on emotional demand. The analysis resulted in showing that the coping strategies influence emotional demands statistically significantly ( $r^2 = 0.37$ ) that signifies surface acting and deep acting influence emotional demands of individuals.

**Table 6 - Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.646 <sup>a</sup>	.417	.370	.74274
a. Predictors: (Constant), SurfaceActing, DeepAct				

**Table 7 - Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.453	1.283		.353	.727
	Deep Act	.271	.132	.319	2.054	.051
	Surface Acting	.687	.211	.505	3.250	.003
a. Dependent Variable: Emotional Demand						

\* Corresponding significantly at 5% level of significance

\*\* Corresponding significantly at 10% level of significance

From Table 7, it is evident that surface acting ( $\beta = 0.505$ ,  $p = 0.003$ ) and deep acting ( $\beta = 0.319$ ,  $p = 0.051$ ) influence emotional demand significantly. The analysis shows the importance of emotional labour strategies with emotional demand in line with previous studies (Rafaeli and Sutton, 1987).

**Predictors of emotional exhaustion**

Emotional exhaustion was the dependent variable and the independent variables comprised emotional demand, job demand, surface acting and deep acting. It was found that emotional exhaustion was statistically significantly influenced ( $r^2 = 0.498$ ) by job demand and emotional demand, which means that at least 50% of emotional exhaustion is significantly affected by these two factors. The coefficients table, Table 9 shows that Job demand ( $\beta = 47.3\%$ ,  $t = 3.238$ ,  $p = 0.003$ ) and Emotional demand ( $\beta = 41.4\%$ ,  $t = 2.833$ ,  $p = 0.009$ ) are statistically significantly influential in predicting emotional exhaustion. Therefore it becomes clear that surface acting and deep acting do not have a direct impact on emotional exhaustion as they may be adapted to meet the job demands and emotional demands.

**Table 8 – Predicting Emotional Exhaustion - Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.622 <sup>a</sup>	.386	.363	.77447
2	.732 <sup>b</sup>	.535	.498	.68719
a. Predictors: (Constant), JobDemand				
b. Predictors: (Constant), JobDemand, EmotionalDemand				

**Table 9 – Coefficients of the dependent variable: Emotional Exhaustion**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
2 (Constant)	.554	.902		.614	.545
JobDemand	.386	.119	.473	3.238**	.003
EmotionalDemand	.429	.151	.414	2.833**	.009
a. Dependent Variable: Emotional Exhaustion					

\* Corresponding significantly at 5% level of significance

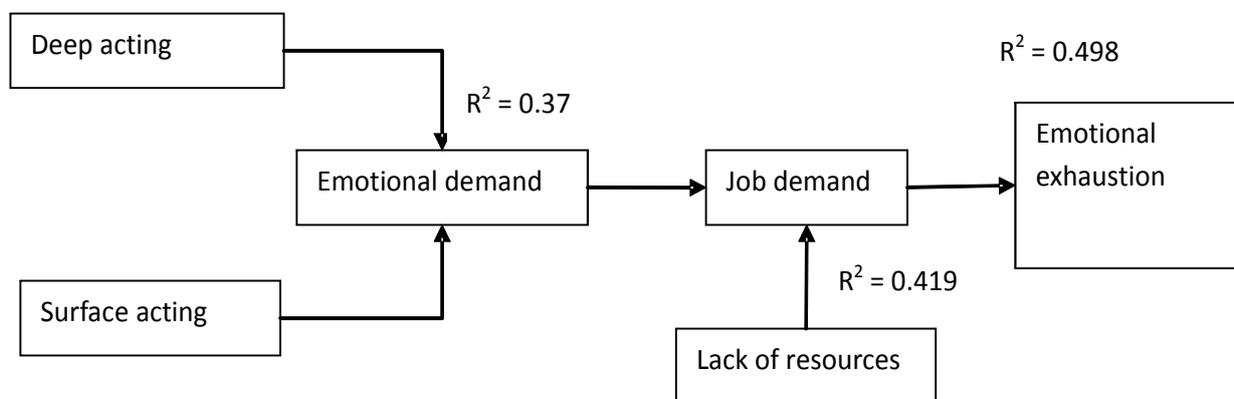
\*\* Corresponding significantly at 10% level of significance

The above results demonstrate that both job demand and emotional demand exert significant positive effects on emotional exhaustion. Earlier studies have shown that emotional demand (Geertje van Daalen et. al., 2009) and Job demand (Bakker, Demerouti, De Boer, & Schaufeli, 2003; Bakker et al., 2004; Demerouti et al., 2001) are the main predictors of burnout. In the present study emotional demand and job demand have predicted emotional exhaustion significantly

The series of regression analysis have resulted in the following:

- Job demand and emotional demand influence emotional exhaustion significantly.
- LOR predicts Job demand significantly and
- Coping strategies of deep acting and surface acting predict emotional demand significantly.

The model thus has its entire links validated except that COR influences Job demand less. This may be because the impact of LOR is very high when compared to the goodness that COR does in reducing the job demands. A number of theories (Pajares, 2002) suggest that the negative impact made by a particular factor is stronger than the positive impact that the factor would create. Hence the availability of resources, as conservation of resources may have had lesser positive impact than the non-availability or the lack of resources, has made negative impact on job demand.



**Fig 2 – Validated model that explains the strength of influence between constructs**

Further regression analysis was done to test what is the impact of emotional demand on job demand and that of job demand on emotional exhaustion to study the sequential interactional effect of these variables on emotional exhaustion. It was found that emotional demand ( $\beta = 0.337$ ) has statistically significant influence on job demand. And job demand ( $\beta = 0.605$ ) was able to explain 60.5% of variations in emotional exhaustion, which is fairly a major component to explain exhaustion.

## Discussions

The focus of this paper was to evaluate the effect of various variables on emotional exhaustion and job demands, in the context of the automobile industry. This paper also assessed the role of moderators in the sequential interaction of emotional demand, job demand, and emotional exhaustion. The job demand evokes emotional exhaustion because they lead to depletion of resources. And job demands and emotional demands together cause emotional exhaustion. The study has attempted to bring a model that studies the sequential interactions of coping strategies, emotional demand, resources availability and job demand on emotional exhaustion.

The means of the variables analysed in this study indicate that all measures related to emotional exhaustion are fairly high ranging between 5 and 6. It can be noted that Job Demand ( $\mu = 5.55$ ,  $s = 1.168$ ) and Lack of Resources ( $\mu = 5.41$ ,  $s = 1.141$ ) constructs represent what the employee perceives about the organizational climate and support rather than that of one's own, like in Emotional demand or Conservation of Resources. The maximum and minimum values of job demand and LOR suggest that people have very wide differences in perceiving these two factors. We may find that COR and LOR are significantly of high value and that may contradict their definitions. But this contradiction is explained through the standard deviation of these factors. The standard deviation may be high for job demand and LOR, due to the factor that different individuals may perceive the organizational factors differently. Individuals may vary in their work experiences, level of training, taking up challenges, managing time and various other aspects.

Emotional demand and job demand has significant correlation with emotional exhaustion. When an individual is required to pay attention to his work that would disturb his natural emotional state, it leads to exhaustion. This causes him extra efforts to pose the desired emotion to the customers, which cause depletion of his emotional strength. Similarly when job demands are high, whether in terms of time or workload or target set by the organisation, it demands the employee of his energy that leads to emotional exhaustion. When the employee is able to perform his work calmly, even when the demands are high in his workplace, he doesn't get emotionally exhausted. It could be seen that Lack of resources has indeed higher correlation with emotional demand and job demand than conservation of resources. This implies that it is usually easier to weaken an individual through non-availability of resources than to strengthen the individual with availability of resources. In general when resources are available, employees may not pay attention to the supporting factors that would enhance their performance. Or at least this impact will be lesser than the non availability of resources that disturb or exhaust the employee.

The regression analyses of the three sets of relationships indicate the strength of these relationships. The coefficient of determination is significant and implies that these relationships are strong and hence validate the same. From the study, it has been confirmed that the impact of job demand on emotional exhaustion is more than emotional demand on emotional exhaustion (job demand  $\beta = .473$  and emotional demand  $\beta = .414$ ). It can be observed that the correlation between these constructs too is in line with similar result (job demand  $r = .605$  and emotional demand  $r = .581$  at  $p = .001$ ). This indicates that the requirements on the job are more demanding and deplete an individual emotionally more than the emotional challenges in one's job.

It can also be noted that the hypothesised relationship between job demand and lack of resources has received support and is in agreement with the extant literatures. Studies have also shown that the lack of some resources namely self-efficacy, self-esteem, optimism (Xanthopoulou et al., 2007), resilience, active coping style (Bakker & Demerouti, 2008) relate to emotional exhaustion. Thus the lack of resources has a greater negative impact on job demand than the positive impact of conservation of resources as discussed earlier.

The results show that employees take the job demand in a positive perspective when there are resources to support. But when there is a lack of resources the job demands taken up are not the same. The job demands are still

taken up, may be for the compensation benefits. If the depletion of resources continues without being supported by the conservation of resources this will lead to the emotional exhaustion. There is an inverse relationship between conservation of resources and emotional exhaustion and it is evident only when the demand exceeds the resources already available for the employee.

The results also imply that the coping strategies, both deep acting and surface acting, have significant influence on emotional demand. Deep acting alone has a beta value of 32% which indicates that it forms a major factor in exerting emotional demand. And when combined with surface acting, the coping strategies account for 50% of factors that instigate emotional demand. Hence when individuals wield attempts to satisfy customers in terms of desired emotions, they act in specific patterns as coping mechanisms that cause emotional strain that can lead to emotional exhaustion.

## Conclusion

The analyses have shown that the coping strategies of deep acting and surface acting have significant influence on emotional demands. It has also indicated that Lack of resources has a significant say on the Job demands. Emotional demand and job demand together influence the emotional exhaustion of the employee. Previous researches have shown these relationships valid; this study has shown conformance with the extant literature and has shown the sequential relationship of emotional demand, job demand and emotional exhaustion. A comprehensive model has been arrived at which shows the relationship between emotional exhaustion, emotional demand, job demand and the role of labour strategies and availability of resources in this relationship. This model can be further tested for employees in other streams.

The study brings in a new perspective that encompasses all these variables of study and result in a model, that is useful for the managers to deal with the emotional exhaustion of their employees.

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# Social Insurance in India - A Case Study of the New India Assurance Co. Ltd

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## Abstract

Social Insurance refers to the safeguard against probable danger involved in rural and social activities. Social activities where insurance coverage is required refer to agricultural operations, rearing of livestock, health-related problems etc. The paper highlights the importance of social insurance, and its need for the lives of rural people. The paper is an attempt to examine the current schemes of social insurance penetration and to explore the performance of the New India Assurance Co. Ltd. in India. The study depends mainly on secondary data and required data have been collected from the annual reports and website of the New India Assurance Co. Ltd. The data has been analyzed by using descriptive statistics and t-test by SPSS. There is an evidence of significant contribution of social insurance schemes of the company to the lives of rural people.

**Keywords:** Social insurance, Rural insurance, Rural life, Rural insurance policies, Social security

## Introduction

Insurance is the safeguard against probable danger. Insurance can be bought against a particular event for its possible occurrence. It is a prevarication tool used as a preventive measure against future losses. This device is applied for minimizing or managing the future contingent risks. It is a mode of financially managing instrument through which a person gets the benefit of insurance coverage for a particular event. Therefore, a person buys future contentment and pleasure living through insurance. Life insurance is bought lesser in India by rural population. General insurance is often bought because there are compulsions under the law or from the financiers asking for insurance as collateral security. In the case of life insurance, there is no little compulsion. The tendency is to defer the decision. The possibility of death is ignored by the rural people; however there is more possibility of such misfortune for the lives of people in rural areas. The rural people never believe that they can yield to destiny and they think they will live a long and healthy life. The rural population in India is without life insurance cover and this part of the population is also subject to weak social security and pension systems with hardly any old age income security. It is an indicator that growth potential for the insurance sector is immense.

Though the Government has taken steps to promote social insurance, for nearly two decades this field has not made any headway. One of the priorities for forecasting expansion of social insurance would be identifying the productive potential and specific insurance needs in areas not yet reached by insurer and enhancing cooperation between insurance and rural credit agencies or institutions. The buying behaviour of rural consumer is influenced by the income levels and distributions and marketers' efforts on promotional activities. The rural customers are risk avoiders and therefore insurance cannot apply the similar methodology that they apply to launch products in urban areas. The paper is an attempt to examine the current schemes of social insurance penetration and to explore the performance of the New India Assurance Co. Ltd. in India. The paper highlights the importance of social insurance, and its need for the lives of rural people. The present study focuses on performance of The New Assurance Co. Ltd., in social insurance through its different products and schemes.

## Literature Review

**Daniel and Uthoff (2003)** studied the role of insurance in social protection and found that social insurance is

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becoming an efficient way to organize financing. To move away from the current segmentation of the population among different health subsystems, membership of an insurance scheme needs to be decoupled from the occupational position of the individual.

**Singh and Gangal (2011)** found that Micro insurance is of supreme importance for protecting poor lives against accidents, threats and other types of risks. This paper focused on the importance of micro insurance for the Upliftment of rural poor and also focused on the initiatives taken by private and public insurance companies in the growth of rural India and also helps understand how micro insurance is helpful in alleviation of poverty.

**Karim et al (2012)** seek to address the human security needs of the targeted communities in the areas of public safety, coexistence and reconciliation, health, education, training, employment and institutional support. Accordingly, the paper focused on rural & agriculture insurance for economic, human security in rural India.

**Devarakonda (2013)** stated that Micro insurance in India has valuable lessons for rest of the world, particularly in the regulation of the industry. Unlike micro lending -- the better-known side of micro finance -- micro insurance has been a hard sell among the world's poor. She explores the opportunities and challenges of micro insurance in India and studies the three regulated distribution models of micro insurance in India.

**The study of Gupta (2014)** examined the current status of rural insurance penetration and explored the reasons of poor performance of insurance companies in rural India. It covers the key aspects of tapping emerging insurance market in rural areas and focuses on remedies to overcome the challenges in this regard. It analyses the current distribution models and provides future road map to increase rural share in insurance market. Based on the analysis, the paper tries to give a future forecast of the market that is intended as a rough guide to the direction in which the market is likely to move.

**Sam Gutterman's** study on the nature of social insurance programs and their funds presents an objective discussion, through a point-counterpoint dialogue, reflecting two perspectives of important aspects of social insurance programs that provide financial assistance for those who are retired, disabled, ill or unemployed. It addresses the desirability and advantages of key aspects of these programs and whether pre-funding of a social insurance program can occur and contribute to the financial security of the participants or whether it is an economic sham.

## Scope and Objectives of the study

It covers social insurance products and schemes issued by the New India Assurance Co. Ltd., for the rural people. The study covers the period from 2007-08 to 2013-14 for the collection of data and analysis purpose.

### Objectives of the Study

- To know the various social insurance policies of The New India Assurance Co. Ltd in India
- To study the coverage under various social insurance schemes of The New India Assurance Co. Ltd in India
- To analyze the performance of social insurance schemes insured by The New India Assurance Co. Ltd in India
- To offer suggestions, if any, based on findings

### Hypothesis of the study

$H_0$ : There is no significant role in social insurance by The New India Assurance Co. Ltd

$H_1$ : There is a significant role in social insurance by The New India Assurance Co. Ltd

## Methodology of the study

The present study is analytical and descriptive in nature and based on secondary data. The required data have been collected mainly from annual reports of the New Assurance Co.Ltd and from websites of the company. The study is confined only to the New Assurance Co.Ltd for a seven years period starting from 2007-08 to 2013-14. In order to analyse the data and draw conclusion in this study, tools like percentages, standard deviation and 't' test have been used.

## Importance of the Social Insurance

Social insurance is similar to other insurance programs which involve a wide pooling of risks. Its benefits, determined by formula, are payable to designated beneficiaries by means of a pre-determined basis, and it contains complete assurance that benefits will be provided as designated. It protects participants financially from current and future changes in their condition, including their longevity and health status. A social insurance program that provides benefits after retirement from employment can certainly be viewed as a large defined-benefit pension or health plan, with contribution rates and benefits (by means of rules defining the benefits provided) enacted by law. In many social insurance programs, either the contributions or benefits are progressive in nature; that is, favouring in some way those who need public support more. Some countries provide all or part of their retirement benefits using a defined-contribution approach with no pre-defined benefit.

## The New India Assurance Co. Ltd in India-An overview

New India Assurance Co. Ltd is a 100% wholly owned Government of India undertaking. It is a multinational general insurance company operating in 22 countries and headquartered at Mumbai, India. The Company's global business has crossed Rs.14,300 Crore. Founded by Sir Dorabji Tata in 1919, it is a market leader in India in non-life business for more than 40 years. It has the highest degree of financial strength to honour its policyholders' obligations. "It has been leading the market, apart from premium, in reserves & net worth for many years. The Indian operations of company, span across all territories through 2,097 offices, including more than 1,041 micro offices. It has 19,000 employees and around 50,000 tied agents providing insurance services to their customers. It has over 160 products catering to almost all segments of general insurance business. It also provides cover to petrochemical, oil & energy industries, power & steel plants, aviation fleets, satellites, large projects & infrastructures, SMEs and to all forms of commercial sector. Its retail business is offered through commercial & personal lines of business and also a range of products in rural, social sectors and micro insurance segments.

New India Assurance Company Ltd. operates through many B2B avenues including bank assurance, motor vehicle manufacturers and dealers, MFI & NGOs, Common Service Centers and through affinity programmes with corporates & brokers. It also has significant participation in government run mass insurance schemes. It is on a robust core insurance platform, with a central data base and has an integrated grievance management system synchronized with that of the regulator. Its Customer Care department is positioned at all Regional offices. It offers multiple options for the customers to renew the policies and has put in place SMS & E Mail alerts and information at various trigger points. In Indian operations, the company has earned many awards and recognitions in 2012-13.

## Social Insurance Policies/Schemes in the New India Assurance Co. Ltd

The New India Assurance is a pioneer non-life insurance company insuring all types of assets, belongings and lives of rural and social sector in the country. Insurance covers provided by the company are need-based/tailor-made for the benefit of rural and social sectors. Social policies comprise the insurance of: (1) various livestock, (2) Sub-animals,(3) Plantation and horticultural crops, (4) Property (5) Persons.

**Note:** The information on the schemes of the company is taken from its website.

The schemes of social insurance are: Universal Health Insurance Schemes for BPL and APL families, Jan Arogya Bima Policy, Raj Rajeshwari MahilaKalyanYojana, Bhagyashree Child Welfare Policy, Janata Personal Accident Insurance, Student Safety Insurance, AshryaBimaYojana, Rural Insurance, Livestock insurance and Mediclaim.

## **Universal Health Insurance Scheme for BPL families**

The policy covers reimbursement of Hospitalisation expenses for illness / diseases suffered or injury sustained by the Insured Person. In the event of any claim becoming admissible under policy, the company through TPA will pay to the Hospital / Nursing Home or Insured Person the amount of such expenses subject to limits as would fall under different heads, as are reasonably and necessarily incurred in respect there of anywhere in India by or on behalf of such Insured Person but not exceeding Sum Insured (all claims in aggregate) for that person as stated in the schedule in any one period of insurance.

### **Jan Arogya Bima Policy**

This policy aims at providing cheap medical insurance to poorer sections of society. The coverage is similar to the individual mediclaim policy, however, that cumulative bonus and medical checkup benefits are not available in this policy. Maximum sum Insured per insured person is Rs. 5,000.

### **Raj Rajeshwari Mahila Kalyan Yojana**

The policy covers loss of limbs or eye sight. Death or disability by accident caused by external, violent and visible means would include death or permanent total disablement arising out of or traceable to slipping, falling from the mountain, insect bites, snakes and animals bite, drowning, washing away in floods, landslide, rockslide, earthquake, cyclone and other commotions or nature and/or calamities, murder or terrorist activities.

### **Bhagyashree Child Welfare Policy**

The policy covers death of one or both parents of the girl by accident caused by external, violent and visible means. It includes death or permanent total disablement arising out of or traceable to slipping, falling from the mountain, insect bites, snakes and animals bite, drowning, washing away in floods, landslide, rockslide, earthquake, cyclone and other commotions or nature and/or calamities, murder or terrorist activities.

### **Janata Personal Accident Insurance**

It provides compensation in the event of death or permanent disablement or loss of limbs or sight in eyes.

### **Student Safety Insurance**

This insurance is available to schools, colleges or other educational institutions. The policy is issued in the name of the Institution. The claim amount is payable to the parent/guardian as recorded in the school register. All students are to be covered. Additional students are covered during the policy period at extra premium. But no deletions are allowed.

### **Ashrya Bima Yojana**

Cover is available for on-going companies only. The Company should pay its statutory dues regularly, and should be registered under ID Act or Factories, Shops and Establishment Act, as applicable. That should be a non-BIFR company and its borrowings not termed as NPAs by their lenders and should not have been closed for a continuous period over 30 days during last 12 months from the date of proposal. It should not have any immediate plan to go for re-engineering and upgradation at the time of proposing the cover.

## **Rural insurance schemes in the New India Assurance Co.Ltd**

### **Cattle Insurance scheme**

In this scheme, an insurance policy provides insurance to cattle-breeding community of rural India to cover their Milch-Cows / Buffaloes, Calves / Heifers, Stud Bulls, Bullocks etc.; thus providing their prime livelihood source a financial protection in case of death or disability caused to cattle due to accident or disease, surgical operations, riot and strike.

### Janata Personal Accident scheme

Any person irrespective of sex, occupation and profession in the age group of 10 to 70 years may be covered under Janata Personal Accident Policy. The policy is available for minimum sum insured of Rs. 25,000 per person per annum and the maximum sum insured is limited to Rs. 1,00,000 per person per annum. The rate of premium is Rs. 15 for a sum insured of Rs. 25,000. The sum insured shall be increased in multiples of Rs. 25,000 and premium is charged accordingly.

### Other Rural Insurance Schemes

There are Insurance schemes for Sheep & Goat, Poultry, Dog, Horticulture / Plantation, Lift Irrigation and Agricultural Pump sets, Horse / Pony / Mule / Donkey, Pig, Camel, Duck, Rabbit, Elephant, Zoo and Circus Animals, Inland Fish, Animal Driven Cart, Gramin Personal Accident, Tribals (composite Package), Farmers (Package), Gobar Gas, and Comprehensive Floriculture. Information about all the policies mentioned above is taken from the website of New India Assurance Company Ltd.

## Discussion and Results

The number of policies sold under the scheme of livestock insurance scheme has increased as evident from Table 1. The year 2008-09 experienced the highest growth rate in the number of policies sold at 32.24%. The amount of premium was Rs. 818.27 lakhs in 2007-08, and it went up to Rs. 1,072 lakhs in the year 2012-13, and the highest growth rate in the number of persons covered and premium collected was at 66.17% and 57.24% respectively in the year 2011-12.

As observed from Table 1.1, the number of claims reported and settlements have been increased during the study period. The year 2011-12 experienced the highest growth rate in the number of claims reported and the number of claims settled at 265.75 per cent and 200.16 respectively. It was observed that the year 2012-13 saw a growth rate of 108.98% from the previous year in claims.

The t' test of social insurance scheme by the New India Assurance Co. Ltd to insurers (Table 1.2) has been examined to find out the statistically significant performance of livestock insurance scheme of the company in benefitting the rural people under the livestock insurance scheme. The 'p' values of all variables in the premium and a claim of the new India Assurance Co. Ltd is less than the critical value of 0.05. Hence, the null hypotheses ( $H_0$ ) is rejected implying the significant role of livestock social insurance scheme of New India Assurance Co. Ltd in contributing to social insurance.

Under the scheme of mediclaim insurance (Table 2), number of policies sold to the beneficiary has been increased year after year and it has registered the highest growth rate in the year 2008-09. The amount of premium has been increased from Rs. 1,13,929.10 lakhs in 2007-08 to Rs. 3,29,229.61 lakhs in the year 2013-14. The New Assurance Company Ltd., covered the highest number of persons in year 2013-14 and the year 2010-11 registered the highest growth rate of 30.92 per cent.

Under the mediclaim insurance scheme in claims (Table 2.1), the settlement of claims to the beneficiary has increased year after year. The amount of claims has increased from the Rs. 93,213 lakhs in 2007-08 to Rs. 2,82,147.88 lakhs in the year 2013-14 and the year in which the highest growth rate in the number of claims reported was 2012-13 at 48.68 percent.

The t' test of mediclaim social insurance scheme by the New India Assurance Co. Ltd (Table 2.2) has been examined to find out the significant role of the insurance company in contributing to the rural people under the mediclaim insurance scheme. The statistically significant t values indicate that null hypothesis ( $H_0$ ) cannot be accepted at 5% level of significance, indicating that The New India Assurance Co. Ltd has played a significant role in the performance of mediclaim insurance scheme.

Under **Jan ArogyaBima Policy social** insurance scheme (Table 3), the number of policies sold to the beneficiary has increased year after year and it is highest in 2011-12. The amount of premium has increased from

Rs. 21.27 lakhs in 2007-08 to Rs. 58.37 lakhs in the year 2013-14 and registered the highest percentage in 2011-12 i.e. 244.37 per cent.

Under the **Jan Arogya Bima Policy** insurance scheme in claims (Table 3.1), the number of claims reported and the number of claims settled have increased during the study period. There has been an increase in the number of claims reported and settled by 129.42% and 128.21% respectively in the year 2011-12 compared to previous year. The amount of claims has increased year by year from Rs. 36.39 lakhs in 2007-08 to Rs. 63.26 lakhs in 2013-14.

The t' test of Jan Arogya Bima social insurance scheme by the New India Assurance Co. Ltd (Table 3.1) has been examined to find out the significant role of the said scheme in contributing to the rural people. The t values are statistically significant at 5% level indicating the rejection of the null hypotheses ( $H_0$ ). It indicates that Jan Arogya Bima Policy insurance scheme of the New India Assurance Co. Ltd has played a significant role in contributing to the health of rural people.

Under the cattle insurance (Table 4), the number of policies sold, amount of premium collected and number of persons covered have increased during the study period. The amount of premium has increased from Rs. 3,488.44 lakhs in 2007-08 to Rs. 4,763.33 lakhs in the year 2013-14. The highest growth rate of 45.94% in the number of policies sold was registered in the year 2008-09. The growth rate in both the number of persons covered and the amount of premium collected was the highest in the year 2012-2013 at 43.93% and 54.58% respectively.

Under the cattle insurance scheme in claims (Table 4.1), the number of claims reported and settlements have increased during the study period. The highest percentage of number of claims reported is during 2010-11 i.e. 56.46 per cent and number of settlements in 2011-12 i.e. 31.54 per cent. The amount of claims has increased year by year from the Rs. 162.87 lakhs in 2007-08 to Rs. 4283.10 lakhs in the year 2013-14 and highest percentage of amount of claims is registered in year 2011-2012 i.e. 56.50.

The t' test of cattle insurance scheme has been examined to find out the significant role in promoting the rural people under the Cattle insurance scheme (Table 4.1). The 'p' value of all variables in the premium and claims of The New India Assurance Co. Ltd is less than the critical value of 0.05, indicating that null hypothesis ( $H_0$ ) cannot be accepted at 5% level of significance. It concludes that The New India Assurance Co. Ltd has played a significant role in promoting the rural people through cattle insurance scheme.

Under Janata Personal Accident scheme (Table 5) the number of policies sold has increased during the study period and recorded highest in 2008-09. The amount of premium collected has increased from Rs. 1243.77 lakhs in 2007-08 to Rs. 2374.17 lakhs in the year 2013-14 and registered the highest growth in 2011-12.

Under the Janata Personal Accident scheme (Table 5.1), the number claims registered and number of claims settled have increased during the study period. The amount of claims increased year by year i.e. from Rs. 1187.96 lakhs in 2007-08, to Rs. 2295.08 lakhs in the year 2013-14 and recorded the highest growth in 2011-12 at 124.56 per cent.

The t' test of Janata Personal Accident Scheme has been examined to find out the significant role in promoting the rural people under the Janata Personal Accident scheme (Table 5.1). The 'p' value of all variables in the premium and claims of The New India Assurance Co. Ltd is less than the critical value of 0.05, indicating the rejection of null hypothesis at 5% level of significance. It implies that The New India Assurance Co. Ltd has played a significant role in the performance of Janata Personal Accident scheme.

## Findings

The New India Assurance Co. Ltd., has played a significant role in respect of (1) the Livestock insurance scheme under social insurance sector both in terms of premium and settlement of claims; (2) mediclaim insurance scheme by selling more policies, collecting premium, and settlement of claims; (3) the scheme of Jan Arogya Bima Policy both in terms of mobilization of premium and in settlement of claims; (4) the cattle insurance scheme during the study period; and (5) Janata Personal Accident scheme.

## Suggestions

The following suggestions are made for the New India Assurance Company: (1) It may introduce some more different types of insurance schemes and improve rural life. (2) It may take initiatives in widening outreach of rural and social-insurance products to the rural poor as providing rural-insurance schemes are necessary and essential adjunct in the inclusive process. (3) It may create awareness about their social and rural insurance schemes in rural areas. (4) It may give proper training to employees who deals with these type of insurance policies so that they faces the challenges in market and with different kinds of people. (5) It may market their policies through persons having regular contact with the rural people like teachers, rural doctors, the gram pradhan etc.; they may be good agents for this purpose. (6) It may strengthen effective premium administration and claim settlement in rural areas.

## Conclusion

The role of The New India Assurance Co, Ltd., is significant with respect to the select social insurance scheme. However, there is still untapped potential in social insurance sector. The company should create proper awareness among the rural people about the schemes. Social awareness can be spread through the local volunteers, community centres, local government and non-government organizations.

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## Annexure

**Table 1: Livestock Insurance Scheme - Premium**

Year	No of Policies Sold	Growth Rate	No of Persons Covered	Growth Rate	Premium (Rs. In Lakhs)	Growth Rate
2007-08	71318	-	292230	-	818.27	-
2008-09	94313	32.24	386456	32.24	1082.11	32.24
2009-10	110999	17.69	454828	17.69	1273.56	23.39
2010-11	57897	-47.84	252313	-80.26	473.84	-62.79
2011-12	25210	-56.45	419273	66.17	745.09	57.24
2012-13	26655	5.73	606385	44.62	1072.97	44.00
2013-14	21003	-21.2	511649	-15.62	144.94	-86.49

**Table 1.1: Livestock Insurance Scheme - Claims**

Year	No of Claims (Reported)	Growth Rate (%)	No of Claims Settled	Growth Rate (%)	Claims (Rs. in Lakh)	Growth Rate (%)
2007-08	9102	-	9817	-	540.72	-
2008-09	12035	32.22	11987	22.1	684.75	26.63
2009-10	13259	10.17	15756	31.44	916.96	33.91
2010-11	2619	-80.24	2493	-84.17	183.51	-79.98
2011-12	9579	265.75	7483	200.16	302.41	64.79
2012-13	18720	95.42	18691	149.77	632	108.98
2013-14	15703	-16.11	16194	-13.35	518.05	-18.03

**Table 1.2: 't' Test Result for the Livestock Insurance Scheme – Premium and Claims**

Livestock insurance	Mean	Std. Dev	Mean Difference	t value	Sig.value
No of Polices Sold	58199.28	35895.91	58199.28	4.29	0.005
No of Persons Covered	417590.6	122393.6	417590.57	5.42	0.000
Amount of Premium	801.54	390.97	801.54	5.42	0.002
No of Claims Reported	11573.85	5187.3	11573.85	5.90	0.001
No of Claims Settled	11774.42	5651.87	11774.42	5.51	0.001
Amount of Claims	539.77	243.42	539.77	5.87	0.001

Note: N is 7 and df is 6.

**Table 2: Mediclaim Scheme -Premium**

Year	No of Policies sold	Growth Rate (%)	No of Persons Covered	Growth Rate (%)	Premium (Rs. Lakh)	Growth Rate (%)
2007-08	1234554	-	8560474	-	113929.1	-
2008-09	1437947	16.47	5982784	-30.11	133767	17.41
2009-10	1446268	0.57	6095223	1.87	152695.8	14.15
2010-11	1613626	11.57	7166982	17.58	199920.82	30.92
2011-12	1591086	-1.39	9531815	32.99	234229.47	17.16
2012-13	1624002	2.06	12207167	28.06	275227.19	17.5
2013-14	1623524	-0.02	12363886	1.28	329229.61	19.62

**Table 2.1: Mediclaim scheme - claims**

Year	No of Claims Reported	Growth Rate (%)	No of Claims Settled	Growth Rate (%)	Claims (Rs. in Lakh)	Growth Rate (%)
2007-08	813463	-	752623	-	93213	-
2008-09	671877	-17.4	610973	-18.82	127189	36.44
2009-10	743754	10.69	734492	20.21	149597.3	17.61
2010-11	608009	-18.25	551733	-24.88	182320.5	21.87
2011-12	590376	-2.9	607484	10.1	199182.6	9.24
2012-13	877821	48.68	828192	36.33	258204.3	29.63
2013-14	1110535	26.51	1000000	20.74	282147.9	9.27

**Table 2.2: 't' Test Result for the Mediclaim Insurance Scheme - Premium and Claims**

Mediclaim insurance	Mean	Std. Deviation	Mean Difference	t value	Sig. Value
No of Polices Sold	1510144.0	146242.49	1510143.85	27.32	0.000
No of Persons Covered	8844047.0	2671101.13	8844047.28	8.76	0.000
Amount of Premium	205571.3	78894.98	205571.28	6.89	0.000
No of Claims Reported	773690.7	181753.48	773690.71	11.26	0.000
No of Claims Settled	726499.6	154889.52	726499.57	12.41	0.000
Amount of Claims	184550.6	68342.04	184550.63	7.145	0.000

Note: N is 7 and df is 6.

**Table 3: Jan ArogyaBima Policy - Premium**

Year	No of Policies Sold	Growth Rate (%)	No of Persons Covered	Growth Rate (%)	Premium (Rs. Lakh)	Growth Rate (%)
2007-08	8230	-	20637	-	21.27	-
2008-09	9689	17.72	16152	-21.73	16.26	-23.55
2009-10	14049	44.99	25258	56.37	30.09	85.05
2010-11	7525	-46.43	16375	-35.16	15.03	-50.04
2011-12	12274	63.1	54307	231.64	51.76	244.37
2012-13	10435	-14.98	67411	24.12	55.63	7.47
2013-14	10274	-1.54	70755	4.96	58.37	4.92

**Table 3.1: Jan ArogyaBima Policy - Claims**

Year	No of Claims Reported	Growth Rate (%)	No of Claims Settled	Growth Rate (%)	Claims (Rs. Lakh)	Growth Rate (%)
2007-08	1022	-	1072	-	36.39	-
2008-09	1089	6.55	804	-25	20.31	-44.18
2009-10	1069	-1.83	945	17.53	31.26	53.91
2010-11	768	-28.15	684	-27.61	19.46	-37.74
2011-12	1762	129.42	1561	128.21	60.44	210.58
2012-13	1780	1.02	1805	15.63	60.16	-0.46
2013-14	1525	-14.32	1548	-14.23	63.26	5.15

**Table 3.2:-'t' Test Result for theJan ArogyaBima PolicyInsuranceScheme - Premium and Claims**

<b>Jan ArogyaBima Policy</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Mean Difference</b>	<b>t value</b>	<b>Sig.value</b>
No of Policies Sold	10353.71	2247.56	10353.71	12.19	0.00
No of Persons Covered	38699.28	24526.17	38699.28	4.18	0.01
Amount of Premium	35.48	19.20	35.48	4.89	0.00
No of Claims Reported	1287.85	398.25	1287.85	8.56	0.00
No of Claims Settled	1202.71	432.41	1202.71	7.36	0.00
Amount of Claims	41.61	19.35	41.61	5.69	0.00

Note: N is 7 and df is 6.

**Table 4: Cattle Insurance Scheme - Premium**

<b>Year</b>	<b>No of Policies Sold</b>	<b>Growth Rate (%)</b>	<b>No of Persons Covered</b>	<b>Growth Rate (%)</b>	<b>Premium (Rs. Lakh)</b>	<b>Growth Rate (%)</b>
2007-08	152999	-	536683	-	3488.44	-
2008-09	223287	45.94	753223	40.34	4519.34	29.55
2009-10	237431	6.33	880935	16.95	4805.61	6.33
2010-11	305469	28.65	605270	-31.29	3562.28	-25.87
2011-12	114806	-62.41	407679	-32.64	4519.87	26.88
2012-13	121180	5.55	586799	43.93	6987.1	54.58
2013-14	90898	-24.98	424912	-27.58	4763.33	-31.82

**Table 4.1: Cattle Insurance Scheme - Claims**

<b>Year</b>	<b>No of Claims Reported</b>	<b>Growth Rate (%)</b>	<b>No of Claims Settled</b>	<b>Growth Rate (%)</b>	<b>Claims (Rs. Lakh)</b>	<b>Growth Rate (%)</b>
2007-08	33739	-	36252	-	2162.87	-
2008-09	23319	-30.88	23478	-35.23	2705.29	25.07
2009-10	14816	-36.46	15497	-33.99	2906.84	7.45
2010-11	23182	56.46	11147	-28.06	1656.91	-42.95
2011-12	17060	-26.40	14663	31.54	2593.11	56.50
2012-13	18101	6.10	18937	29.14	3677.14	41.80
2013-14	17929	-0.95	18168	-4.06	4283.1	16.47

**Table 4.2:-'t' Test result for the Cattle Insurance scheme - premium and claims**

<b>Cattle Insurance</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Mean Difference</b>	<b>t value</b>	<b>Sig.value</b>
No of Policies Sold	178010.00	78808.95	178010.00	5.98	0.00
Amount of Premium	4663.71	1159.32	4663.71	10.64	0.00
No of Claims Reported	178010.00	78808.95	21163.71	8.78	0.00
No of Claims Settled	19734.57	8239.67	19734.57	6.34	0.00
Amount of Claims	2855.03	887.27	2855.037	8.51	0.00

Note: N is 7 and df is 6

**Table 5: Janata Personal Accident Scheme - Premium**

<b>Year</b>	<b>No of Policies Sold</b>	<b>Growth Rate (%)</b>	<b>No of Persons Covered</b>	<b>Growth Rate (%)</b>	<b>Premium (Rs. Lakh)</b>	<b>Growth Rate (%)</b>
2007-08	608708	-	6463304	-	1243.77	-
2008-09	781527	28.39	7647701	18.32	1317.89	5.95
2009-10	846569	8.32	8284173	8.32	1427.57	8.32
2010-11	1049351	23.95	4421513	-46.62	1500.03	5.07
2011-12	214084	-79.59	10652087	140.91	3712.11	147.46
2012-13	225317	5.24	1398497	-86.87	3967.54	6.88
2013-14	171747	-23.77	1063420	-23.95	2374.17	-40.16

**Table 5.1: Janata Personal Accident Scheme -Claims**

<b>Year</b>	<b>No of Claims Reported</b>	<b>Growth Rate (%)</b>	<b>No of Claims Settled</b>	<b>Growth Rate (%)</b>	<b>Claims (Rs. Lakh)</b>	<b>Growth Rate (%)</b>
2007-08	4458	-	4012	-	1187.96	-
2008-09	1701	-61.84	1698	-57.67	1805.60	51.99
2009-10	4790	181.59	2131	25.50	1357.21	-24.83
2010-11	1879	-60.77	1640	-23.04	1075.62	-20.74
2011-12	3634	93.40	2576	57.07	2415.32	124.55
2012-13	8563	135.63	7881	205.93	3065.38	26.91
2013-14	7181	-16.13	8193	3.95	2295.08	-25.12

**Table 5.2:-'t' Test result for the Janata Personal Accident scheme - Premium and Claims**

<b>Janata Personal Accident</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Mean Difference</b>	<b>t value</b>	<b>Sig.value</b>
No of Policies Sold	556757.57	354816.91	556757.57	4.15	0.006
Amount of Premium	2220.44	1170.26	2220.44	5.02	0.002
No of Claims Reported	4600.85	2554.87	4600.85	4.77	0.003
No of Claims Settled	4018.71	2858.63	4018.71	3.72	0.010
Amount of Claims	1886.02	738.07	1886.02	6.76	0.001

Note: N is 7 and df is 6

# Role of Social Media Marketing in E-Retailing

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## Abstract

Businesses extensively use social media websites as marketing channels to engage and interact with potential consumers. One of the most powerful ways is to use social media as a brand-building tool to attract new customers. Social media marketing may be the tool that can help increase the number of people who visit the company website and how long they stay on it and encourage them to continue coming back. Community strength is a very powerful branding force, and social media offers accurately this kind of relationship-building prospect that is virtually immeasurable. The main objective this paper is to explore the role of social media marketing in e-Retailing. The study is based on thorough literature review. It is found that social media platforms offer gigantic potential for building relationships with the e-customers in an online environment. One of the key success factors of social networking channels is to involve customers and to understand their needs personally.

**Keywords:** E-retailing, Online Shopping, Social Media Analytics, Social Customer Relationship Management

## Introduction

The world of consumerism is a highly competitive field wherein retailers constantly strive to create an impressive image in the minds of the consumers. In reply to growing e-consumer needs, online retailers and consumer product manufacturers continually need to develop innovative strategies to attract more business. The focus is on advancement in business models regularly so as to adapt to the uncertain market environment. Recent concept of shopping is online retailing or e-Retailing. As one of the market trends, e-Retailing has been widely used in retail industry and growth is increasing day by day in today's scenario. The retailer's Web site acts as a platform for interaction between an online retailer and a consumer. The biggest advantage of online retailing compared to other retail formats is the vast number of alternatives that become available to the consumers. Organization can gain good opportunities by integrating social media into the innovation process.

The emergence of social media in different forms of user groups has supported the increased user involvement through which today online retailers strive for better engagement with their customers. Payments can be done in different ways as and how it is convenient for the customers. Social media channels offer incomparable opportunities to interact with customers and build associations, largely due to their synchronized, interactive nature. In the current world of connected environment, where customers conduct their own research, purchase online and seek recommendations from friends and family, it is in the best interest of the e-retailers to have an electrifying and interactive social media presence. Social media platforms also allow the user to tailor the content for each market segment and give businesses the opportunity to get their messages across more widely. Social media, especially social networking sites, provide a space for people to communicate through the web, which also might be an important representative of consumer engagement and socialization.

Despite the challenges, sellers are increasingly using the Internet because it reaches such a large number of consumers worldwide. Along with information about a company and its products, buyers can also have healthier access to product review and rating systems that are available online. The use of Internet tools for price searching and comparison provides an added benefit in consumer's choice, as they can purchase their desired products in the lowest price available in the competitive online market. There are many benefits available for retailers that embrace social media, including the ability to connect with and advertise to particular customer demographics. Social media

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is increasingly a platform consumers use to express their loyalty to their favorite brands and products, and many seek to obtain payback from brands for serving promote the products. Social media is the means to socialize content across the globe. They use web-based tools and technology to quickly socialize knowledge and information to a huge number of users.

They allow creation and exchange of user-generated content. Social media encourages everyone to share a lot about their business. Social media sites are becoming the go-to place for consumers who want to learn more about a business/product. That is because these sites allow companies to offer the most up-to-date information about their products, services, or upcoming events and offers. Social media platforms not only help e-customer service teams discover brand information and customer issues in synchronized, but also provide a platform for routing customer issues to the appropriate department to fix these issues quickly. With social media, businesses can assess marketing communication and approaches, measure user responses and refine the message accordingly.

## Literature Review

As per the study by Shergill and Chen (2005), the use of internet by the companies is not just limited to selling the products. The purpose is manifold. It enables the companies to withstand in highly competitive markets, as online platform reduces their marketing costs and thereby passing the benefit to the customers in terms of lesser price for the product. It also facilitates the companies to continuously be in touch with the customers during both pre-sale and post-sale period. They use online platform for communicating the features and benefits of the products prior to the actual sale. Post sale, online retailer can collect the feedback of online buyers posted in social media platforms and frame both product design and marketing strategies to attract customers in real time. Online retailers can continuously participate in social media marketing activities and understand consumer online buying behavior which helps in retaining existing customer and attracting new customers.

Vinerean et al. (2013) opined that managers should understand the importance of social media in understanding customer buying behavior and identifying their interests so that the customer relationship management can be made more effective. Using social media channels online buyers can exchange information their opinion on a set of products at any point of time and the same information can help the online retailer for tuning their product marketing strategies to attract more customer base in the specific market segment. Using social media marketing platforms online retailer can build strong relationship with the customers quickly and this relationship may yield good increase in sales.

As per the study by Bolotaeva and Cata (2011), social network advertising is the order of the day and businesses have huge opportunities to expand their customer base. Presence of an online retailer on social media updates him about the latest trends in the market, customer needs and habits, changing market influence on the online buyers, segment wise customer preferences. E-retailer can plan the product positioning in various segments based on the feedback in the social media which is a strong tool in the online space.

Akrimi and Khemakhem (2012) observed that electronic word of mouth is a proficient mode that allows organizations to increase their visibility on the web. Electronic word of mouth can be understand as one of the feature in social media marketing and the positive feedback of online buyers moves very fast over internet to the public, this may result in increased traffic to online retailers website.

Reitz (2012) observed that online buyers get influenced by positive feedback from other online buyers and may get tempted to buy online; this is possible with the positive feedback in Social Media by various groups of online buyers.

Clark and Melancon (2013) opined that organizations should wish to have a high percentage of their consumers as followers on social media. Online Retailers should encourage their consumers to participate in social media platforms regularly. This sort of encouragement may give in good results in attracting more followers to visit the online retailer site and turns them into regular customers in the future. To achieve this, eTailer should provide eye-catching content on the social media platforms continuously.

Iona and Stoica (2014) opined that social media influences online consumer buying behavior and

organizations can strengthen their relationship with potential consumers by participating in social media platforms. Online retailers can measure e-consumer buying behavior patterns and associated attributes by constantly following consumer feedback on various products in social media platforms. Improved quality of products related information and engaging customers in social media platforms provide tremendous opportunities to online retailers to convert potential customers into purchasing customers very quickly. Online retailers can create brand awareness to the targeted masses of prospective customers in less time and in turn achieve the expected business results.

Gbadeyan (2010) observed that the skill set of the team members who are responsible for social media participation from the organization side, plays an important role in establishing appropriate and proper marketing strategies in online marketing environment. The enthusiasm to participate in social media platforms results in creating strong and attractive content which in turn gets the focus of prospective customers in the market. Online retailers can attract more customers in the market by involving highly skilled team to contribute to social media. Market positioning of each brand can be done by affectively utilizing the available social media platforms and encouraging the prospective customers to participate in various online events to get their attention on the brand image.

Ghosh (2014) reported that online buyers would like to look at the product reviews that are posted by other online consumers over social media platforms, before opting for online purchase of various products and services in online environment. It is very important for online retailers to encourage their customers to participate and contribute to product reviews in social media platforms which establish a strong pipe line of potential customers. Product reviews also help eRetailers in establishing affective marketing strategies and product road map. Social media platforms help eTailers to reach out to targeted customers in large groups very affectively as these platforms are available on the web.

Baruah (2012) reported that social media platform is a cost effective marketing tool for business entities and less time consuming tool to market the products. E-retailers by adopting social media marketing concepts for their product marketing strategies can save funds of marketing budget and divert the same fund for other channels of marketing techniques. As social media marketing concept is less time consuming, the effort saved can be spent on other channels of marketing to generate new prospective customers and convert them into e-customers. Social media platforms help eRetailers in online customer interaction and also customer support very affectively.

As per the study by Craig Lefebvre (2011), Social Media Marketing is a good tool to meet the unique needs of segmented markets. Online Retailers can establish market segments and utilize social media platforms to reach out to the prospective customers in those segmented markets quickly and easily. Online Retailers can have dedicated social media marketing strategies for each target segment and achieve the desired results. Segment wise consumer preferences can be noted and incorporated for product marketing strategies by etailers.

## **Objectives and Methodology**

The objective of the paper is to explore the role of social media marketing in e-Retailing. The current study is based on thorough literature review. The product under study is online retail store/E-tail store, offering various products to customers across the globe.

## **Market Environment**

There are various online retail stores available in the market for consumers to select and buy products. Consumer has the option to browse the available online retail websites to compare pricing, delivery model and other offers before finalizing the purchase decision to purchase products as per their need.

## **Role of Social Media Marketing in E-retailing**

### **Social Media emergence**

Customer engagement and interaction has gone digital, and social media is helping online shoppers become more communal with their brands. To effectively implement a social selling strategy, online retailers need to first

leverage social media as a way to learn more about customers who are engaging with them. Social media networks provides a platform for word-of-mouth in the digital age, and new platforms are available for online retailers to see where their audience is and what they are expecting about various product lines. Social media not only can help expand the online retailer's message, but also amplify the voice of the customer. And online shoppers are more than willing to share their experiences, whether they are positive or negative on social media.

### **eRetailers can use Social Media platforms to build communities and strengthen consumer relationship**

Social media has evolved into more than just another advertising channel for eRetailers to showcase their products. In addition to solidifying their relationships with existing customers, eRetailers are increasingly using social media to attract new customers. Many eRetail leaders have successfully expanded their customer base using social media effectively. There are various advantages in sales function, such as sales leads generated from social media platforms; and improved conversion of leads through actively engaging with prospects, providing planned offers via social media, and driving greater brand promotion by providing an open platform for happy customers to voice their opinions and views.

### **Social Media Analytics in eRetailing**

Social media analytics can help retailers track the quantity and quality of the brand's mentions across all social media; track conversations on blogs, chat forums and other social channels; anticipate and forecast potential problems around brand perception so that the eRetailer can be proactive in understanding the market. Social Media Analytics helps eRetailer in maximizing the customer experience. There are countless blogs, comments and complaints regarding products and services on the web, this huge volume of information contain consumer sentiments that can be used to evaluate user's experience with a particular product or service.

### **Areas where social media has the greatest impact in eRetail**

The major areas where social media has the greatest positive impact are Brand building/awareness, e-customer loyalty, e-customer service, and gaining market insight of customers. By affectively using social media to focus in these areas, businesses will be better prepared to interact with their e-customers, preserve them and ultimately increase traffic to their eRetail store. Prospects are more likely to become customers if eRetailer respond to their specific requirements in a prompt and personal manner.

### **Participation in Blogs**

Blogging is a great way to introduce new content to visitors while also helping improve search engine optimization through indexing. When eRetailer write a series of in-depth, valuable articles about a topic, search engines take note. Each high-quality blog post that the eRetailer publish is another opportunity to get traffic from search engines. Blogs allow companies to act as experts in a given space (eRetail space) that they do business in and provide visitors with content that interests/attracts them. A regularly updated blog can produce a constant stream of good leads from all around the world. It offers information in a fresher way and invites online shoppers to interact with eRetailers, by entering their comments/feedback.

### **To provide channel for brand building and promote the brand image in the market**

Social media means that target audience can be anywhere and interacting at any time, it provides great potential for participation and forming communities of same interest. Another way social media marketing helps with customer acquisition is by establishing a brand as genuine. When online consumers discover a business or retailer they want to use but know minute about, they often check their social media page to gain knowledge of more about it before making an e-purchase decision.

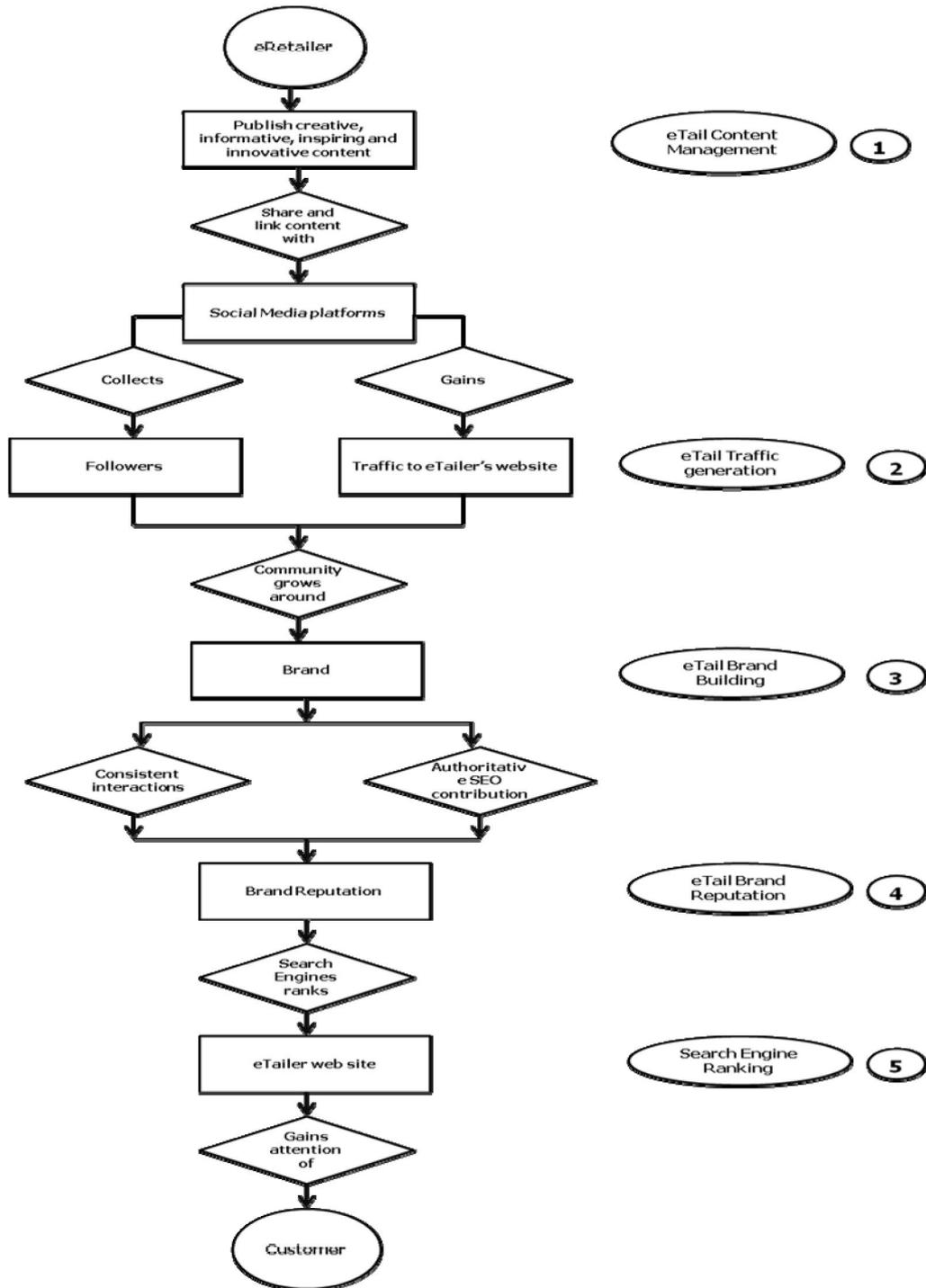
### **Win and Retain online customers**

By actively participating in social media page, online retailers can not only listen to what e-customers have to articulate, but also be a part of the discussion. In the online retail business this will ensure 1) identify who your

customers are 2) target your social media campaigns towards the accurate customer base 3) respond to queries in real-time 4) customer retention. Set clear Social Media Key Performance Indicators (KPIs), measure the results and compare them to set goals, be more present, spend more effort to improve the SM strategy to gain market advantage.

**Surveys & Campaign effectiveness**

Using surveys on Social Networking sites Retailers can provide a great way to gain insight into the thoughts of their consumers. Measuring the impact of advertising campaigns is essential in any marketing channel, and social media presents various modes of gauging e-advertising effectiveness. With the help of social media marketing tools online retailers can gauge the brand strength and plan accordingly on product road map.



**Figure 1.0 Social Media Process Flow in eTailing**

### Great platform for Search Engine Optimization (SEO)

Social Media platform is great for boosting SEO. Search engines are picking up on how much activity each business is doing on social media and will rank business accordingly. Social media channels are key generators, continuously bringing huge volume of traffic to the webpage. The more active and fresh content eRetailers are posting on social media accounts; they will get the better rank on search engines. Customers may use a combination of search and social media to help review and gain information on products and services provided, eRetailers gain more advantage by ensuring good online presence in reaching out to these consumers.

### Offer exclusive deals, discounts and offers

Online retailers can reward social media community with exclusive deals and offers. Followers will feel appreciated as dependable customers, and if they prefer to share with their own network connections, eRetailers might get some additional customers as a result. Social media efforts help eRetailers to motivate customers as the deals and offers are transparent and the total community understands the business offers to loyal customers, which will be an attracting point for the new customers.

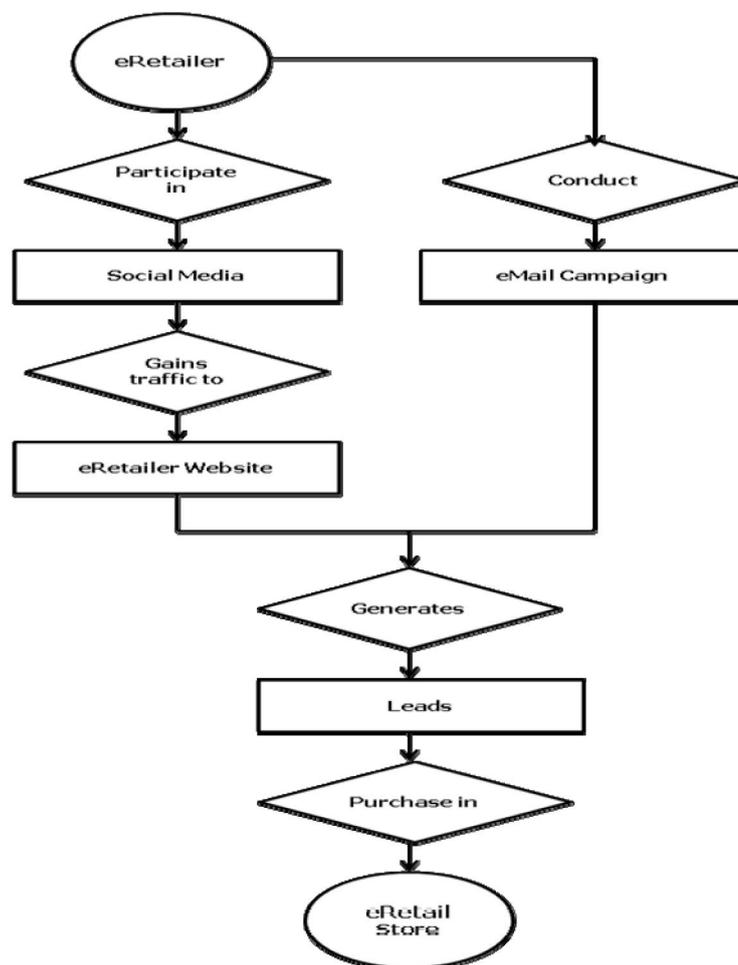
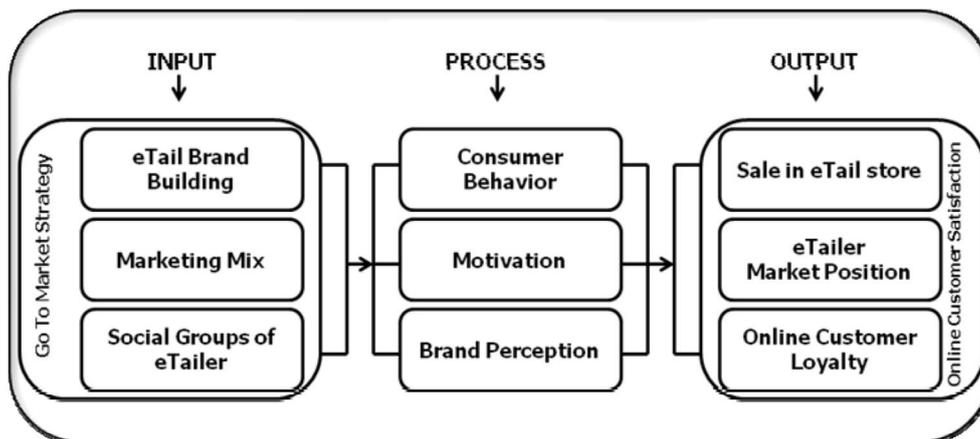


Figure 2.0 Social Media contribution in Lead Generation

### Product Feeds can help eRetailers to reach a vast market segment

Retailers that sell products online can use product feeds to reach a wide audience. A product feed is simply a file generated from the website that lists product details such as photos, pricing, descriptions and even special offers such as discounts. These product feeds can be submitted to shopping assessment websites, search engines and also made accessible to e-customers using feed readers.



**Figure 3.0 Go-To-Market Strategy in eTailing with Social Media contribution**

### **Social Customer Relationship Management (Social CRM)**

Social CRM is an advanced form of customer relationship management that uses social media platforms, techniques and technologies to enable organizations to communicate with their target customers. This business strategy is supported by technical platforms, trade processes, and social media networks to facilitate engage customers in a collaborative manner to provide mutual benefits to both e-customer and the business entity. SCRM software provides the necessary methods that allow online retailers to collect data on each interaction. Questions and queries can be stored for quick and further reference and solutions can be publicly responded to for others to read.

### **Listening to online customer voice**

Usually customers talk about a brand/product on social media. They recommend a product to their friends, talk about a customer service experience on social media. What these customers are saying is a key source of information for any eRetailer. By noting both the positive and negative feedback, the eRetailer can learn more about the e-customer expectations, so that they can build better products, and create a better customer experience. Moreover, social media allows the customers to connect and interact with eRetailer on a more personal level.

Sl.No.	Objectives of Social Media Marketing	Key Benefits to eTailers
1	Customer Relationship	Maintains customer information and keep the customer up to date on product related updates.
2	Awareness and Recognition	Creates product awareness and build recognition in competing market environment. Customer understand the presence of the brand and it's competition online.
3	Brand Penetration	Speeds up brand penetration in various segments of market.
4	Targeting Specific Customers	Understand customer preferences and target right customer base. Generates strong repeat sale leads.
5	Brand Positioning	To position the brand appropriately in the market.
6	Loyalty and Retention	To reward the loyal customers and retain the customer for long term. Engage customers by offering them the best possible experience.
7	Sales Forecasting	Helps the eTailers in forecasting the sales, which will be an input for product planning.

**Table 1.0 Objectives of Social Media Marketing in eRetailing**

## Recommendations

### Search Engine Optimization

The words that user types in the search box carry amazing value to business entities. Search engine traffic can make an organization's success in terms of web traffic. Targeted traffic to a website can provide promotion, revenue, and coverage like no other channel of marketing. Investing in SEO activities can have an extraordinary rate of return compared to other types of marketing and promotional activities. So it is suggested to eRetailers to optimally design the SEO plan with dedicated staff to manage social media activities to gain market advantage. It is also suggested to focus on unique keywords formation and implementation as part of SEO activities, which will result in increase in search engine rankings. Online Retailers need to be on all platforms of social media to get in touch with various groups of customers.

### Content Quality

Online retailers should identify the growing importance of social media marketing and create fresh content (such as product info, product images and videos) to attract new customers. There should be a framework to measure the effectiveness of the social media participation for online retailer to properly plan the future plan of action on SM activities.

### Customer Relationship Management

Retailers should give priority to properly integrate Social Media Marketing strategies with Customer Relationship Management system to capture the feedback of customers and ensure that it is incorporated in all relevant plans to provide competing products in the market.

### Supply Chain Management

It is advised that online retailers should engage the customers in social media and map the customer experience to supply chain management system to achieve the expected customer satisfaction. It is suggested to online retailers to adopt a system to ensure that their customers are continuously engaged in their social media activities.

### **Customer Loyalty**

Encourage the customers to participate in social media and give priority to capture their feedback on the business/products. There should be appropriate focus on social media analytics to measure ROI with respect to the effort spent on social media to retain customer loyalty. It is suggested that eRetailers have to measure the customer presence on the company's website and what they are looking for as part of social media analytics data.

### **Conclusion**

E-tailing has provided a new milestone and inexpensive delivery channel for retailers to reach out to their customers. There would be an exponential growth in the online retailing business in the current scenario. Though much is yet to be achieved, remember E-tailing is a new to various groups of people. With broadband internet access still accessible to entire population, this industry may see an explosive growth. Most growth drivers are favorable demographics, wealth, ever varying lifestyle, introduction to new thoughts. It is now a question of establishing a sustainable eco-system for e-tailing, which definitely drives the growth of e-retailing. The key growth drivers of digital business under the realms of online retailing are convenience and accuracy, feedback management, effectiveness, queue management, ease of access, and customization. Digital modus operandi aims at fulfilling these requisites for giving better shopping experience to the customers. Social media can be used to communicate and provide the interaction that consumers look for. Social media is the recent tool for e-marketers who try the possible means to get their message out to their target markets. Social media platforms offer immense possibilities for nurturing relationships with consumers in an online environment. As many more people access the internet through mobile so a mobile version of the site as well as promos should be initiated by the eRetailers. Taking into consideration that customers may not be extremely computer savvy, the steps involved in the e-purchase process should be clearly explained in the form of a demo video on the website. One of the key achievements of social networking channels is involving e-customers and determining their needs on a personal level through encouraging consumers to participate enthusiastically and listening to their requirements.

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## *Abstract of Ph.D Thesis*

# **Management of Working Capital – A Case Study of National Newsprint & Paper Mills Limited**

**Adarsh Arora\***

The prosperity, civilization and culture of a country depend upon its paper industry. A country which uses the maximum paper, is known highly civilized, developed and educated. Paper is a core industry for any country and paper consumption can be taken as a measure of growth and progress in the areas of industrial, cultural and educational activities. Owing to the increase in the educational standard among the people, the consumption of paper is increasing continuously in the country. The economic and social development of any country depends on the paper industry.

The current study is on the performance of the “National Newsprint & Paper Mills Limited” (NEPA) was floated by M/s Nair Press Syndicate Limited, as a private entrepreneur, on 25<sup>th</sup> January 1947. It was the first Newsprint Mill in the country. The management of NEPA was taken by the Madhya Pradesh Government in 1949 and it became a Government company in 1959. It was the first indigenous newsprint manufacturing unit in the country. In 1930s, the industry employed not more than 10% of the labour force and even less and perhaps half of them was on a full time basis. It was dominated by two major pulp and paper companies with mills of grand falls and corner brook, which together held leases to almost all the island's productive forest on generous terms. The traditional production management strategy in paper manufacturing is based on volume – intensive approach. This involves the measurement of overall performance or productivity, while aiming at a high level of capacity utilization and minimum waste levels. This approach has proved successful in mills producing high volumes with a limited and standardized products range. Until 1981, NEPA Limited was the only unit in the country manufacturing newsprint. For expansion of newspaper in the country, there is a need for substantial increase in indigenous production of newsprint. Limited annual availability of such newsprint is a serious bottleneck to the growth of newspaper. India is a deficit country in respect of newsprint production. The domestic production of newsprint increased from 1.02 lakh metric tonnes in 1981-82 to 2.72 lakh metric tonnes during 1989. The total newsprint requirement for 1988-89 was of the order of 5.40 lakh metric tonnes. So one of the objectives of the study is to study how NEPA has contributed for the economic and social development of Indian economy. Here keeping in mind this point, an effort has been made to analyse if Newspaper Mills India are able to fulfill the required demand in the country. The financial performance of the company with special focus on its working capital management has been analyzed from various aspects for the duration of 15 years using various statistical tools.

## **Objectives of the Study**

- To analyse the importance of Paper, Newspaper and Newspaper Mills and their performance in India with special reference to National Newsprint and Paper Mills Limited.
- To study how NEPA has contributed to the economic and social development of Indian economy.
- To explore if Newspaper Mills are able to fulfill the required demand in the country.
- To analyze the working capital management of the company for the duration of 15 years using various tools like index numbers, ratio analysis and trend values.

## **Data and Methodology**

The secondary data has been used in this research project which has been collected with the help of the various annual reports of NEPA Limited and other paper making units. Various information have been collected from books, articles, bulletins and newspapers. For collecting the data, the web site of the paper making units have

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also been used. The study has been based on the 15 years commencing from 1987-88 to 2001-02. The various tools like absolute percentage change, index numbers, trend values, and ratio analysis have been used to assess the financial performance of the company with special focus on working capital management of the company. The whole study has been divided into chapters; financial structure, current assets, receivable management, inventory management, current liabilities, management of working capital of the company.

## Findings and Suggestions

1. The main problem of the company is the unavailability of adequate raw material for producing the paper and newsprint. The cost of the raw material is very high which increases the cost of the finished goods manufactured by the company. The Government should provide the company with the raw material at a very reasonable rate, so that it can easily compete in the market. The management should also make a policy to enhance the plantation of those types of plants which will be used as raw material in this company in the near future.
2. Transportation facility which is required for carrying raw material and delivering finished goods is not in adequate quantity. The company has to hire the trucks etc. at a high cost. It also increases the cost of production. The Government should provide the transportation facility to this industry at a cheaper rate.
3. The export of paper and newsprint is not much from India. So the management of the company should concentrate more on the export of newsprint with minimum cost to earn more foreign currency. The Government should provide various types of concessions to this company for enhancing its sales not only in the country but also in the foreign countries.
4. The company has been continuously suffering from heavy losses. The cost of the production of the paper and newsprint produced is much more than the amount of sales. Due to these heavy losses the current assets cannot be formed. The company should try to reduce its cost of sales by using the modern management techniques. The employees of the company should be motivated to work more as much as possible.
5. Unnecessary burden of overheads can reduce the efficiency and performance of any business unit, NEPA Limited has been suffering from this problem. The quantity of these overheads should be reduced.
6. For the betterment and effective planning different committees can be formed by any business or organization. So a committee should be established by the company for the improvement and progress of NEPA Limited.
7. Inefficient and inadequate finance is also an important problem of this company. Without sufficient and adequate finance the company cannot manage its working capital properly. So the company should be allowed to freely transact its securities in the financial market. This will also enable it to introduce new and attractive schemes which may enable it to mobilize more funds for its operations.
8. The company is not able to utilize its maximum production capacity. There is an urgent need to expand the production capacity of the company. This can only be possible if the company is allowed to venture into a number of financial services in order to mobilize more resources.

## Conclusion

NEPA Limited has no adequate funds to fulfill its requirements for the better Working Capital Management. It has been observed that it is not able to meet the required demand due to lack of adequate finance. As finance is the life blood of each industry and organization, without adequate and sufficient funds or finance, no organization can smoothly and successfully perform its operations and activities. It cannot achieve the pre-determined objectives without appropriate finance. Just like any other industrial concern, in the absence of adequate finance, this industrial unit may not be able to cope with the available demand. It can be mainly attributed to improper attention of the management towards its development, despite there are various other factors responsible for it. NEPA Limited has a significant place in the newsprint era of public sector. The Government should give proper attention for the development of this company because there will be a large demand of newsprint in the future.

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Articles submitted to the journal should be original contributions and should not be under consideration for any other publication at the same time. Submissions may be sent via E-mail to: editor@vjim.edu.in and one hard copy by post. The intellectual contributions can be made under any one of the following categories:

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