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## **Editor's Desk**

The recent crisis in Chinese financial markets has affected many countries in the world. India was so affected by it that on the 24<sup>th</sup> of August 2015 the stock market as quoted by Economics Times crashed by 1,625 points in a single day. This was even worse than January 21<sup>st</sup> 2008 which was a fall of 1,408 points. It also affected the markets in Europe and U.S.A. and it was called the 'Black Monday' crash. The result of the fall was due to private retail investors buying shares with borrowed money in the Chinese stock markets. So when the market declined, millions of investors had to sell their investments to pay back the debt.

Although China's stock market crash does not have a direct impact on western countries but it's slow down is expected to globally reduce the demand for commodities like metals, oil and gas. This will have an effect on the producers comprising OPEC countries, Canada, Australia and African countries. In Asian countries the crash and further devaluation of Chinese currency has had a domino's effect and stocks in Asian countries are quite depressed. How has the Chinese stock market crash affected India? There are several positive and negative effects. The price of commodities like crude oil and copper decreased due to fall in demand of raw materials in China. India's stock prices reacted to this fall and became volatile especially in metal producing companies. To cite an example Vedanta and Hindalco's stock prices have fallen and because of that the SENSEX fell by 484 points immediately after the crash and there continued to be a low side in India's markets.

The immediate effect was that China had a lack of demand for gold after the crash and the price of gold decreased by 10%. Indians being very keen holders of gold this could have different kinds of effects. One effect would be that people would immediately begin to buy gold and this can have a stabilizing effect on the price of gold as the demand will push up the prices of the gold again. Another expected effect was that India was exporting automobiles to China and the demand would surely decrease after the crash. The result of this can be seen with the decline in the share prices of Tata Motors by 6.2%. Finally, bad news for India! China's devaluation of its currency will make its goods cheaper to the world. This means that goods from India will become less attractive. Amongst the positive aspects, India is quite upbeat as it expects that prices in oil will also fall as an effect of depressed markets in China. This will enable India to lower its inflation and have higher production and decrease in its trade deficit. Also consumption of metals being large in India it will benefit by importing metals at lower costs as it requires metals for infrastructure especially to construct its new plan of Smart Cities. Let us wait and watch!!

  
(Preeti Singh)

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# THE EFFECT OF FINANCIAL RATIOS ON THE FIRM VALUE AND EARNINGS PER SHARE

Harsh Vineet Kaur ★

The present study investigates the effect of financial ratios, operating cash flows and firm size on earnings per share and firm value of companies in IT sector. In the present study, the ratios like Net Profit Margin, Current Ratio, Asset Turnover Ratio, Operating cash Flows and Firm Size are used as the independent variables while the earnings per share and Firm Value are used as the dependent variable. Twelve hypotheses were formulated to investigate the research independent variables with earnings per share and Firm Value and were tested using regression model. The results were consistent with the research results of Legziyan et al. (2011), Martani et al.(2009) and Taani and Banykhaled (2011) but inconsistent with the research results of Martani et al. (2009), Zeynali and Mohammadshilan (2011).

The World has become a global village and many companies have expanded their business operations across the oceans. Global competition has increased tremendously over the past few years. The need of the hour is that the companies focus their efforts on creating shareholder value in order to survive the intense competition. In view of this, it is becoming important for companies to measure the value they create for their shareholders. Keeping track of the value created year-on-year enables companies to evaluate past decisions and make decisions that will improve shareholder value (Moncla & Gregory, 2003). Investors and market analysts resort to financial statement analysis when it comes to share investing.

Earnings per share and firm value are important results on which investors and analysts focus while making an investment decision.

## I. Review of Literature

Ferri, and Jones (1979) examined the relation between financial structure of the firm, and its industrial class, size, variability in income and operating leverage. They found that debts structure of the firms is related to the sectorial class of the firm and the magnitude of the firm but this relation is not positive. Moreover, they pointed that income variability has no relation with the debt structure of the firm and operating leverage is not effective on the %age of the debts of the firm.

Masulis (1983) examined the influence of the change in the debt level on firm value and concluded that change in debt level has a change on firm value as well. As a conclusion, he demonstrated that both stock price and firm value can be explained positively with the change on the debt level of the firm and level of operating leverage.

Kothari and Shanken (1997) in their study tested the relationship between the ratio of book value to market value and dividend yield with the expected market returns. Results show that there is positive and significant relationship between ratio of book value to market value and dividend yield with the expected market returns.

Auret and Sinclair (2006) studied the relationship between the ratio of book value to market value and stock returns during the years 1990 to 2000 in listed companies in the Johannesburg Stock Exchange (JSE). In this study, the ratio of market value to book value, price to earnings, dividend yield, cash flow to price, price to net asset value and firm size are used as control and independent variables. Results indicate that there positive and significant relationship between the ratio of book value to market value and stock returns.

Baldemir, and Süslü (2008) examined the influence of short term debts on the change of stock prices. Analysis was made for 75 firms registered to ISE- 100 Index. Initially, simple least squares analysis was implemented by using the changes in the stocks of the firms and the ones in short-term debts and the change in coefficients were regarded as meaningless. The model is not significant in either R2 or F statistics. This case takes us to the result that M-M theory is not valid for Turkish economy. Hence, it was concluded that there is no relation between the stock prices and debt/shareholders' equity.

Martani, and Khairurizka (2009) examined the value relevance of accounting information in explaining stock

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return. In their study, they used profitability, liquidity, leverage, market ratio, size and cash flow as proxies of accounting information. Cumulative abnormal return and market adjusted return were used as stock return variables. The samples of the study were listed companies in manufacturing industries actively trading in Indonesia Stock Market. The study found that profitability, turnover and market ratio has significant impact to the stock return.

Martani et al. (2009) in their study analyzed the relationship between financial ratios, firm size, and cash flows from operating activities with stock returns in the manufacturing business units listed in the Indonesia Stock Exchange during the years 2003 to 2006. Results showed that the ratios of profitability and market have positive and significant relationship with stock returns and there is no relationship between the debt ratios, firm size with stock returns.

Cheng et al. (2010) researched the leverage effect on firm value by threshold panel regression. They used ROE as firm value, total debt/total assets ratio as the threshold value. They pointed out there is a threshold relation between debt ratio and firm value. They also exhibited that when debt ratio is lower than 53.97 % firm value can be increased by debt; when it is between 53.97% and 70.48% a decrease starts and there is a decreasing trend when it is between 70.48% and 75.26 %.

Chowdhury, and Chowdhury (2010) tested the influence of debt-equity structure on the value of shares given different sizes, industries and growth opportunities with the companies incorporated in Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE) of Bangladesh. The interesting finding of this paper suggested that maximizing the wealth of shareholders requires a perfect combination of debt and equity, whereas cost of capital has a negative correlation in this decision and it has to be minimum. This was also seen that by changing the capital structure composition a firm can increase its value in the market. Nonetheless, this could be a significant policy implication for finance managers, because they can utilize debt to form optimal capital structure to maximize the wealth of shareholders.

Legziyan et al. (2011) investigate the effect of financial ratios on company's earnings prediction and stock returns in Tehran Stock Exchange. In their study, they tested 10 cases of the most important financial ratios for a sample of 252 companies during the years 2001-2006. Research findings showed that profitability ratios and activity ratios can be a good predictor for future stock returns in the Tehran Stock Exchange While no significant relationship

was found between the financial ratios and future earnings.

Taani and Banykhaled (2011) in their study investigated the effect of financial ratios, firm size and cash flow from operating activities on earnings per share. This study was performed on the 40 listed companies in the Amman Stock Exchange during the years 2000-2009. The research results indicate that there is positive and significant relationship between debt ratio, market value, operating cash flows and return on equity with earnings per share.

Zeynali and Mohammadshilan (2011) in their study studied the effect of capital structure on the size, rate of return on capital and earnings per share of listed companies in Tehran Stock Exchange in the pharmaceutical industry in the period 2007-2009. The result showed that there is significant relationship between financial structure of these companies and their size. But there is no significant relationship between their financial structure with the rate of return on capital and earnings per share.

Karaca and Savsar (2012) investigated the effect of financial ratios on the company's value in 36 companies during the years 2002-2009 in Turkey. Research findings indicated that analysis of financial ratios is effective on firm value and there is significant and negative relationship between inventory turnover ratio and return on equity.

## II. Research Design & Methods

**Objectives:** The present study has been conducted with the following objectives

- To study the effect of financial ratios on earning per share
- To study the effect of financial ratios on firm value

### Methodology

The following hypothesis has been formulated for the purpose of the study:

H1: There is significant relationship between net profit margin and earnings per share.

H2: There is significant relationship between return on equity and earnings per share.

H3: There is significant relationship between current ratio and earnings per share.

H4: There is significant relationship the asset turnover ratio and earnings per share.

H5: There is significant relationship between the ratio of

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operating cash flows and earnings per share.

H6: There is significant relationship between firm size and earnings per share

H7: There is significant relationship between net profit margin and firm value

H8: There is significant relationship between return on equity and firm value.

H9: There is significant relationship between current ratio and firm value.

H10: There is significant relationship the asset turnover ratio and firm value

H11: There is significant relationship between the ratio of operating cash flows and firm value

H12: There is significant relationship between firm size and firm value.

The various financial values have been calculated as follows:

**earnings per share** – Net profit/ number of equity shares

**Firm value-Market value** – Total Financial Debts - (Liquid assets + Marketable Securities)

**net profit margin** – Net profit/ net sales

**return on equity** – Net Profit/ Equity

**current ratio** – Current assets/ current liabilities

**asset turnover ratio** – Net Sales / Total Assets

**operating cash flows** – Cash from operating activities/ net sales

**firm size** – Natural logarithm of total assets

Data Base: The present study is based on companies in IT Sector in India. Information Technology (IT) industry has played a major role in the Indian economy during the last few years. A number of large, profitable Indian companies today belong to the IT sector and a great deal of investment interest is now focused on the IT sector. In order to have a good benchmark of the Indian IT sector, IISL has developed the CNX IT sector index. CNX IT provides investors and market intermediaries with an appropriate benchmark that captures the performance of the IT segment of the market. The index consists of 20 companies on which the present study is based.

Companies in this index are those that have more than 50% of their turnover from IT related activities like IT

Infrastructure, IT Education and Software Training , Telecommunication Services and Networking Infrastructure, Software Development, Hardware Manufacturer's, Vending, Support and Maintenance.

Data for ten years i.e 2001-2002 to 2011-2012 has been taken for the purpose of analysis. The data has been taken from CMIE Prowess and MoneyControl.com . The statistical calculations have been done on SPSS 17.0 .

### III. Results & Analysis

Table 1 shows the results of testing research hypotheses of effect on Earnings Per Share. As can be seen from the results of table, there is significant and positive relationship between the net profit margin and earnings per share at error level less than 1%. The results indicate that if the net sales of the companies under study increases, their net profit will also increase. Thus, the first research hypothesis is confirmed.

The second research hypothesis investigates the relationship of return on equity and earnings per share. The results suggest that statistically there is significant and positive relationship between return on equity and earnings per share at error level less than 1%. Thus, the second research hypothesis also is confirmed.

The result of the third research hypothesis indicates there is significant and positive relationship between the current ratio and earnings per share at error level less than 1%. There is significant relationship between Asset Turnover Ratio and earnings per share. The results indicate that by increasing corporate assets, net sales of company increase and the increase in sales will increase in net profit of company. It is noteworthy that the fourth research hypothesis also is not rejected.

The results of the fifth hypothesis indicate that there is no significant relationship between the ratio of operating cash flow and earnings per share. So, the seventh research hypothesis is rejected.

Finally, the sixth hypothesis studied the relationship between firm size and earnings per share. The research findings show that there is significant and positive relationship between firm size and earnings per share at error level less than 10%.

The amount of F statistic is equal to 10.38 and its significance level is 0.000 which indicate that the research regression model is significant in general. Adjusted R<sup>2</sup> value indicate that financial ratios, operating cash flows and firm size as independent variables can explain about 50 percent

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of the changes in earnings per share (dependent variable) of studied companies.

The value of calculated Durbin-Watson statistic is equal to 2.37. Since this value is between 1.5 and 2.5, therefore it can be concluded that the disturbance component of the model is independent in the investigated period. In other words, the amounts of the disturbance component of the model are random and the assumption of the existence of autocorrelation between variables is rejected.

Table 2 shows the results of testing research hypotheses of effect on Firm Value. As can be seen from the results of the table, there is a significant and positive relationship between the net profit margin and Firm Value at an error level less than 1%. The results indicate that if the net sales of the companies under study increase, their Firm Value will also increase. Thus, the seventh research hypothesis is confirmed.

The eighth research hypothesis investigates the relationship of return on equity and Firm Value. The results suggest that statistically there is a significant and positive relationship between return on equity and Firm Value at an error level less than 1%. Thus, the eighth research hypothesis is also confirmed.

The result of the ninth research hypothesis test indicates there is a significant and positive relationship between the current ratio and firm Value at an error level less than 1%. There is a significant relationship between Asset Turnover Ratio and firm Value. The results indicate that by increasing corporate assets, net sales of the company increase and the increase in sales will increase the net profit of the company and ultimately the Firm Value of the company. It is noteworthy that the tenth research hypothesis is also not rejected.

The results of the eleventh hypothesis indicate that there is no significant relationship between the ratio of operating cash flow and Firm Value. So, the eleventh research hypothesis is rejected.

Finally, the twelfth hypothesis studied the relationship between firm size and Firm Value. The research findings show that there is a significant and positive relationship between firm size and firm Value at an error level less than 10%.

The amount of F statistic is equal to 12.38 and its significance level is 0.000 which indicates that the research regression model is significant in general. Adjusted R<sup>2</sup> values indicate that

Financial ratios, operating cash flows and firm size as

independent variables can explain about 50 percent of the changes in firm Value (dependent variable) of studied companies.

The value of calculated Durbin-Watson statistic is equal to 1.98. Since this value is between 1.5 and 2.5, therefore it can be concluded that the disturbance component of the model is independent in the investigated period. In other words, the amount of the disturbance component of the model is random and the assumption of the existence of autocorrelation between variables is rejected.

## IV. Conclusion

Financial analysis of the companies using various financial ratios is used by managers to evaluate the current financial position of the company. The results of the current performance are compared with its past performance and also help in future predictions which are an important tool for planning and controlling the activities of the company. Therefore, the present study investigates the effect of financial ratios, operating cash flows and firm size on earnings per share and firm value of companies in the IT sector. In the present study, the ratios like Net Profit Margin, Current Ratio, Asset Turnover Ratio, Operating cash Flows and Firm Size are used as the independent variables while the earnings per share and Firm Value are used as the dependent variable.

Twelve hypotheses were formulated to investigate the research independent variables with earnings per share and Firm Value and were tested using a regression model. The results were consistent with the research results of Legziyan et al. (2011), Martani et al. (2009) and Taani and Banykhaled (2011) but inconsistent with the research results of Martani et al. (2009), Zeynali and Mohammadshilan (2011).

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**Table 1: Results of regression for effect on Earnings Per Share**

Variables	Coefficient	T- statistic	Sig
Constant	-64.76	-3.488	.001
Net profit margin	24.02	13.34	0.000
Return on Equity	53.1	7.61	0.000
Current Ratio	25.47	7.08	0.000
Asset Turnover Ratio	15.63	5.63	0.000
Operating Cash Flows	10.41	.87	0.38
Firm Size	36.44	1.74	0.08
R <sup>2</sup>	.50		
Adjusted R <sup>2</sup>	.49		
F- statistic	10.38		
Sig(F- Statistic)	0.000		
Durbin- Watson	2.37		

**Table 2: Results of regression for effect on Firm Value**

Variables	Coefficient	T- statistic	Sig
Constant	-86.74	-4.57	.001
Net profit margin	43.34	10.34	0.000
Return on Equity	33.1	5.72	0.000
Current Ratio	15.35	8.03	0.000
Asset Turnover Ratio	17.43	6.23	0.000
Operating Cash Flows	18.43	1.67	0.58
Firm Size	23.54	2.65	0.09
R <sup>2</sup>	.60		
Adjusted R <sup>2</sup>	.39		
F- statistic	12.83		
Sig(F- Statistic)	0.000		
Durbin- Watson	1.98		

# EVALUATING IMPACT OF MARKET ORIENTATION ON ORGANIZATIONAL COMMITMENT AND TEAM SPIRIT AMONG THE EMPLOYEES: A STUDY OF BANKING INDUSTRY

**Praveen Sahu★**

*The role of market orientation has been deeply evaluated and examined by the scholars all over the world. More so ever, the business performance has been the most examined outcomes of market orientation all over the industries. Earlier researches have indicated that market orientation positively affects business performance both economic and non-economic. The present study briefly examines the impact of market orientation on behavioural outcomes of employees. The study is aimed to check whether market orientation has any impact on organizational commitment or team spirit among the employees in banking sector. The sample of 217 senior executives was collected from Madhya Pradesh. Statistical tools like correlation and linear regression were used to examine the collected data. The results of the study indicate that market orientation positively affects both organizational commitment and esprit de corps among the employees.*

*Keywords: Market Orientation, Organizational Commitment, Team spirit, Banking Industry*

Market orientation has been considered as an important tool for a firm's superior performance and long-term success in today's highly competitive business environment. Market orientation is simply asserted as implementation of marketing concept. It is assuring that an organization is performing activities described in the concept of marketing, that are; (1) generation of information about customer and market; (2) distribution of information among the corporate functions of an organization; (3) responding according to the information disbursed. Market orientation has been considered as a very important concept in the field of marketing in present times. The firms which follow the concept of market orientation are trying to enhance their "understanding of customers" whilst constantly developing and delivering superior solutions to them through timely responsiveness (Baber, 2014). The first attempts were made by Kotler (1977); Shapiro (1988) and Payne (1988) to address the implementation issue of marketing concept. Later on the new perspectives emerged which addresses implementation of marketing concept within marketing literature, this was termed as market orientation. Kohli & Jaworski (1990); Narver & Slater (1990); Ruekert (1992) and Deshpande', Farley, & Webster (1993) developed five different perspectives which visualized market orientation as a key towards implementation of marketing concept. These are: Decision-making perspective (Shapiro, 1988), market intelligence perspective (Kohli & Jaworski, 1990), culturally based behavioural perspective (Narver & Slater, Effect of

Market Orientation on Business Profitability, 1990), strategic perspective (Ruekert, 1992) and customer orientation perspective (Deshpande', Farley, & Webster, 1993). The concept of marketing and its implementation has now taken pace in India during second decade of 21<sup>st</sup> century. The concept of market orientation has been adopted by most of the companies belonging to various sectors in India. The major changes have been observed in services and manufacturing sector.

One of the non-economic outcomes of market orientation has been organizational commitment. It is the individual's psychological attachment to the organization (Wikipedia, 2013). Bhuian and Abdul-Muhmin (1997) viewed organizational commitment as an intrinsic feeling or a set of intentions that enhances the desire of an employee to stay with an organization. It is also expressed as the obligation of an employee to stay with the organization (Hackett, Bycio, & Hausdorf, 1994). It was found in the studies that commitment of employee was consequence of market orientation. Kohli and Jaworski (1990) argued that implementing market orientation in an organization makes an employee psychologically and socially content due to its benefits. It enhances the sense of pride among the employees working for an organization. Jaworski and Kohli (1993) found a strong and positive relationship between market orientation and organizational commitment

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and proved organizational commitment as an outcome of market orientation.

Another important behavioural outcome of employees of market orientation is 'esprit de corps' among the employees. It means sense of team spirit among the employees. Henry Fayol (1916) defined esprit de corps as "Promoting team spirit will build harmony and unity within the organization." Zeithmal, Berry, & Parsuraman (1988) suggested that enhanced team spirit among the employees increased the perception of service quality among the customers. Kohli and Jaworski (1990) suggested that by implementation of market orientation in an organization could lead to enhancement of esprit de corps. Their suggestion was tested empirically (Jaworski and Kohli, 1993), a significant relationship was identified between market orientation and esprit de corps. Shoham and Rose (2001) in their cross national study hypothesised a relationship between market orientation and business performance. Their results were parallel with previous studies (Kohli & Jaworski, 1990; Jaworski & Kohli, 1993; Siguaw, Brown, & Widing, 1994) implicating esprit de corps as a consequence of market orientation.

The present study is aimed to examine the impact of market orientation on organizational commitment and esprit de corps among the employees of private and public sector banks.

## I. Review of Literature

Glazer (1991) and Glazer and Weiss (1993), thoroughly examined the various dimensions of Market Orientation on the strategic perspective given by Shapiro (1988). Glazer (1991), highlighted that organizations should focus upon collection of information. He quoted examples of Fedex (USA), American Airlines (USA), McKesson (USA) and Panasonic (Japan), all these organizations gained competitive edge over other players in the market through their efficient information collection systems (Baber, 2014).

Narver and Slater (1993) stated that "market orientation is a business culture committed to the continuous creation of superior value for customers. The value of a seller to a buyer is the difference between what the buyer perceives as the total benefits (want satisfactions) offered by the seller and what the buyer perceives as the total money, time, and energy expenditures required to acquire and use the perceived benefits."

Narver and Slater (1995) stated that market orientation is perfected by entrepreneurial drive. It results in creating a strong foundation for organizational learning. Authors also

stated organizational learning as an imperative factor of a market oriented organization and empirically examined the effects on market orientation under different industry settings.

Maltz and Kohli (1996) in their article also suggested that managers should have access to frequency and formality of intelligence sharing and should implement various strategies to expand cross functional allocation of intelligence.

Cervera, Molla', and Sanchez, (2001) conducted an empirical research on market orientation of public organizations. The authors inspected precursors and consequences of market orientation in public organizations. The authors via their study associated performance enhances with market orientation. Hampton, Wolf, Albinsson, and McQuitty (2009) also empirically examined the association between market orientation and level of professionalism of professors at universities. The study indicated that market orientation is positively associated with level of professionalism of university's professors and it lead towards enriched university performance. The positive after effect of university performance was retention of student in the university for other courses too.

Bunic (2007) simulated the research of Jaworski and Kohli (1993) and examined in Croatian manufacturing companies. The author agreed with the views of Jaworski and Kohli (1993) and stated that "MO can improve a firm's non-economic performance, viewed as the function of employees organizational commitment and esprit de corps". The results of examination exhibited a positive and extremely significant relationship between market orientation and esprit de corps.

Lings (2004) studied the construct of market orientation and also examined consequences of internal market orientation in an organization. Author empirically examined the relationship between internal and external market orientation. The results of the study indicated a positive and significant relationship between internal market orientation and performance. The author also suggested that internal Market Orientation results in employee satisfaction and fosters employee's organizational commitment.

Based upon the reviewed literature examining relationship between market orientation and esprit de corps and organizational commitment following hypotheses are proposed:-

H<sub>1</sub>:- Overall market orientation positively affects

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organizational commitment of employees of an organization.

H<sub>2</sub>:- Overall market orientation positively affects esprit de corps among the employees of an organization.

## II. Research Design & Methods

Primary data was collected for the research. The convenience sampling method was used to collect the data to understand the market orientation of and its impact on organizational commitment and 'esprit de corps' among the employees of private and public sector banks of Madhya Pradesh. The self-administered questionnaires were provided to the respondents. The MARKOR scale developed by Jaworski and Kohli (1993) was used to measure level of market orientation. 5-point Likert type scale was used to record the responses of the respondents. The information related to employees of banks was collected using internet. The respondents comprised of top management executives and senior executives who were part of decision making. The 300 self-administered questionnaires containing 16 items were sent through postal services to 35 private and public sector bank headquarters located in Madhya Pradesh. In the beginning, the response rate was only 40%. Consistent telephonic conversations by researchers and their associates increased the response rate. In the end, 230 responses were collected and out of those 217 responses were reported usable (response rate of 72%).

## III. Results & Discussion

The collected data was analysed with the help of IBM SPSS 20.0.

It can be seen in table 4.1 that the total respondents, 137 respondents (63%) were male and 80 respondents ( 37%) were females.

It is seen in table 4.2 that 111 respondents (51.2%) were employed in private sector banks. 106 respondents (48.8%) were employed in public sector banks.

Table 4.3 indicates that all the three variables Cronbach Alfa score was more than 0.6, indicating that the data collected was reliable and can be further used.

Table 4.4 displays the correlation between overall market orientation and 'esprit de corps' and organizational commitment among the employees of public and private sector banks.

Linear regression was used to study causal relationship between market orientation and 'esprit de corps' and organizational behaviour. Table 4.5 examines the relationship

between overall market orientation of private and public sector banks in Madhya Pradesh and employee's organizational commitment and 'esprit de corps'.

It was observed in table 4.5 that overall market orientation in banks of Madhya Pradesh and employee's organizational are positively related and statistically significant ( $B=0.862$ ,  $p < 0.001$ ). The R also exhibits a significant correlation between the overall Market Orientation and business performance ( $R=0.515$ ). Overall Market Orietnation in private and public sector banks in Madhya Pradesh explains for total 26.1 % ( $\Delta R^2=0.261$ ) of variance on employee's organizational commitment. Table 4.5 also indicated that overall market orientation in banks of Madhya Pradesh and employee's organizational commitment are positively related and statistically significant ( $B=0.320$ ,  $p < 0.01$ ). It can be inferred that increase in overall market orientation by 1, the 'esprit de corps' among employees was also increases by 0.320. The R also exhibits a significant correlation between the overall market orientation and 'esprit de corps' ( $R=0.214$ ). It indicates a positive but weak relationship between the variables. Overall market orientation in private and public sector banks in Madhya Pradesh explains for total 4.1 % ( $\Delta R^2=0.041$ ) of variance in 'esprit de corps' among the employees (Baber, 2014).

### Limitation of the Research

Following are the limitations of the research:-

1. Due to the relatively small sample size various statistical tools were not used. The next study would utilize large sample sizes so that the results could be more precise.
2. Only two behavioural outcomes on employees were examined. Through extensive literature review more behavioural outcomes of market orientation should be examined.
3. The study pertained to Madhya Pradesh State in India. India being a developing nation and banking sector in India operates under rigid rules and regulations. Thus the results of the study cannot be generalized.
4. The respondents were far spread across Madhya Pradesh. It created a major constraint and lead towards small number of responses.

## IV. Conclusion

The concept of market orientation has been identified as the most important concept and its implementation has been useful for scholars and academicians from past five decades. The developed model has potential because

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modern marketing activities are not only customer centric but also can result in positive behavioural outcomes from the employees of an organization.

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Figure 1.1: Proposed Model for the study

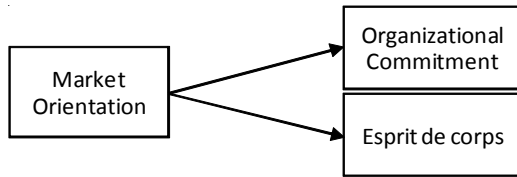


Table 4.1: Gender

Gender	Frequency	%age
Male	137	63.1%
Female	80	36.9%
Total	217	100%

Table 4.2: Bank wise respondents

Bank Type	Frequency	%age
Private Sector Banks	111	51.2%
Public Sector Banks	106	48.8%
Total	217	100%

Table 4.3: Cronbach's Alfa reliability coefficient and descriptive statistics for total data

Variables	No. of Items	Cronbach's Alfa Coefficient	Mean	Standard Deviation
Overall Market Orientation	11	0.783	4.23	0.38
Employee's Organizational Commitment	2	0.725	4.38	0.63
'Esprit de Corps'	3	0.663	4.10	0.56
N= 217				

Table 4.4: Correlation Coefficient between overall Market Orientation and its consequen

	Variables	1	2	3
1	Overall Market Orientation	1	.515**	.214**
2	Organizational Commitment		1	.264**
3	Esprit de corps			1

\*\* . Correlation is significant at the 0.01 level (2-tailed).  
 \* . Correlation is significant at the 0.05 level (2-tailed).

Table 4.5: Effect of overall Market Orientation on employee commitment and Esprit de corps: Standardized Regression Coefficients

Independent Variable	Dependent Variables	
	Employee Commitment	'Esprit de Corps'
Overall Market Orientation	0.862***	0.320***
R	0.515 <sup>a</sup>	0.214
R <sup>2</sup>	0.265	0.046
ΔR <sup>2</sup>	0.261	0.041
N	217	

\*\*\*p < .001

\*\*p < .01

\*p < .05

Table 4.6: Status of hypotheses

H <sub>1</sub>	Overall Market Orientation positively affects organizational commitment of employees of an organization.	Supported
H <sub>2</sub>	Overall Market Orientation positively affects 'esprit de corps' among the employees of an organization.	Supported

# IMPACT OF JAPAN'S DEMOGRAPHY ON ITS APPAREL MARKET: AN OVERVIEW

Animesh Saxena★ P.S. Tripathi★★

*The Japanese fashion market maintains its position as one of the largest in the world. Japan's Apparel Market is expected to continue to grow by 1-2% a year. Japan is very severely competitive open market where consumers demand extremely high quality products. Japanese themselves are known for being obsessed with clothes, gadgets and accessories. Japanese fashion is known for adopting latest fashion trends quickly. Fast fashion is taking root in the market. Earlier there have always been mass-produced, low-priced products available, but the new trend is for products that incorporate the very latest style with high quality.*

Japan is the third largest apparel market in the world with current 2013 import value worth ¥31.5 trillion. The market is expected to continue to grow by 1-2% a year through 2018. Japan is the second biggest export market for most leading fashion and apparel brands and a vital source of sales and profit. China is the market leader contributing to 75.6% in 2013 of the total value of apparel imports into Japan which is declining because of the minor strains recently developed in the diplomatic relations between China and Japan & increasing labor wages in China. Japan adopted "China Plus One" policy, in which Japanese buyers intend to relocate about 30 percent of their orders from China to other locations like Vietnam, Bangladesh, India, Cambodia & Indonesia. Japan is a highly sophisticated consumer market, where the consumption is very diverse. Japan's appetite for foreign fashion brands continues to grow.

The late 1990s may be called "An era of the coexistence" of many kinds of styles without any single predominating trend. Perhaps most noticeable in the 1990s has been the phenomenon whereby fashion conscious high school and even junior high school girls have taken the lead in setting fashion trends. The Japanese apparel market in 2011 recovered quickly from a dip after the Great East Japan Earthquake. Fast fashion is coming in the market, while luxury brands and demand for high-priced items are also showing recovery.

Demographic factors and their subsequent impact on the Japanese Apparel Market:-

## a) Population:

Japan's current population is 127.34 million (2013) which represents a decrease of 270,000 people compared to 127.61 million (2012)(Source:countryeconomy.com) because of adoption of birth control policy. Female population is greater, with 65.3 million representing 51.41%

of the total, compared to Male population i.e 62 million which represents 48.75% of total population. Japan is in eighth place in terms of population after China, India, USA, Indonesia, Brazil, Pakistan & Russia. The population is greatest along the Pacific seaboard where the weather is mild and the transportation and industrial facilities are most highly developed. In fact, approximately 70% of the nation's people live on the strip of coastal plain between Tokyo and the northern part of Kyushu.

In 2010, Japan's total population census (in thousands) was 128,058 in which population by age was:-

0-14 years was 13.2%

15-64 years was 63.7%

65+ years was 23.1%

## b) Geographical Regions of Japan

Japan is a country made from four major islands namely:

- Hokkaido
- Honshu
- Shikoku
- Kyushu

Each region has its own dialect, custom and unique traditional culture. Apart from this Japan can also be categorized into different economic regions. The capital

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and surrounding area is the economic, cultural, media and political heart and exerts a magic pull particularly on young people. Approximately 30 million people live in the conurbation which includes the cities of Yokohama, Saitama Kawasaki and Chiba as well as Tokyo. Branches of government, economic associations and universities are all concentrated here. The Kanto region alone produces 40% of Japanese economic strength, a figure comparable to the GDP of Italy. So there are many good reasons why most foreign business chose Tokyo as their point of departure for their Japan activities. However foreign companies should not overlook the other regions in the country. The Kansai region in particular, (Osaka, Kobe, Kyoto), the Nagoya area as well as northern Kyushu (Fukuoka, Kitakyushu) have clearly distinguished themselves in recent years by their better than average dynamism. The cities and regional promotional boards vigorously court overseas businesses and offer organizational support and occasionally tax advantages for establishing a business presence in their area.

#### **b) Personal Expenses in Clothing:**

According to an annual survey of household accounts by the Statistics Bureau, Japan's average monthly household income in 2014 is 463,964 Yen, while average expenditures are 302,141 Yen. The typical Japanese workweek is Monday through Friday, 9:00 a.m. to 5:00 p.m. There has been a marked increase in family spending on recreation, entertainment and education. Clothing accounts for 5.1%, 16,188 Yen (US\$150.2). Please refer Table 1.

#### **c) Climatic Conditions**

In general Japan is a rainy and highly humid country. It has very varied climate temperatures owing to its extended geographic location. It is a country surrounded by oceans and consists of four major islands (Hokkaido, Honshu, Shikoku, and Kyushu), which together comprise 97% of Japan's land area & other 6,848 small islands. Japanese people purchase clothes according to annual events and the season.

Japan has four distinct seasons throughout the year:

##### 1) Spring (March – May)

Spring is probably the best time of year to be in Japan. The temperature is warm but not hot, there's not too much rain.

Golden Week (April 27 to May 6) is the longest holiday of the year, when everybody travels and sale of garments are at the peak level.

Clothing: Light to medium weight clothing is best during spring. (Light jackets, light sweaters and other similar kinds of tops.)

##### 2) Summer (June – August)

The Japanese summer begins in June with a 3-4 week rainy season. During summer humidity and the temperature heading as high as 40°C

Clothing: Light weight clothes of cotton & linens are required throughout summer. (Cardigans and other similar kinds are handy, since indoors are mostly air-conditioned).

##### 3) Autumn (September – November)

Autumn is the season for many exhibitions, music concerts & sports tournaments in Japan. Temperature become tolerable, fair days are common.

Clothing: Light to medium weight clothing is best during autumn. (Light jackets, light sweaters and other similar kinds).

##### 4) Winter (December – February)

The temperature rarely drops below 0°C in the plains during wintertime. It is also quite dry and very often sunny.

Clothing: Medium to heavy weight clothing is recommended for winter. (Overcoats, sweaters etc.)

#### **d) Economic Condition:**

Japan has the third largest economy in the world \$5,964 trillion by Nominal GDP, fourth largest \$4,628 trillion by purchasing power parity (PPP) and is the world's second largest developed economy. Japan is the world's third largest automobile manufacturing country & has the largest electronics goods industry. Japan's total exports amounts to \$788 billion & majorly export goods: Motor vehicles 13.6%, Semiconductors 6.2%, Iron and steel products 5.5%, Auto parts 4.6%, Plastic materials 3.5%, Power generating machinery 3.5% whose major export partners are China 18.1%, USA 17.8%, South Korea 7.7% whereas Japan's total imports amounts to \$808.4 billion & majorly import goods: Petroleum 15.5%, Liquid natural gas 5.7%, Clothing 3.9%, Coal 3.5% whose major import partners are China 21.3%, USA 8.8%, Australia 6.4%, Saudi Arabia 6.2%.

## **I. Review of Literature**

A reasonable amount of study has been done to the demographics of Japan and its impact on Apparel Industry. A brief resume on the review of work already done on

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related aspects of the subject are as follows:-

Motoshige Ito (1991) , The Japanese Distribution System and Access to the Japanese Market

National Bureau of Economic Research, (p. 175 - 190)

Motoshige Ito stated that one of the essential characteristic of Japanese system both in manufacturing and distribution, is the network of large and small firms that cooperate. It is decentralized system, characterized by what is called Japanese style business relations. This is in contrast to an integrated system where complicated exchange is conducted within large firms and transaction between firms is at arm's length.

Japan External Trade Organization(JETRO) , Guidebook for Export to Japan ( Apparel Products and Materials ) 2011

JETRO report says the apparel market in Japan is an already mature one, so it is important to clearly focus on brand characteristics, and differentiate from other brands. The recession is also resulting in an increase in consumers, who make no compromises when selecting products, emphasizing product price and quality. When entering the Japanese market, there is a need to carefully consider consumer needs, and determine characteristics which can differentiate one's products from that of other manufacturers. It is important to set sales strategies that take into account the seasonal events when selling apparel products in Japan. It is essential to closely monitor the consumption trends in Japan, be aware of consumer needs and appropriate quantity demanded, and to develop a production/sales system that can release products into the market on a moment's notice. Quality standards sought in Japan are usually stricter than other countries, and this must be taken into consideration. With regards to quality criteria, Japan has a Product Liability Law which prescribes that the manufacturer (importer in the case of imports) is liable for damages if their product proves to be harmful to human life, body, or assets due to defects.

In Japan, fashion is no longer controlled or guided by professionally trained designers but by the teens who have become the producers of fashion (Kawamura 2006).

White (1994) has offered one of the more comprehensive examinations of the Japanese teen market. She characterizes the Japanese culture as one that reinforces individual conformity, even if that conformity is as simple as complying with the fashion norms of a particular segment. It appears that Japan tends to have a sort of dress code for individual market segments. While older consumers may

do little to modify the "code," teens seem to find a way to express some individuality.

Objectives:

- 1) To study the buying and behavioral patterns of Japanese consumers regarding garments.
- 2) To study the problems faced while exporting garments to Japan.
- 3) To identify the factors hindering the penetration into non-traditional markets.

II. Research Design & Methods

- RESEARCH DESIGN:

The research adopts an exploratory cum descriptive approach. The research involves studying various problems faced by the Japanese Garment Importers.

- SAMPLING DESIGN:

In this study a simple Non-Probability method namely convenience sampling was adopted.

- SOURCES OF DATA:

Both Primary source (In-Depth Interviews) & Secondary source of data (Internet, AEPC, JETRO etc) is used.

- DATA COLLECTION:

Data was collected from the 100 respondents who were garment exporters to Japan & other markets from the Delhi, NCR region with the help of a well designed questionnaire. 80% of Indian garment export to Japan is made from this region only (by AEPC report). Data was also collected from a sample size of 25 respondents who were buyers and/or buying agents of Japanese companies.

### III. Results & Analysis

Problems faced by Indian companies while exporting to Japan. Interpretation via Chart Summary. Please refer Table 2 & Figure 1.

In the aftermath of global economic crisis in 2008, exports collapsed, resulting in the Japanese economy contracting in 2008 and 2009. Recovery in 2010 was again export-led. In 2013, garment exports to Japan stood at \$478.48 million, up 18.53 percent year-on-year. The figures were \$247.51 million and \$173.32 million in fiscal 2010-11 and 2009-10 respectively.

The reason for the steady increase in garment exports to the East Asian island nation is its 'China+1 strategy',

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announced by the Japanese government in 2008 to reduce dependency on China, the largest garment supplier worldwide. The policy promotes shifting of production from China to other nations such as Bangladesh, Vietnam, India. Trade between China and Japan was growing rapidly since the two countries normalized relations 40 years ago. However, Japan's unlawful "purchase" of China's Diaoyu Islands recently has overshadowed bilateral economic relations. China has been Japan's largest trade partner since 2007. Japan is a very promising market, and it is to do with the prevalence of fast fashion.

In 2013, there is 21.3% increase in Japan's total garment imports from whole world & 3.29% increase in volume from 2012. The Japanese importers are even ready to compromise on the costs to a great extent if the products have some distinct quality that can outmatch the garments from other countries.

#### **Market Challenges:**

The difficulty of penetrating the Japanese market depends to a great extent on the product or service involved. Key variables include the degree of local or third-country competition, the number of regulatory hurdles to be overcome, and cultural factors such as language (both spoken and written), strict service and quality expectations, and business practices. Generally, tariffs on most imported goods into Japan are low. However, cultural, regulatory, or other non-tariff barriers continue to exist that can impede or delay the importation of foreign products into Japan.

Exchange rate for Jan-Dec, 2013: (¥ / \$) = 97.85. Please refer Table 3.

Japan's total import value in 2013 was 81,242,545 (Million Yen) out of which total Garment imports (including Knit, Woven & Accessories) were 3,152,418 (Million Yen) which is only 3.88% of total import value.

Japan's import of knitted garments is higher than the woven garment and in the last three years share of knitted garment in total garment import has increased substantially.

#### **Business Culture:**

Japan's business culture attaches a high degree of importance to personal relationships, and these take time to establish and nurture. Patience and repeated follow-up are typically required to clinch a deal. Most Japanese business people prefer to do business with someone only when they have been properly introduced and have met face-to-face, and an introduction by a familiar "go-between" typically helps to dispel reluctance. High-quality and

customer support throughout the cycle are crucially important for Japanese which begins with establishing a close working relationship with a long-term commitment. Every effort should be made to answer technical questions in detail, to ensure that delivery dates are met, and to maintain absolute clarity regarding all issues from initial order through shipment and delivery. Problems most often arise from misunderstandings, lack of communication, language difficulties, and differing business practices. Japanese buyers are highly concerned with the quality of packing and poor packaging may lead to market entry problems. Missed deadlines and the arrival of goods damaged through poor packaging and shipping practices are interpreted as a bad message about the supplier. Quality control is one of the most important buying considerations for Japanese users. Japanese society is complex, structured, hierarchical and group-oriented. It places strong emphasis on maintaining harmony and avoiding direct confrontation. Japanese social and cultural norms tend to be group oriented rather than focused on the individual. In building relationships one should emphasize trust, confidence, loyalty and commitment for the long term.

### **IV. Conclusion**

Japanese apparel industry experienced a bounce back in 2012 after the devastating effects of the Great East Japan earthquake in 2011 and prolonged economic concerns. Current value sales increased due to the growing average spend per customer, particularly evident in women outerwear, kids wear.

Earlier consumers refrained from purchasing discretionary products including clothing and footwear, now they began to buy more premium and high-quality apparel which lasts longer than the simple, economy items.

In response to the labor costs increase for manufacturing apparels & the territorial disputes of surrounding islands with China, Japanese apparel companies shifted their production volume from China to South East Asian countries like Vietnam, Indonesia, Cambodia and India.

The outlook for apparel in Japan is expected to decline over the forecast period, driven by the decreasing population. Compared with the review period, value sales are expected to record a milder decline because the unit price increase is expected to continue, which will be influenced by the potential consumption tax hike to 8% in 2014 and 10% in 2015.

Japanese spend 5.1% of their household spending on clothes & during the Golden Week (April 27 to May 6), sale of

garments are at the peak level.

Japan's import of knitted garments is higher than the woven garment and in the last three years share of knitted garment in total garment import has increased substantially.

In 2013, there is 21.3% increase in Japan's total garment imports from whole world & 3.29% increase in volume from 2012. The Japanese importers are even ready to compromise on the cost but not on the quality.

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Indian Textile Journal

Japan External Trade Organization (JETRO) ,Guidebook for Export to Japan ( Apparel Products and Materials ) 2011

Motoshige Ito (1991) ,The Japanese Distribution System and Access to the Japanese Market National Bureau of Economic Research, (p. 175 - 190)

Annual reports and Journals of Apparel Export Promotion Council (AEPC, Govt. of India)

“Managing Productivity in the Apparel Industry “a book by Dr Rajesh Bheda

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<http://www.trade.gov/eastasia/nte/2011ccg-Japan.pdf>

<http://www.thaigarment.org/Report/050555/THE%20JAPANESE%20APPAREL%20MARKET%20AND%20IMPORTS%202012.pdf>

**Table 1: Personal Expenses**

Particulars	Yen	Ratio
Food	73,844	23.3%
Shelter	20,787	6.6%
Light, Fuel Water	21,477	6.8%
Furniture & Household articles	11,018	3.5%
Clothes & Footwear	16,188	5.1%
Medical	11,323	3.6%
Transportation	36,208	11.4%
Education	13,860	4.4%
Culture & Amusement	37,353	11.8%
Others	80,302	25.3%
Total Expenditure	317,133	100%

**Table 2: Interpretation via Chart Summary**

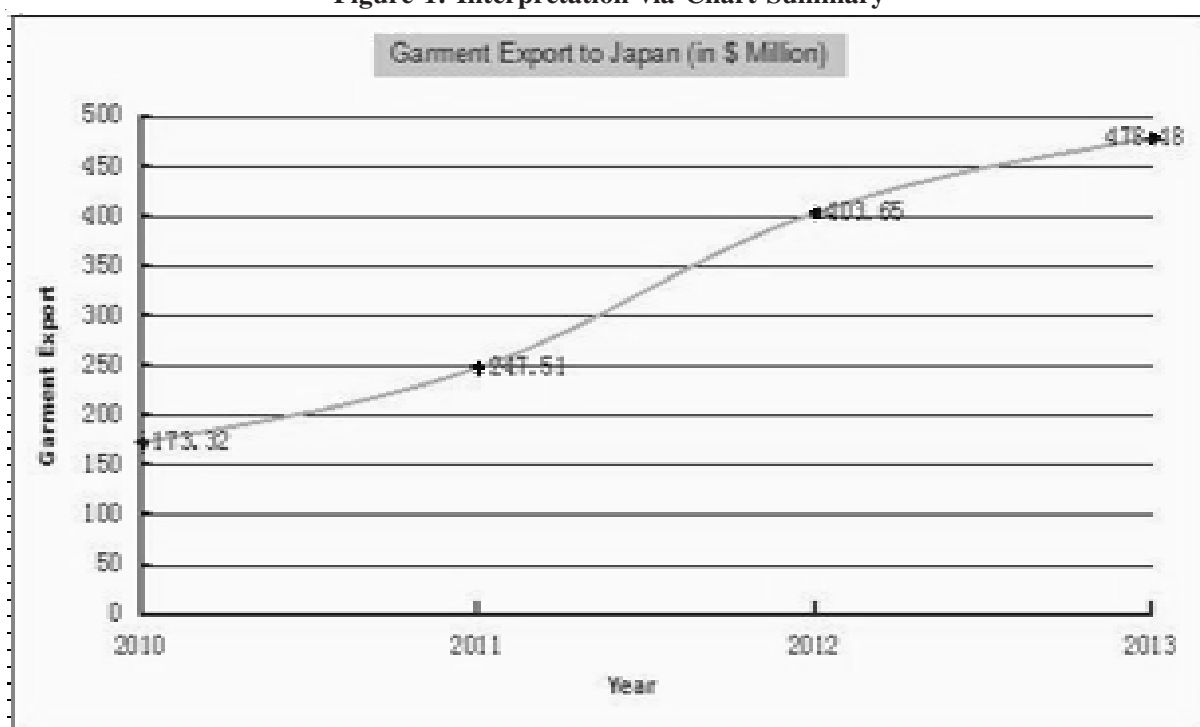
Problems	Percentage	Rank order
Taste & Preferences	23 %	4
High Quality Standards	32 %	2
Lead Time	39 %	1
Language Barrier	10 %	3
Price	22 %	5
Economies of Scale	39 %	7
Innovative Designs	11 %	6

**Table 3: Top 10 countries: Japan's Import Conditions of Garments (Jan-Dec, 2013)**

Countries	Knit		Woven		Accessories		Total		Total	
	1,000	Million	1,000	Million		Million	Ton	%	Million	%
	PC	Yen	PC	Yen	Ton	Yen			Yen	
China	221717	108388	100451	100993	147289	29080	886104	80.3	238462	75.6
Vietnam	185098	91893	84727	121645	6532	20383	75711	6.9	233920	7.4
Italy	2545	23537	2380	41131	545	18038	2465	0.2	82706	2.6
Indonesia	58090	32969	59516	42529	3736	5394	33031	3.0	80891	2.6
Bangladesh	67808	23282	39168	44817	19	44	17838	1.6	46798	1.5
Myanmar	3819	1937	36168	44817	19	44	17838	1.6	46798	1.5
Thailand	53473	22939	12910	7352	4870	15313	12556	1.1	45604	1.4
Cambodia	18077	10509	18154	17253	243	1102	10107	0.9	28864	0.9
India	6261	3269	24130	18462	983	4773	6411	0.6	26504	0.8
USA	3005	5282	1615	9493	455	3799	1594	0.1	18574	0.6
ASEAN	337362	169068	218273	241536	20704	51801	161169	14.5	462404	14.7
EU	6686	34530	4182	59277	1031	27249	4584	0.4	121056	3.8
World	269329	134920	130617	141207	174435	39114	110327	100.	315241	100.

Source: Japan Customs Statistics (Jan - Dec 2013)

**Figure 1: Interpretation via Chart Summary**



## WEAK FORM EFFICIENCY IN INDIAN CAPITAL MARKETS:AN ANALYSIS

Nufazil Altaf★ Farooq Ahmad Shah★★

*This paper attempts to test Efficient Market Hypothesis in its weak form on the returns of two sectorial indices (BSE 500 and CNX 500) in the Indian Securities Market. Using daily BSE 500 and CNX 500 indices, data for the period from 1<sup>st</sup> January 2005 to 31<sup>st</sup> December 2014 this paper employs various econometric techniques like Unit Root Test, Run Test and Variance Root Test for arriving at the conclusions. The results of the study reveal that returns on BSE 500 and CNX 500 are informational inefficient.*

**Keywords:** BSE 500, CNX 500, Weak form efficiency.

Every country around the world realizes the importance of stock markets as a leading indicator of the development of its economy. The present scenario is marked by an integration of worldwide markets where the momentum in one market has an effect on another. In such a scenario it becomes imperative that in security markets, scrip should reflect all the available information into the prices so that the investors can generate returns by relying upon such information (Nisar and Hanif, 2012). This association between information and share prices was explained initially by Fama (1970) as efficient market hypothesis. An efficient market is one where a large number of rational investors compete with one another to predict the future market value of a security under the assumption that information is freely available to all the investors. This was a major shift in stock market literature as earlier literature considered the efficient capital markets to follow Random walk hypothesis; asserting that changes in stock prices occurred randomly. However, Fama formalized the theory of efficient markets by presenting the efficient market hypothesis in the form of fair game model, asserting that in efficient markets, prices of the securities adjust rapidly to the available information. The basic premise of efficient market hypothesis is that information is freely available to all the investors and no investor can earn above average profits because all investors will react quickly to the available information. Thus, security prices remain adjusted to all the available information. Efficient market hypothesis is based on the following propositions:

- Information is freely available to all the investors.
- Investors use this information to make trading decisions.
- Investors react quickly to all the available information.

To sum up, efficient market hypothesis asserts that actual

prices of securities provide a good estimate of intrinsic value of a security

Fama (1970) asserted that an ideal capital market is one in which prices provide accurate signals for resource allocation. It is the market where investors can make investment decisions by choosing a security under an assumption that the price of such security reflects all the available information. Fama further divided the efficiency of markets into three forms, namely (A) Weak form; (B) Semi strong form and (C) Strong form.

The weak form of efficient market hypothesis (EMH) states that the current prices of security already reflect the historical information related to past prices, rates of return, volume of trade and other market relevant information. In other words it can be said price of the security stands adjusted to the past information. As this hypothesis assumes that market prices are already adjusted, it implies that past information should have no association with future returns (Reilly and Brown, 2012). Thus, we can say if the markets are weak form efficient then the security returns will have constant mean and are serially uncorrelated.

The semi strong form of EMH states that the current prices of security adjust rapidly to the release of public information. In semi strong form of market hypothesis, all the information considered by weak form hypothesis and also the non-market information is reflected by the prices of securities. It implies that once the information is public

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no investor should be able to make above average returns because the security prices rapidly adjust to the release of information (Reilly and Brown, 2012)

The strong form EMH states that the current prices of security adjust rapidly to all the information from public and private sources as well as the new information. Strong form of efficient market hypothesis maintains that no investor has access to the insider information that can help in the formation of prices. Thus, no investor should be able to consistently beat the market and derive above average returns (Reilly and Brown, 2012)

Efficiency of stock markets has gained importance in both academic and business world. Testing the efficiency of markets has become the interest of number of researchers in developing as well as developed countries. However, the results of studies are mixed. Some researchers support the efficient market hypothesis, while others reject it. Hence the present study is an attempt to test the efficiency of Indian stock markets taking the CNX 500 and BSE 500 indices as the sample.

## I. Review of Literature

Review: Theory and Empirics

Nisar and Hanif (2012) investigated the validity of weak form of efficient market hypothesis over the four major stock exchanges of South Asia (India, Pakistan, Bangladesh and Sri Lanka) for a period of 14 years. The study used serial correlation, Run Test, Variance Ratio Test and Unit Root Test for data analysis. Results of the study revealed that none of the four stock exchanges of South Asia supported weak form of efficient market hypothesis.

Pandey (2003) in the study of analysis of efficiency of Indian stock markets while using Runs Test and the Auto Correlation Function ACF (K) test for the period from January 1996 to June 2002 concluded that Indian Stock Markets do not follow efficient market hypothesis.

Neha and Saif (2014) tested the weak form market efficiency for CNX MNC index in India for the period of 10 years. Results of the study revealed that CNX MNC index is not weak form efficient.

Khan, Ikram and Mehtab (2011) tested the weak form efficiency of Indian Capital Markets over the period of 10 years. The study applied run test for data analysis and concluded that Indian Capital Markets are weak form inefficient.

Sharma and Kennedy (1977) compared the stock indices

of the three major stock exchanges during 1963-73 using run test and spectral analysis. Results of the study revealed that all the three stock exchanges follow random walk hypothesis and are weak form efficient.

Seiler and Walter (1997) tested the random walk hypothesis on the earliest stocks listed on the New York Stock Exchange (NYSE) from February 1885 to July 1962. The study concluded that NYSE stocks follow weak form efficient market hypothesis.

Keasey and Mobarek (2000) investigated the efficiency of Dhaka Stock Market using both parametric and non-parametric test for the period 1988 to 1997, concluded that Dhaka Stock markets are weak form efficient.

The above review makes it clear that the results are inconsistent as some studies have supported the weak form of efficient market hypothesis while some researches confirmed that markets are weak form inefficient. The findings are mixed and hence testing weak form of efficient market hypothesis is still relevant.

It is true that information moves the markets but the response to the information will be random, because different investors will learn about the information at different times. Furthermore, opinion regarding the news differs from investor to investor. Some may take information as favorable making them go long or buy while as others may treat it as unfavorable making them go short or sell. Since, the timing of trade is different; there will be ups and downs in the security prices. In such a case does efficient market hypothesis hold true? In this backdrop this study will be an attempt to answer the relevancy of efficient market hypothesis in the Indian capital markets.

The research has so far been mostly on the major indices while the sectorial indices have been almost ignored. This study would bridge this gap by taking into consideration two major sectorial indices of Indian stock markets, VIZ CNX-500 and BSE-500. Literature review exemplifies use of econometric techniques such as run test, unit root test and variance ratio test. This study would use these econometric techniques for data analysis.

### Objectives of study

This study would be an attempt to test the weak form of market efficiency of Indian capital Markets. Thus the following two objectives have been articulated:

- To test whether BSE 500 index supports the weak form efficient market hypothesis or not
- To test whether CNX 500 index supports the weak form

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efficient market hypothesis or not

## II. Research Design & Methods

Daily BSE 500 and CNX 500 indices data for the period from 1<sup>st</sup> January 2005 to 31<sup>st</sup> December 2014 have been used for this study. Since the data for the study is secondary in nature, the same has been obtained from NSE and BSE websites. The returns for both BSE-500 and CNX -500 indices  $R_t$  have been calculated by using the following formula:

$$R_t = \text{Log } P_t - \text{Log } P_{t-1}$$

Where  $P_t$  is the current value of index and  $P_{t-1}$  is the previous days value of index

The data collected has been analyzed by using different econometric techniques like Jarque-Bera, Unit root test (Augmented Dickey- Fuller test), Run test and variance ratio test. Data has been analyzed by using EViews -8 (Enterprise Edition) and SPSS (Version 20).

## III. Results & Analysis

Table 1 summarizes the descriptive statistics for the returns on BSE-500 and CNX-500 indices. Mean value of returns on BSE-500 is equal to 0.000236. There is a little difference between median and maximum value meaning that BSE-500 index has been able to generate highest returns during middle period of study. Minimum value of BSE 500 is -0.049722 meaning that BSE 500 has also generated negative returns during the period under study. The value of skewness of returns on BSE-500 is -0.532495 and the Kurtosis value is equal to 13.31528 which suggest that stock returns are not normally distributed. The negative skewness value shows that returns on BSE-500 are abnormally skewed towards the left tail. Standard deviation of returns on BSE-500 is equal to 0.005632 which shows the presence of volatility in BSE.

In addition to above measures of descriptive statistics, the Table reveals Jarque-Bera value of stock returns on BSE-500 is equal to 11125.82 with the probability value of 0.000000 which means that the probability value of Jarque-Bera is less than 0.05. Thus, we can reject our first null hypothesis at 5 percent significance level meaning that stock returns on BSE 500 are not normally distributed.

Table 1 shows the descriptive statistics of CNX-500. Mean value of returns on CNX-500 is equal to -0.00000409 meaning that CNX-500 has mostly generated negative returns during the study period. The median value of returns

on CNX-500 is also negative which supports the notion that CNX-500 has mostly generated negative returns. There is a huge gap between maximum and minimum values of stock returns on CNX-500 which implies the presence of volatility of returns on CNX-500. This is also evident from the value of standard deviation of stock returns of CNX 500.

The value of skewness of returns on CNX-500 is 1.122001 and the value of Kurtosis is equal to 17.35961, suggesting stock returns are not normally distributed. The positive skewness value shows that returns on CNX-500 are abnormally skewed towards the right tail.

The Table further reveals that Jarque-Bera value of stock returns on CNX-500 is equal to 21853.90 with the probability value of 0.000000 which means that the probability value of Jarque-Bera is less than 0.05. Thus, we can reject our second null hypothesis at 5 percent significance level meaning that stock returns on CNX-500 are not normally distributed.

### Unit root test

Hassan et.al (2007) exemplified the use of unit root test for testing market efficiency. In their study they argued that for markets to be efficient, prices of the security should move in random or non-stationary fashion. Since unit root test investigates whether time series is stationary or not, it becomes relevant to test market efficiency in the present study using this test. This study has used the most famous measure of testing unit root hypothesis the Augmented Dickey-fuller test

From Table 2 it can be seen that probability value of t-statistic is less than 0.05 meaning that the null hypothesis of BSE-500 having a unit root can be rejected. Another explanation for the rejection of null hypothesis is that ADF t-statistic is greater than test critical values at all the three levels meaning that returns on BSE-500 are stationary. Thus, it can be concluded that BSE-500 does not support weak form of efficient market hypothesis or it can be said that the index is informational inefficient. The above results are consistent with the results of Pandey (2003) and Neha and Saif (2014).

From the Table 3 it can be seen that probability value of t-statistic is less than 0.05. Thus, the null hypothesis that CNX-500 has a unit root can be rejected. Another explanation for the rejection of null hypothesis is that ADF t-statistic is greater than test critical values at all the three levels. It means that returns on CNX-500 are stationary and therefore it can be asserted CNX-500 does not support

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weak form of efficient market hypothesis or CNX-500 is informational inefficient. The above results support the results of previous studies of Pandey (2003) and Neha and Saif (2014)

### Run test results

The second method used for testing null hypothesis is run test proposed by De Fusco (2004). In Run Test each price change is assigned a plus sign (if the prices increase) and minus sign (if the prices fall). A run occurs when two consecutive changes are same. Run test is used to determine statistical dependence or randomness of stock returns. There are two decision rules for accepting or rejecting null hypothesis. According to first rule if Z-value does not falling between  $\pm 1.96$  then null hypotheses of observed randomness can be rejected. Another rule for accepting or rejecting null hypothesis of observed randomness is that when expected number of runs is different from observed number of runs null hypothesis can be rejected and vice versa.

It is evident from Table 4 that z value for both the series, BSE-500 and CNX-500 do not fall in between  $\pm 1.96$ . It can be concluded that returns on BSE-500 and CNX-500 are not weak form efficient.

### Variance root test results

Lo and A. C Mackinlay (1988) proposed variance ratio tests to answer the question if returns on security are predictable or not? This test compares the variance of difference of time series data over different periods. Variance ratio tests the predictability of returns on security under assumptions of homoscedasticity and heteroskedasticity by using asymptotic distribution. There are two decision rules for accepting or rejecting null hypothesis. First rule for accepting or rejecting null hypothesis is that, if Z-statistics does not fall in between  $\pm 1.96$ . Null hypothesis of predictability of returns on security can be rejected. Second rule states that if Variance ratio of returns is equal to 1. Null hypothesis of predictability of returns on security cannot be rejected.

The values of Z-Statistic and variance under homoscedastic and heteroskedastic assumption on BSE-500 in Table 5 show that BSE 500 does not support weak form efficient market hypothesis as the z-Statistic does not fall in between 1.96 and variance ratio is not equal to 1 over the multiple periods. It can therefore be concluded that under both homoscedastic and heteroskedastic assumption of variance root test, returns on BSE-500 is not weak form efficient.

The results in Table 5 are consistent with the results of Nisar and Hanif (2012) and Pandey (2003)

Table 6 shows the calculated values of variance root test for returns on CNX-500 under the assumption of homoscedasticity and heteroskedasticity. The values of z-Statistic do not fall in between 1.96 and variance ratio is not equal to 1 over the multiple periods implying that returns on CNX-500 do not support weak form of efficient market hypothesis. The above results are consistent with the results of Pandey (2003) and Nisar and Hanif (2012)

## IV. Conclusion

This study empirically tested the weak form of efficient market hypothesis by using econometric techniques like unit root test, run test and variance root test in the Indian context by taking two sectorial indices BSE-500 and CNX-500 as sample for a period of 10 years (1<sup>st</sup> January 2005 to 31<sup>st</sup> December 2014).

The results of the study indicate that returns on BSE-500 and CNX-500 are not normally distributed that is the returns on both indices are stochastic that is the returns can be analyzed statistically but cannot be predicted precisely.

The study used Augmented Dickey Fuller test for testing unit root on the returns of BSE-500 and CNX-500. The results concluded that returns on BSE-500 and CNX-500 are not weak form efficient.

Another test for testing weak form efficiency used in the present was run test. Results of run test reveal that returns on BSE-500 and CNX-500 do not support weak form efficient market hypothesis.

Last test used by the study was variance root test under the assumption of homoscedasticity and heteroskedasticity. Results of variance root test on the returns of BSE-500 and CNX-500 under both the assumptions revealed that returns on both indices do not support efficient market hypothesis.

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**Table 1:Descriptive statistics of BSE-500 & CNX-500**

	<b>BSE-500</b>	<b>CNX-500</b>
Mean	0.000236	-0.00000409
Median	0.000648	-0.000277
Maximum	0.055520	0.074935
Minimum	-0.049722	-0.041124
Std. Dev.	0.005632	0.006628
Skewness	-0.532495	1.122001
Kurtosis	13.31528	17.35961
Jarque-Bera	11125.83	21853.90
Probability	0.000000	0.000000
Observations	2483	2483

**Table 2: Augmented Dickey-Fuller test on BSE-500**

		<b>t-statistic</b>	<b>Prob*</b>	<b>Max lags</b>
Augmented Dickey-Fuller test		-25.38893	0.0000	26
Test critical values	1% level	-3.432793		
	5% level	-2.862505		
	10%level	-2.567329		

Lag length: Automatic based on SIC, MAXLAG=26  
Deterministic Terms: Intercept

**Table 3: Augmented Dickey-Fuller test on CNX 500**

		<b>t-statistic</b>	<b>Prob*</b>	<b>Max lags</b>
Augmented Dickey-Fuller test		-22.22521	0.0000	26
Test critical values	1 %level	-3.432807		
	5% level	-2.862511		
	10 %level	-2.567332		

Exogenous: Constant  
Lag length: Automatic based on SIC, MAXLAG=26  
Deterministic Terms: Intercept

**Table 4: Run test on BSE-500 and CNX-500**

	<b>BSE-500</b>	<b>CNX-500</b>
Cases< Test values	1241	1241
Cases>=Test values	1242	1242
Total Cases	2483	2483
Number of Runs	929	1439
Z	-12.585	7.888
Asymp. Sig.(2- Tailed)	.000	.000
a. Median		

**Table 5: Variance root test on BSE-500 under the assumption of Homoscedasticity and Heteroskedasticity**

Results under Homoscedastic assumption				Results under Heteroskedastic assumption		
Period	Var.Ratio	z-Statistic	Probability	Var. Ratio	z-Statistic	Probability
2	0.712919	-14.30230	0.0000	0.712919	-6.874798	0.0000
3	0.466937	-17.81498	0.0000	0.466937	-8.638776	0.0000
4	0.368907	-16.80585	0.0000	0.368907	-8.316504	0.0000
5	0.298201	-15.95853	0.0000	0.298201	-8.072639	0.0000
6	0.246335	-15.18865	0.0000	0.246335	-7.833477	0.0000
7	0.193950	-14.73365	0.0000	0.193950	-7.723039	0.0000
8	0.174022	-13.91122	0.0000	0.174022	-7.386753	0.0000
9	0.156518	-13.23957	0.0000	0.156518	-7.105250	0.0000
10	0.139921	-12.69074	0.0000	0.139921	-6.868418	0.0000
11	0.132211	-12.11846	0.0000	0.132211	-6.602379	0.0000
12	0.121061	-11.67981	0.0000	0.121061	-6.398589	0.0000
13	0.107329	-11.33833	0.0000	0.107329	-6.241769	0.0000
14	0.095896	-11.01731	0.0000	0.095896	-6.093191	0.0000
15	0.094553	-10.61921	0.0000	0.094553	-5.899479	0.0000
16	0.088090	-10.32125	0.0000	0.088090	-5.758679	0.0000

**Table 6: Variance root test on CNX-500 under the assumption of Homoscedasticity and Heteroskedasticity**

Results under Homoscedastic assumption				Results under Heteroskedastic assumption		
Period	Var. Ratio	z-Statistic	Probability	Var. Ratio	z-Statistic	Probability
2	0.475434	-26.13372	0.0000	0.475434	-9.787383	0.0000
3	0.246132	-25.19429	0.0000	0.246132	-10.05181	0.0000
4	0.200548	-21.28921	0.0000	0.200548	-8.998463	0.0000
5	0.158153	-19.14316	0.0000	0.158153	-8.468991	0.0000
6	0.136716	-17.39781	0.0000	0.136716	-7.975037	0.0000
7	0.102641	-16.40267	0.0000	0.102641	-7.730693	0.0000
8	0.098446	-15.18409	0.0000	0.098446	-7.318112	0.0000
9	0.087713	-14.31956	0.0000	0.087713	-7.029611	0.0000
10	0.075503	-13.64124	0.0000	0.075503	-6.799666	0.0000
11	0.073039	-12.94477	0.0000	0.073039	-6.535926	0.0000
12	0.066980	-12.39847	0.0000	0.066980	-6.329870	0.0000
13	0.060038	-11.93899	0.0000	0.060038	-6.155624	0.0000
14	0.052331	-11.54818	0.0000	0.052331	-6.007814	0.0000
15	0.054365	-11.09054	0.0000	0.054365	-5.817710	0.0000
16	0.049311	-10.76015	0.0000	0.049311	-5.687594	0.0000

# AN EXPLORATION OF THE IMPACT OF SERVICE TENURE AND NUMBER OF ORGANIZATIONS WORKED EARLIER ON EMPLOYEE SATISFACTION

Rupali Arora ★

*Employee attrition and managing employee productivity has become a vital issue in the corporate field. It is a big confront for managers to match the expectations of every employee in such an increasing trend of job hopping. In the ITeS-BPO sector of India where retention has become a challenge during the past couple of years the BPO-ITeS industry has exhibited the highest attrition rates ranging around 65 per cent. This is a vicious and persistent problem as the attrition rate has increased since 2001 despite all the efforts made by companies in the industry. An attempt has been made in this research to study the BPO Sector and to see whether tenure of service and number of organizations worked earlier has an impact on factors influencing employee satisfaction for managing digital business performance and productivity as the growth of an organization depends on its ability to compute precisely the performance of its internal customers and use its objectivity to optimize them as a crucial resource.*

*Key Words: Employee Attrition, Employee Productivity, Tenure of Service, Job Hopping, Retention.*

India is globally well established as an Information Technology (IT) services destination. The success in the IT services sector has empowered the country to take its initial steps into the IT-enabled outsourcing domain. The Indian IT-enabled outsourcing market has its roots in the mid-1990s when companies such as American Express, British Airways and GE capital setup captive units for customer support and transaction processing services. Independent BPO vendors began emerging in the late 1990s, and thereafter, IT services companies also made a foray into the IT-enabled outsourcing realm.

Indian IT sector offers cost effective services to the customers situated globally and has emerged as one of the major key players in this global world. Indian BPO companies have a unique distinction of providing efficient business solutions with cost and quality as an advantage by using state of art technology. In India, BPO Industry has grown in the last decade. India enjoys being the favorite off shore destination because of people (manpower) and location. The Indian software & services industry has grown at a remarkable pace since 2001-02. The IT-ITeS industry has continued to perform its role as the most consistent growth driver for the economy.

During FY 2013-14, ITES/BPO exports are likely to be USD 20 billion, with a growth rate of ~11.4% over FY2012-13 (As shown in Table 1). Domestic IT-ITES revenue (excluding hardware) is estimated to reach INR 1147 billion in FY2013-14, as compared to INR 1041 billion in FY2012-13, a y-o-y growth of ~10%.

## I. Review of Literature

### Conceptual Framework

The essential job of management of an organization is effective utilization of available human, technological, financial and physical resources for the achievement of organizational objectives. Human resources play a vital role in realization of organizational objectives. "Every aspect of a firm's activities is determined by the competence, motive and general effectiveness of its human resource. Out of all the tasks of management, managing the human component is the central and most important task because all depends upon how well it is done".

To meet the challenge of increasing service quality and customer satisfaction-a vital requirement is extremely adroit and dedicated work force. While keeping existing talent and still remaining competitive in business, calls for attention to employee satisfaction for which in-depth study of employee satisfaction and attrition, becomes utmost important as employees are now a day treated at par with customers and also referred to as internal customers sometimes. In doing so, companies need to understand the attributes which affect satisfaction with their services. The related literature review will help in formulating the objectives and hypothesis of the present study.

John W. Hunt and Peter N.Saul (1975) in their survey of white collar workers, has proposed that age and tenure had positive, linear relationships to overall job satisfaction.

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Age had a stronger relationship with satisfaction in males than tenure; the reverse held for females. When six facets of satisfaction were examined, the relationships with age and tenure became more complex.

R.D. Sharma and Jeevan Jyoti (2006) made an in depth study to see, if there is a co-correlation between length of employment and perceived job satisfaction. The attitude of randomly selected 120 university teachers towards their job was analyzed. Statistical tools, viz., mean, factor analysis, correlation, multiple regression, multiple correlation were employed to analyze the data collected. The results of the study reveals that out of all the dimensions constituting overall job satisfaction only the two dimensions i.e., the job itself and pay have a negligible association with length of employment. The results of regression analysis confirm that length of employment has no effect on job satisfaction of university teachers and there exists a non linear relationship between the two.

Raina Anupama D. (2006) explored the growth of attrition rate which has been a major concern since the last couple of years. The research was carried out with the main objective to know the problems and effect of attrition on employees working in call centers. The findings of the research were that attrition was more common between the age group of 20-25 years and within three months of joining the organization. The employees leave the organization for career growth and higher studies. Further analysis show that attrition in call centers occur because of lack of social interaction, personal problems, slow growth prospects, odd shifts and monotony of work. Keeping in mind the causes of attrition, various employee retention strategies have been recommended. It recommends that Indian call centers should adopt a medium-or long term sustainable strategy for retention of employees in order to add value to the processes, as other countries are moving aggressively to upgrade the skills of employees.

Jyothi B.S and Dr. P.T. Ravindran (2012) addresses on the knowledge gap by exploring the relationship between HR practices in IT companies and job satisfaction from the perspective of employees of IT units located at Bangalore. The study also confirms the relationship between job satisfaction and organizational commitment of the employees. The findings of this study lead to a conclusion that it is imperative for Software and ITeS companies to address the needs of their employees to strengthen their motivation, satisfaction, and commitment leading to minimizing employee turnover.

Sulakshna Diwedi et al (2014) portrayed the impact of

Organizational Culture on Commitment of Employees by a research study carried out in 15 BPO units in and around Chandigarh. The results reveal that employees of smaller BPOs perceive their culture a shade better than medium or larger BPOs.

### **Need and Objectives of the Study**

The earlier studies have examined various aspects of the job satisfaction in different industries. However, the issue of employee satisfaction needs in-depth study in service organizations like ITeS and BPO companies in India wherein not much research work has been done in this regard despite an alarmingly high rate of employee attrition and highly expensive process of finding suitable replacement of employees leaving the organization. Such a study will help the management of BPO companies to adopt suitable measures to enhance employee satisfaction. In view of the above, the objective of the present study is to explore the factors influencing the employee satisfaction in ITeS-BPO companies in India and to make a comparison on the basis of Number of organizations worked earlier and on the basis Tenure of service.

## **II. Research Design & Methods**

### **Methodology**

**Sampling:** For the purpose of this study primary data has been collected with the help of a structured questionnaire from call floor employees working with ITES-BPO Companies located in Delhi and National Capital Region. The target population for the study comprised of employees of the companies located in this region and listed in the "Directory of IT Enabled Service Providers" published by NASSCOM, which is the apex body for this industry. There are 96 such companies as per this directory. At the first stage 28 companies were selected randomly from the list of 96 companies. At the second stage, a simple random sample of 428 respondents has been taken for the purpose of the study from these 28 companies. The demographic profile of respondents is given in Table 2.

**The measure:** In order to measure employee satisfaction a structured questionnaire was developed. It contains 35 statements concerning various aspects of employee satisfaction measured on a 5 point Likert Scale ranging from 'Strongly Disagree' to 'Strongly Agree'. A weight of '5' was assigned for 'Strongly Agree' and '1' for 'Strongly Disagree'. The other categories of scale were '4' for 'Agree', '3' for 'Neither Agree nor Disagree' and '2' for 'Disagree'. Approximately 25 per cent of the total statements were worded negatively in order to avoid

response set bias as the respondents have a tendency to reply in a affirmative during data collection. These were, however, reverse coded and interpreted accordingly while doing data analysis. Cronbach's alpha method has been applied for testing the reliability of the scale. Its value turns out to be 0.873 (Table 3) which is considered quite satisfactory. It implies that scale used in the study was reliable.

Data analysis techniques: In order to bring out the factors affecting employee satisfaction in the ITES-BPO companies, data has been analyzed by applying factor analysis. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of Sphericity were applied to verify the adequacy or appropriateness of data for factor analysis. As depicted in Table 2 value of KMO measure is found to be .890, indicating that the factor analysis is adequate. The chi-square of Bartlett's Test of Sphericity is 6.549, which is highly significant ( $p < 0.001$ ). It indicates that the data is appropriate for factor analysis. SPSS Software 16.0 version has been used for analyzing the data.

After verifying the reliability of the scale and testing the appropriateness of the data, factor analysis was conducted to identify the factors that affect the employee satisfaction towards their job. For this purpose, Principal Component Method was applied followed by Varimax Rotation Method. The Principal component method helps in determining the number of factors to be extracted while a varimax rotation method enables the more meaningful interpretation of factors.

### III. Results & Discussion

#### Interpretation of Factors

The principal component method, using varimax rotation has reduced the 35 statements to eight factors. A rotated component matrix along with factor loadings is given in Table 5.

Eigen values along with per cent variance accounted for by each factor are given in Table 4. It indicates 61.18 per cent of cumulative variance has been explained by eight (8) factors. The variance reflects considerable contribution of these factors in building employee satisfaction from the organization they are working with.

All the factors account for high positive loadings. Keeping in view the loadings of the factors, these are named as Company Image, Compensation and resources for work, Organizational Climate, Training and Development facilities, Impact and Relevance of Job, Work-Place Relations,

Organizational Communication and Performance Appraisal.

#### Tenure of Service-wise Comparison of Dimensions of Satisfaction

In order to find out that whether the level of employee satisfaction gets affected by the Tenure of Service ANOVA has been conducted to ascertain whether there is any significant difference in the mean scores of factor of employee satisfaction towards working in an ITES-BPO company across the four groups of employees depending upon their length of service that is less than 12 months, 12 months- 24 months, 24 months-36 months, and more than 36 months. The results of the same are presented in Table 6. A glance at this Table indicates that the factor 'Work Place Relations' has got the highest means score in case of two groups of employees having service tenure less than 12 months and 12-24 months. 'Impact and Relevance of Job' is accorded the highest mean score (3.545) by the group 24-36 months. 'Company Image' is given the highest mean score (3.475) by the group having the longest service tenure i.e. more than 36 months.

'Compensation and Resources for Work', 'Organizational Climate', 'Training and Development Facilities', 'Impact and Relevance of Job', and 'Performance Appraisal' are the factors having significant difference in their means scores among the four groups based on length of service.

The employees of different groups are neither satisfied nor dissatisfied with performance appraisal system. Since the mean score being 3.022, 2.904, 2.899, 2.575 for the respondents with less than 12 months, 12 months-24 months, 24 months-36 months, more than 36 months service respectively. Further, the level of satisfaction from this factor is negatively related with increase in service tenure which means that with increase in the length of service, employees are becoming dissatisfied with the practices related to performance appraisal. The difference between the mean score of four groups is significant at 5 per cent level as indicated by the corresponding F value of 2.965.

In case of senior most employees with respect to their length of service i.e. more than 36 months, mean score is 2.708 for the factor 'Compensation and Resources for Work' which happens to be the lowest. The highest mean score 3.275 is obtained in the case of group having service tenure of 12-24 months. The mean score reflects that except the group more than 36 months, employees of remaining group are neither satisfied nor dissatisfied with this particular factor. Employees of group more than 36 months are not satisfied with this factor. With F-value

5.035 there is significant difference in mean scores of four groups at 5% level in case of 'Compensation and Resources for Work'.

The respondents in the category of less than 12 months of service are not satisfied with the 'Organizational Climate' (mean score=2.951), as shown in Table 6 but as the length of service increases to 12 months- 24 months, 24 months-36 months the satisfaction from this particular factor also increases as reflected by the mean score 3.209 and 3.413 for the two groups, respectively. With maturity and experience, employees become more comfortable with 'Organizational Climate'. As a result they are satisfied with their job. However, rising expectations seems to become a cause of dissatisfaction for the highest tenure of service group (more than 36 months). It is clearly reflected from the (Mean Score) Table 6 that for employees having service of more than 36 months there is dissatisfaction with 'Organizational Climate' (mean score=2.862). The difference is statistically significant at 1% level as shown by the F -value of 6.177 in Table 5.23.

Through the analysis it has been established that the difference, in mean scores with respect to factor 'Training and Development Facilities' turned out to be statistically significant at 5% level, F-value being 3.665, and the df being 3/424. The employees with service of less than 12 months neither agree nor disagree that they are satisfied with the training programmes as well as with the opportunity to apply the learning for the benefit of the organization after attending training programmes. But the respondents with tenure of service 12 months- 24 months (mean score=3.553), reflects that they are satisfied with training and development facilities. These facilities include employees' participation in determining training needs and the job rotation policy facilitating their personal and professional growth. Also it is observed that the satisfaction level turns out to be the lowest among four groups in case of the respondents having service tenure of more than 36 months (mean score=3.094).

For the next factor related to 'Impact and Relevance of Job', Table 6 exhibits that the employees having an experience of less than 12 months are neutral with it (mean score=3.172). In case of respondents with tenure of service 12 months- 24 months (mean score =3.362) and 24 months-36 months (mean score=3.545). It emerges that they are slightly pointing out towards the satisfaction with the factor 'Impact and Relevance of Job' while the same mean score dips down to a little low being 3.295 for the respondents having more than 36 months of service. The ANOVA results reveal that difference in mean score turns

out to be significant at 5% level, F value being 3.965. However, there is no significant difference in the mean scores of four groups of employees regarding the remaining three factors viz. 'Company Image', 'Work Place relations' and 'Organizational Communication' as F-value turns insignificant at 5 per cent level. It indicates that employees across different tenure of service groups feel same level of satisfaction with 'Company Image', 'Work Place Relations', and 'Organizational Communication'.

Number of Organizations Worked earlier-wise Comparison of Dimensions of Satisfaction

The level of employee satisfaction gets affected by the number of jobs he/she has changed because each job experience moulds the expectations and perception of the employee regarding the job. In order to find out, whether there exists any significant difference in the level of satisfaction among employees having worked for different number of organizations, they were grouped into four categories viz. none (first employer being the current organization), one, two and three and more.

Table 7 exhibits that among all the factors, the factor 'Work Place Relations' has got the highest mean score. In case of three groups the mean scores are none (3.619), two (3.488), and three and more (3.293). The group having left 'one' job accorded the highest mean score (3.543) on the factor 'Company Image'. As far as the lowest mean score is concerned, except the employees of group 'Three and more' who have given the lowest mean score (2.832) on the factor 'Organizational Climate' the remaining three groups have accorded the lowest mean score on the factor 'Performance Appraisal'.

In order to find out whether there is any significant difference among the mean scores of satisfaction of employees of four groups, ANOVA has been applied.

It is being observed from Table 7 that on the factor 'Training and Development Facilities' the difference in mean scores =3.449, 3.523, 3.179 and 3.144 has turned statistically significant at 5 percent with f-value of 5.499, df being 4/423 for the respondents in four different groups viz. none, one, two, three and more respectively. It reflects that when a respondent makes a change from first job and join a new company (group one), the satisfaction increases from the 'Training and Development Facilities'. However, with further change in job (Group 'two' and 'three and more') the satisfaction from training facilities starts decreasing. The reason for the same can be that employees of an ITeS-BPO company have to perform monotonous and repetitive task without using one's intellectual abilities.

Regarding the factor 'Company Image', the table exhibits that the highest mean score is accorded by employees in Group one (3.543), followed by Group none (3.461), Group three and more (3.273), and Group two (3.249). The f- value for this dimension of employee satisfaction turns significant at 5 percent level. Thus, employees in Group one agrees with the dimensions implying that they are satisfied. However, employees in remaining three groups are neither satisfied nor dissatisfied with 'Company Image'.

Similarly regarding the factors, 'Compensation and Resources for Work', 'Work Place Relations', and 'Organizational Communication' the ANOVA results have found the F-value significant at 5 percent level. This implies that there is significant difference in the level of satisfaction with each of these factors across the four groups of employees. The lowest level of satisfaction is found for employees who left two or three and more jobs.

In case of each of remaining factors viz. 'Organizational Climate', 'Impact and Relevance of Job', and 'Performance Appraisal', F-value turns insignificant at 5 percent level. Thus, no significant difference has been found in mean scores of four employee groups i.e. they feel same level of satisfaction on each of these three factors respectively.

#### IV. Conclusion

'Compensation and Resources for Work', 'Organizational Climate', 'Training and Development Facilities', 'Impact and Relevance of Job', and 'Performance Appraisal' are the factors having significant difference in their means scores across the four groups based on length of service. Except the factors 'Impact and Relevance of Job' and 'Company Image' the lowest mean score on the remaining factors is observed in the case of highest tenure of service group i.e. more than 36 months. Further, the level of satisfaction from the factor 'Performance Appraisal' is inversely related with increase in service tenure which means that with increase in the length of service, employees are becoming dissatisfied with the practices related to performance appraisal in ITeS-BPO companies. Hence the management of ITeS-BPO companies should pay special attention to improve the satisfaction level of employees having maximum service experience with them. Suitable measures need to be taken to improve the 'Performance Appraisal', 'Compensation and Resources for Work', and 'Organisational Climate'.

Significant differences in the level of employee satisfaction has been observed on the factors 'Work Place Relations',

'Training and Development', 'Company Image', 'Compensation and Resources for Work', and 'Organizational Communication' across the four groups of employees based on the number of organizations worked earlier. The lowest level of satisfaction on the factors 'Company Image', and 'Compensation and Resources for Work' is found in case of employees who have left two jobs. Further, the lowest satisfaction with three factors viz. 'Training and Development Facilities', 'Work Place Relations', and 'Organizational Communication' has been found in case of employees who have already left three or more jobs. Thus, the employees who have already left the larger number of jobs seem more dissatisfied on more number of factors. Also, except the employees who have left three or more jobs, for the remaining three groups the lowest level of satisfaction has been found with the factor 'Performance Appraisal'.

Considering the differences in the level of satisfaction among four employee groups based on number of organization worked earlier, it is suggested that ITeS-BPO companies while recruiting and selecting employees should give lesser preference to candidates who have earlier left more number of jobs i.e. three or more, followed by two. However, candidates having an initial experience on one job can be given preference over other groups as they have exhibited the satisfaction levels which are higher than those of remaining three groups in case of the most of the factors of employee satisfaction.

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**Table 1: Segment wise export Revenue Trends in IT – ITES Industry (in USD billion)**

Year/ Segment	2009-10	2010-11	2011-12	2012-13	2013-14 (E)	CAGR % (2009-14)
IT Service	27.3	33.5	39.9	45.4	51.9	15.0
ITeS-BPO	12.4	14.2	15.9	17.9	19.9	11.21
Software Products, Engineering Services, R&D	10.0	11.4	13.0	12.8	14.2	8.14
Total IT-ITeS	49.7	59.0	68.8	76.1	86.0	12.8

Source: <http://deity.gov.in/content/performance-contribution-towards-exports-it-ites-industry>

**Table 2: Profile of Respondents**

Respondents characteristics		Frequency	Percentage	Cumulative Percentage
<b>Gender (N=428)</b>	Male	282	65.8	65.8
	Female	146	34.2	100.0
<b>Marital status (N=428)</b>	Single	354	82.7	82.7
	Married	74	17.3	100.0
<b>Tenure of Service Profile (N=428)</b>	Less than 12 months	104	24.2	24.3
	12 months to 24 months	80	18.7	42.9
	24 months to 36 months	82	19.2	62.1
	More than 36 months	162	37.8	100.0
<b>Number of companies worked before (N=428)</b>	None	124	28.9	28.9
	One	122	28.5	57.4
	Two	130	30.3	87.7
	Three and More	52	12.3	100.0

**Table 3: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.890
Bartlett's Test of Sphericity	Approx. Chi-Square
	Df
	Sig.
Cronbach's Alpha	.873
No. of Items	35

**Table 4: Eigen Values**

Rotation Sums of Squared Loadings			
Component	Eigen Value	% of Variance	Cumulative % of Variance
1	3.601	10.288	10.288
2	3.155	9.014	19.302
3	2.759	7.883	27.185
4	2.758	7.881	35.066
5	2.641	7.546	42.612
6	2.392	6.833	49.445
7	2.157	6.164	55.609
8	1.951	5.575	61.184

**Table 5: Rotated Component Matrix<sup>a</sup>**

	Components (with factor loadings)								
	FS1	FS2	FS3	FS4	FS5	FS6	FS7	FS8	h <sup>2</sup>
I feel that this is a good company to work for.	.757								.690
I think company's management is progressive.	.840								.812
In this organization, people have the opportunity to set challenging goals for themselves.	.552								.566
It gives me a sense of pride working with the organization.	.734								.699
The company is seriously interested in what employees think for the company.	.669								.634
I am paid at par or more compared to other organizations for similar jobs.		.736							.603
The perks and benefits I get are relevant to me.		.709							.588
The organization provides adequate infrastructure resources and facilities for the smooth performance of work.		.592							.508
There is free flow of communication from top to bottom and bottom to top.		.544		.338					.594
I am fairly paid for the work I do.	.349	.491							.548
Special initiatives and efforts are duly recognized at the time of appraisal.		.452					.353		.403
After attending training programmes, employees are motivated to apply the learning for the benefit of the organization.				.775					.781
Employees participate in determining the training needs and skills they should acquire.				.745					.667
Job rotations are made in accordance with a well thought out policy.		.366		.618					.612
The training programme facilitates my personal and professional growth.				.542			.358		.578
Conflicts in this organization are openly discussed and resolved.			.748						.734
I am compelled to violate the formal and administrative procedures and policies owing to group/political pressure.			.743						.599
I believe that the company has an uncertain future.			.708						.616
People in this organization avoid politicking and unhealthy practices as ways to get things done.			.696						.590
I do not find any conflict between family and work.					.789				.656
My job is fairly important for the organization to achieve its goals.					.699				.565
This job does not offer me enough opportunities to acquire new competencies (knowledge, skills etc.).					.736				.586
The job profile is monotonous and repetitive.					.693				.512
I have to constantly cope with new work methods/ technology.					.583				.465
My senior is approachable and willing to help in solving my problems.						.737			.727
People outside the company give me recognition due to my job.						.658			.579
Some of my colleagues and subordinates try to defame and malign me as unsuccessful.						.625			.492
Performance appraisal system is transparent		.357		.337					.513.703
I feel energized after interacting with my seniors.							.615		.634
I feel that the superiors are not receptive to my suggestions.							.676		.633
The appraisal system in this organization has helped me to learn about my strengths and weaknesses for improvements.		.397					.495		.591
The work I do is seldom appreciated.								.813	.710
In this organization people are rewarded for loyalty to powerful individuals than for performance.								.823	.719
The processes and procedures here are conducive to my work performance.							.571		.503
Superiors give feedback to their subordinates with a adequate care and concern.	.330						.471		.516

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

**Table 6: Tenure of Service-wise Comparison of Dimensions of Satisfaction**

Factors leading to employee satisfaction	Less than 12 months	12 months-24 months	24 months-36 months	More than 36 months	F-value	P-value
Company Image	3.349	3.552	3.421	3.475	1.099	.350
Compensation and Resources for Work	3.121	3.275	3.061	2.708	5.035	.002
Organizational climate	2.951	3.209	3.413	2.862	6.177	.000
Training and Development Facilities	3.282	3.553	3.447	3.094	3.665	.013
Impact and Relevance of Job	3.172	3.362	3.545	3.295	3.965	.008
Work Place Relations	3.517	3.641	3.481	3.338	1.566	.197
Organizational Communication	3.365	3.456	3.288	3.150	1.555	.200
Performance Appraisal	3.022	2.904	2.899	2.575	2.965	.032

Note: i) All figures, except F-values and p-values are mean values,  $df=3/424$ .

**Table 7: Number of Organizations Worked earlier-wise Comparison of Dimensions of Satisfaction**

Factors leading to employee satisfaction	None	One	Two	Three & more	F-value	P-value
Company Image	3.461	3.543	3.249	3.273	3.046	.029
Compensation and Resources for Work	3.134	3.189	2.909	3.058	2.737	.043
Organizational Climate	3.102	3.182	2.992	2.832	2.408	.067
Training and Development Facilities	3.449	3.523	3.179	3.144	5.499	.001
Impact and Relevance of Job	3.303	3.331	3.317	3.281	.060	.981
Work Place Relations	3.619	3.410	3.488	3.293	3.043	.029
Organizational Communication	3.311	3.512	3.265	3.106	4.069	.007
Performance Appraisal	2.874	3.005	2.831	2.917	.865	.459

Note: i) All figures, except F-values and p-values are mean values  $df=3/424$

# FARMERS PERSPECTIVE ON FUNCTIONING OF MARKETING CO-OPERATIVES - AN EXPLORATORY STUDY OF MARKFED AND HAFED

Jasmeet Kaur ★ Navkiranjit Kaur Dhaliwal★★

*MARKFED and HAFED are the largest marketing co-operatives of Punjab and Haryana respectively. The federations are playing important role in marketing of agricultural produce and consumer products. The present paper attempts to assess the perception of member farmers regarding working of respective federations. The study is based on both primary and secondary data. Tools like One-Sample Kolmogorov Smirnov test, Reliability Analysis, Average Weighted Scores, Chi-square Test, Mann Whitney Test, Kruskal-Wallis Test and Regression Analysis has been used for the analysis of data. The study found that the majority of respondents of both the federations have expressed their satisfaction regarding the functioning of the federations but overall the respondents of MARKFED are more satisfied with the procurement of the produce and products of their federation than the respondents of HAFED. In MARKFED, the overall satisfaction level of respondents is significantly affected by procurement activity whereas in HAFED, procurement activities along with other opinion statements significantly affect the opinion of the respondents. The federations should take more effective steps for improving further the procurement of agricultural produce, creating more awareness regarding the services provided, building a proper system of product enquiry and complaints and organizing activities relevant to the members.*

*Key words: cooperative, federations, marketing, procurement, MARKFED, HAFED.*

Agricultural marketing occupies an important place in the perspective of agricultural development in India. The co-operative agricultural marketing system plays a major role in agricultural marketing through co-operative marketing societies. These societies are formed by the farmers on the basis of mutual trust for sale of their produce and purchase of various inputs. Co-operative marketing is basically an extension of the principle of co-operation in the field of marketing. It is marketing 'for the farmers' and 'by the farmers' with the objective of eliminating the chain of functionaries operating between the farmers and the ultimate consumer's thereby securing maximum price for the farmers produce. These societies enable the growers to market their produce at better prices, securing better marketing services and ultimately contributing to the improvement in the standard of living of members.

The co-operative societies operate at the local, state, and national levels in India. At the state level, there are apex (State) co-operative marketing federations which serve the state as a whole. Their members are both the primary co-operative marketing societies and the central co-operative unions of the state. The main function of these is to coordinate the activities of the affiliated societies and conduct such activities as inter and intra-state trade, procurement, distribution of inputs and essential consumer goods, dissemination of market information and rendering

expert advice on the marketing of agricultural produce. At the district level, there are central co-operative marketing unions. Their main job is to market the produce brought for sale by the primary co-operative marketing societies that are members of these unions in addition to the individual farmer members. At the base level, there are primary co-operative marketing societies which market the product of the farmer members in that area. There is a large network of co-operative societies operating in the states of Punjab and Haryana. These societies operate in diverse areas such as agriculture, credit, production, processing and marketing, input distribution, housing, dairying, etc. The Punjab State Cooperative Supply and Marketing Federation (MARKFED) and The Haryana State Cooperative Supply and Marketing Federation (HAFED) are playing important role in co-operative agricultural remunerative marketing in Punjab and Haryana. These federations are the largest marketing co-operatives in their respective states. Hence, it becomes significant to examine the extent to which the two federations have performed their various activities and catered to the needs of the farmers of the respective states.

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## I. Review of Literature

Vimala (2004), in her paper evaluated the customer service of co-operatives of Thrissur district in Kerala in terms of behaviour of staff, guidance and promptness in service and present facilities of co-operatives. The primary data was collected from the customers of the co-operatives by conducting a survey using structured interview schedule. The study found that the co-operatives held a prominent place among all the age groups as well as males and females. It was also found that most of the customers were highly satisfied with the co-operatives on all the variables and were homogeneous with respect to all variables.

Baluswami and Balavenkatesh (2004), assessed the marketing efficiency of marketing co-operatives of Erode district during the period of ten years from 1989-90 to 1998-99. The study found that the farmers favoured marketing society due to its efficient system of sale and good price. The study suggested for increasing share of farmers in the share capital, improvement of outright purchase system, increasing business of input sale, controlling administrated expenses, providing better price to members, etc.

Soni and Singh (2013), studied the performance of Chhattisgarh MARKFED during the period of two years, i.e., 2009-10 to 2010-11. For the purpose of the study, 100 respondents from the 10 PAMS of Kabirdham district on the basis of simple random sampling were selected. The study found satisfactory performance of Chhattisgarh MARKFED on key performance indicators and maximum number of respondents were satisfied with the functioning of MARKFED. The study suggested for diversification of the activities of societies with the help of financial and technical assistance by the state government, having proper storage facilities, effective management, providing efficient training facilities, etc.

### Objectives of the Study

The objectives of the study are:-

1. To study the activities of MARKFED and HAFED.
2. To examine the demographic profile of the member farmers of the selected federations.
3. To assess the perception of farmers regarding working of MARKFED and HAFED.

## II. Research Design & Methods

The study is based on primary and secondary data. The primary data has been collected from the farmers with the

help of questionnaire. For this purpose, a sample of 200 farmers, i.e., 100 each from the selected institutions was taken. For collection of data, four districts from the two respective states on the basis of highest number of co-operative marketing societies have been selected. Amritsar, Ludhiana, Ferozepur and Jalandhar districts were selected from the Punjab state, while Hisar, Sirsa, Ambala and Kurukshetra districts were selected from the state of Haryana. One member society was chosen from each selected district on the basis of convenient sampling method. For the purpose of survey, 25 member farmers were selected from each selected society through convenient sampling method. The secondary data has been collected from the annual reports, websites and through discussions with the employees of the federation.

Tools like One-Sample Kolmogorov Smirnov test, Reliability Analysis, Average Weighted Scores (AWS), Chi-square test, Mann Whitney Test, Kruskal-Wallis Test (H test) and regression has been used for the analysis of data. AWS have been calculated by assigning weights 5 for 'strongly agreed'/ 'highly satisfied', 4 for 'agreed'/ 'satisfied', 3 for 'neither agreed nor disagreed'/ 'neither satisfied nor dissatisfied', 2 for 'disagreed'/ 'dissatisfied' and 1 for 'strongly disagreed'/ 'highly dissatisfied'.

## III. Results & Discussion

MARKFED is the largest marketing co-operative in Asia. It was set up in 1954. It is playing a leading role in serving the farmers of the state as well as customers in India and overseas by providing quality products. The management of MARKFED vests with the Board of Directors, including government nominees which creates and makes the policies of undertaking business of the federation. The Managing Director is the principal executive of the organization and is assisted by Additional Managing Directors and other functional heads at the Head Office, and General Managers and Managers in the plants or units, and District Managers at the district level. The federation has various divisions like personnel, food-grain, paddy & export, law & taxation, cattle feed & estate, marketing, accounts, monitoring & ERP and AEZ, etc. (Figure 1)

HAFED is the largest marketing co-operative in Haryana. It was set on 1<sup>st</sup> November, 1966. It is engaged in providing multi-faceted activities which include ensuring remunerative prices to the growers and to provide quality products to the consumers. The organizational structure of HAFED starts with board of directors. The business of the federation is carried on and managed by a whole-time managing director appointed by the state government. The

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federation is divided into various divisions consisting of personnel & administration, procurement & warehousing, marketing, finance & accounts, processing/plant, construction and management services including export, mill, ISO, etc. (Figure 2). HAFED has also opened its district offices which are managed by the district managers who supervise, control and ensure the effective execution and implementation of all the policies and programmes of head office.

### Functions of the Federations

The two federations undertake various activities ranging from supply of agricultural inputs to the farmers, storage and procurement of food grains, processing, marketing of variety of products etc. The main functions performed by these federations are:

- Procurement of agricultural produce - MARKFED and HAFED are one of the major procurement agencies of Punjab and Haryana. They procure food-grains like wheat, paddy, cotton, mustard seeds etc. from farmers on behalf of government and also make commercial purchases for processing them in their processing plants. A farmer in the mandi can sell their produce to commission agents or to co-operative marketing societies (CMS) directly. In mandis of Punjab and Haryana, farmers mostly sell their produce to commission agents who perform functions like purchase of food-grains, cleaning, weighing, etc. and CMS lifts the stocks from each commission agents. CMS makes payment to commission agents or to farmers directly in case of direct purchase from them on the behalf of agencies like MARKFED and HAFED.
- Products Sold - MARKFED and HAFED provide various genres of products. The products marketed by the MARKFED include canned products, bottled products, agro chemicals, edible/refined oils, animal feeds and rice. The MARKFED markets its products under the brand name SOHNA. The product mix of the HAFED consists of agri-inputs, consumer products including rice, oil, sugar and turmeric and cattle feed. The product mix of the federations keeps on changing as per the needs of the consumers and the farmers. The prices of the products are fixed keeping in view the prices of competitive products in consultation with the divisions looking after the production aspects.
- Additional Services - Federations provide various additional services to the farmers of the respective state in terms of arranging training camps, farming contracts

including contract farming, organic farming etc. MARKFED has been declared as Punjab nodal agency for the exports of fruits, vegetables and food-grains by the Government of India.

### Demographic Profile of Farmers

The demographic profile of the farmers of the selected institutions has been studied on basis on the basic attributes like gender, age, educational qualification, category, size of landholding and annual household income. Age-wise, the respondents of both the federations have been classified into four educational categories, viz. 'below 30 years', 'between 30 to 40 years', 'between 40 to 50 years' and 'above 50 years'. On the basis of education, the respondents surveyed have been divided into four categories viz. 'below matric', 'matric', 'graduate', and 'post graduate'. Category-wise, the respondents surveyed in both the federations have been divided into three categories, viz. 'Scheduled Caste/ Scheduled Tribe' (SC/ST), 'Backward Class' and 'General'. On the basis of size of land holding under operation, the respondents surveyed have been classified into five groups viz. 'below 1 acres', 'between 1-2.5 acres', 'between 2.5-5 acres', 'between 5-10 acres' and 'above 10 acres'. Annual household income-wise, the respondents have been divided into four income groups 'below 1.5 lakh', 'between 1.5-3 lakh', 'between 3-5 lakh', and 'above 5 lakh'. The demographic profile of the respondents of the two federations is presented in table 1.

### Gender-wise Distribution

Gender-wise, analysis reveals that all the respondents surveyed in case of both MARKFED and HAFED are male. Thus, there is no difference in both the federations with regard to gender-wise distribution.

### Age-wise Distribution

Age-wise Table 1 reveals that in case of MARKFED, majority of the respondents (50%) belong to the age group, 'above 50 years'. It is followed by age groups 'between 40-50 years' (29%), 'between 30-40 years' group (19%) and 'below 30 years' group (2%).

In case of HAFED, a large proportion of the respondents (45%) belong to age group, 'above 50 years' followed by 'between 30-40 years' group (30%), 'between 40-50 years' group (22%) and 'below 30 years' group (3%).

The chi-square ( $\chi^2$ ) value (3.893) is not significant at 5% level of significance which indicates that there is no significant difference in the two federations in terms of age-wise distribution.

### Education-wise Distribution

Table 1 shows that the majority of the respondents in MARKFED and HAFED belong to educational category 'matric' (53% & 40% respectively), followed by 'below matric' category (29% & 36% respectively), 'graduate' category (16% & 24% respectively) and 'post graduate' category (2% & 0% respectively). The table reveals that there exists homogeneity in both the federation in terms of educational-wise categories with non-significant chi-square value (6.171) at 5% level of significance.

### Category-wise Distribution

Category-wise distribution of the respondents in the Table 1 highlights that in both the federations, maximum number of the respondents belong to 'General' category (MARKFED = 93% & HAFED = 78%), followed by 'BC' category (MARKFED = 5% & HAFED = 21%) and 'SC/ST' category (MARKFED = 2% & HAFED = 1%). The chi-square ( $\chi^2$ ) value (11.495) is significant at 5% level of significance which indicates that there is substantial difference among the federations in terms of category-wise distribution of the respondents. The respondents belonging to 'General category' are higher in MARKFED as compared to that in HAFED whereas the respondents belonging to 'BC' category are more in HAFED as compared to that in MARKFED.

### Landholding Distribution

Table 1 shows that in MARKFED, equivalent number of the respondents (34%) belong to 'between 5-10 acres' and 'above 10 acres' group followed by 'between 2.5-5 acres' group (23%), 'between 1-2.5 acres' group (8%) and 'below 1 acres' (1%). Whereas in HAFED, proportionately more respondents (34%) belong to 'between 2.5-5 acres' group followed by 'above 10 acres' group (28%), 'between 5-10 acres' group (27%), 'between 1-2.5 acres' group (9%) and 'below 1 acres' group (2%). The table reveals that there is no significant difference in the two federations in terms of size of landholding-wise distribution.

### Annual Household Income-wise Distribution

Annual household income-wise distribution of the respondents in Table 1 depicts that in MARKFED, 33% of the respondents are from income category 'above 5 lakh'. It is followed by annual household income category 'between 3-5 lakh' category (30%), 'between 1.5-3 lakh' category (27%) and 'below 1.5 lakh' category (10%). In HAFED, proportionately more respondents belong to income category 'between 1.5-3 lakh' (34%), followed

by 'between 3-5 lakh' category (27%), 'above 5 lakh' category (22%) and 'below 1.5 lakh' category (17%). Thus, there exists homogeneity in both the federations in terms of annual household income-wise distribution.

### Farmers' Perception Regarding Working of MARKFED and HAFED

The responses of the respondents relating to the activities performed by the federations including procurement activity, products sold, additional services provided, satisfaction level and the impact of various activities of the federations on the satisfaction level of the respondents is presented in tables 2 to 9.

### Satisfaction level of Respondents Regarding Procurement of Agricultural Produce

To ascertain the satisfaction level of the respondents, they were asked to indicate their satisfaction level on a five-point scale regarding 6 statements relating to the procurement of agricultural produce by the federation through societies. All the 200 respondents (100 each from the selected institutions) gave their responses on these statements. The cronbach's alpha coefficient (MARKFED = 0.894 & HAFED = 0.745 respectively) and the mean value of inter-item correlations (MARKFED = 0.627 & HAFED = 0.305 respectively) of the responses of the respondents indicates that the responses on these statements are reliable and valid. Table 2 shows the AWS showing the satisfaction level of the respondents over the given statements.

Table 2 reveals that the respondents were highly satisfied with the 'Mode of collection of produce/crop' (4.11) whereas the respondents were satisfied with the statements 'Mode of payment of produce/crop' (3.99), 'Procedure for weighing of produce' (3.95), 'Price paid for produce/crop' (3.92), 'Time taken in selling of produce/crop' (3.80), and 'Packing facility (bags) provided for produce' (3.55). Federation-wise analysis shows that the respondents were highly satisfied with the 'Mode of collection of produce/crop' and 'Mode of payment of produce/crop' in both the federations. The respondents were highly satisfied with 'Price paid for produce/crop' and 'Time taken in selling of produce/crop' in case of MARKFED whereas satisfaction level was low in case of HAFED (3.83 & 3.70 respectively). Thus, there was significant difference between the two federations on these statements with Z value 2.625 & 3.023 significant at 5 per cent level of significance. There was equal level of satisfaction among the respondents of both the federation in case of 'Procedure for weighing of produce' (3.96). The statement 'Packing facility (bags) provided for produce' was favoured by the respondents

of MARKFED (3.65) as compared to the respondents of HAFED (3.60).

Further, the mean value of average weighted scores corresponding to the satisfaction level of the respondents regarding various opinion statements relating to the 'procurement of produce' is highest in MARKFED (3.99) as compared to that in HAFED (3.87).

### **Respondents' Satisfaction Level Regarding Products of Federation**

To ascertain the satisfaction level of respondents, they were asked to indicate their satisfaction level on a five-point scale regarding 10 statements relating to the products of federation. All the 200 respondents (100 each from the selected institutions) gave their responses on these statements. The cronbach's alpha coefficient (MARKFED =0.855 & HAFED =0.748 respectively) and the mean value of inter-item correlations (MARKFED =0.388 & HAFED = 0.210 respectively) of the responses of the respondents indicates that the responses on these statements are reliable and valid. Table 3 shows the AWS of the responses of the respondents' regarding the products of the federation.

Table 3 shows that the respondents are found to be highly satisfied with regards to the statements such as 'quality of inputs' (4.05), 'Quality of consumer goods' (4.05) and 'Location of mode from where you buy product' (4.05) whereas respondents were satisfied with 'Timely availability of inputs' (3.88), 'Quality of animal feed' (3.88), 'Prices of inputs' (3.87), Price of animal feed (3.82), 'Prices of consumer goods' (3.78), 'Weighing system of different inputs/feed' (3.73), and 'Packaging of inputs/feed' (3.70). Federation-wise analysis reveals that the respondents of both the federations are highly satisfied with the quality of consumer goods (MARKFED =4.09 & HAFED =4.01). The respondents of HAFED have also shown their higher degree of satisfaction with the 'quality of inputs' (4.17) as compared to lower level of satisfaction shown by the respondents of MARKFED (3.92) with Z value = 3.215 significant at 5% level of significance. In case of statement 'Location of mode from where you buy product' respondents of MARKFED were more satisfied (4.13) as compared to HAFED (3.96) with Z value = 2.463 significant at 5% level of significance. The respondents of MARKFED are more satisfied with the 'Prices of consumer goods' (3.94) and 'Price of animal feed' (3.92) as compared to HAFED (3.61 & 3.71 respectively) with significant Z value (3.550 & 2.202 respectively). In case of statement 'Weighing system of different inputs/feed' respondents of HAFED (3.80) are more satisfied as

compared to MARKFED (3.66). There exists homogeneity in the responses of respondents on the statements 'Timely availability of inputs' (MARKFED = 3.89 & HAFED = 3.87), 'Prices of inputs' (MARKFED = 3.90 & HAFED = 3.83), 'Packaging of inputs/feed' (MARKFED =3.70 & HAFED = 3.70), and 'Quality of animal feed' (MARKFED =3.91 & HAFED = 3.85).

Further, the mean value of average weighted scores corresponding to the satisfaction level of the respondents regarding various opinion statements relating to the 'products of the federation' is highest in MARKFED (3.91) as compared to that in HAFED (3.85).

### **Respondents' Perception Regarding Additional Services Availed**

MARKFED and HAFED also provide various other services to the farmers of the respective states like arranging training camps, farming contracts including contract farming, organic farming etc. It was found that the majority of the respondents were unaware about the varieties of the services provided by both the federations. Table 4 and 5 shows the responses of the respondents in this regard.

Table 4 depicts that only a small proportion of the respondents of MARKFED and HAFED availed the camp/training facilities arranged by the respective federations. The chi-square value (15.457) is significant at 5% level which indicates that the large proportion of the respondents of MARKFED (23%) have availed this facility as compared to the respondents of HAFED (4%). The respondents have attended camps with daily contact hours of 4-5 hours and benefitted in terms of information relating to crops, seeds, feed and rates of the products.

Table 5 reveals that lesser proportion of the total respondents are engaged in the contract farming contracts (9%) and organic farming contracts (5%). Table further depicts that 7% of the respondents of MARKFED and 11% of respondents of HAFED are engaged in contract farming contracts. 10% of respondents of HAFED are involved in organic farming contracts. The chi-square value (10.526) is significant at 5% level of significance which implies there is significant difference in the two federations in case of organic farming contracts. The respondents have expressed their satisfaction with the contracts and voiced that they are provided extra money in case of such contracts.

### **Respondents' Consent Regarding Various Opinion Statements**

To examine the working of the federations and its societies

the respondents were asked to give their level of agreement on 8 statements. The Cronbach's Alpha Coefficient (MARKFED = 0.835 & HAFED = 0.803 respectively) and the mean value of inter-item correlations (MARKFED = 0.434 & HAFED = 0.334 respectively) of the responses of the respondents indicates that the responses on these opinion statements are reliable and valid. Table 6 shows the AWS showing the agreement level of the respondents on various opinion statements.

Table 6 reveals that the respondents strongly agreed with the statement 'Federation always inform the farmers regarding doses and usage of inputs' (4.02) and 'The federation has helped in improving crop' (4.01) whereas the respondents agreed with the statements 'Federation provides ready market to the farmers' (3.92), 'Federation is playing multi-faceted role for you' (3.87), 'Federation provides general information regarding trends and prices' (3.73) and 'Federation has helped in eliminating exploitation by private traders' (3.56). Further there was lower level of agreement among respondents on the statements, 'Federation has proper grievance handling mechanism' (3.43) and 'Federation arranges proper training camps regarding better cultivation of the existing and new crops' (3.43).

Federation -wise analysis shows that the respondents of MARKFED strongly agreed with the statements 'The federation has helped in improving crop production', 'Federation is playing multi-faceted role for you' and 'Federation provides ready market to the farmers', (AWS = 4.10, 4.08, 4.03 respectively) as compared to HAFED (AWS = 3.91, 3.66 & 3.80 respectively) with Z value significant at 5 per cent level of significance on such statements (2.293, 5.141 & 2.273 respectively). The respondents of HAFED agreed with the statements 'Federation has helped in eliminating exploitation by private traders' (3.85), 'Federation has proper grievance handling mechanism' (3.57) as compared to MARKFED (3.27 & 3.29 respectively) with significant Z values (4.695 & 3.321 respectively). There was no significant difference in the responses of respondents on the statements 'Federation always inform the farmers regarding doses and usage of inputs' (MARKFED = 3.98 & HAFED = 3.85), 'Federation provides general information regarding trends and prices' (MARKFED = 3.63 & HAFED = 3.83) and 'Federation arranges proper training camps regarding better cultivation of the existing and new crops' (MARKFED = 3.47 & HAFED = 3.39). The level of agreement on the statement 'Federation arranges proper training camps regarding better cultivation of the existing and new crops' remained on the lower level in case of both the federations.

Further, the mean value of average weighted scores corresponding to the agreement level of the respondents regarding various opinion statements are same in the both the federations (3.73).

#### Respondents' Overall Satisfaction Level Regarding Federation and Societies

Respondents were asked to mention their opinion regarding the overall working of the federations and the societies. The responses of the respondents in this regard are presented in Table 7.

Table 7 shows that the majority of respondents of MARKFED (98%) and HAFED (94%) have expressed their satisfaction regarding the functioning of the federations and societies. So, there exists homogeneity in the responses of the respondents of both the federations.

#### Respondents' Overall Satisfaction Level (Demographic variables-wise Distribution)

The opinion of the respondents regarding overall satisfaction level on the basis of sub-categories of demographic variables is presented in Table 8.

Table 8 reveals that in case of MARKFED, opinion of the respondents regarding overall satisfaction regarding the federation and the societies significantly varies on the basis of categories of educational qualification with H value (8.607) significant at 5% level of significance whereas the opinion of the respondents regarding overall satisfaction level doesn't differ on the basis of groups of other demographic variables. On an average, the overall satisfaction level of the respondents is the highest for the educational category 'graduate' (4.13), followed by 'matric' category (4.04), 'below matric' category (4.03) and 'post graduate' category (3.00).

In the case of HAFED, the opinion of the respondents regarding overall satisfaction doesn't significantly vary on the basis of categories of demographic variables.

#### Relationship Model of the Activities of the Federation and Overall Satisfaction

For estimating the amount of relationship between opinion of the respondents regarding overall satisfaction level relating to the functioning of the federation and various activities of the federations, overall satisfaction level of the farmers (Y) has been used as dependent factor and the mean value of the opinion of the respondents relating to the various activities of the functioning of the federations including procurement activity ( $X_1$ ), products of the federation ( $X_2$ ), and other opinion statements ( $X_3$ ) has been

used as independent factor. The relationship model is presented in Table 9.

Table 9 reveals that in case of MARKFED, procurement activity ( $X_1$ ) enters in the regression model in the first step and singularly explains 35.3% variation in the opinion of the respondents regarding overall satisfaction level (Y). Thus, one unit of increase in  $X_1$  will lead to 0.461 units increase in the overall satisfaction level (Y).

The F-test for the model is also highly significant. The multivariate analysis for the period concludes:-

$$Y = 2.190 + 0.461 X_1 + e. \text{ ——— (1)}$$

Where, e is the error term.

After the first step, no other variable enters the regression model so in case of MARKFED, the opinion of the respondents relating to procurement activity mostly affects the opinion of the respondents regarding overall satisfaction level.

Table 9 further depicts that in case of HAFED, other opinion statements ( $X_3$ ) enters in the regression model in the first step and singularly explains 29.6% variation in the opinion of the respondents regarding overall satisfaction level (Y). Thus, one unit of increase in  $X_3$  will lead to 0.502 units increase in the overall satisfaction level (Y). After first step, procurement activity ( $X_1$ ) enters in the regression model and along with  $X_3$  explains 32.7% variation in the opinion of the respondents regarding overall satisfaction level (Y). Thus, one unit of increase in  $X_3$  and  $X_1$  will lead to 0.442 units and 0.202 units increase in the overall satisfaction level(Y).

The F-test for the model is also highly significant. The multivariate analysis for the period concludes:-

$$Y = 1.577 + 0.202 X_1 + 0.442 X_3 + e. \text{ ——— (2)}$$

Where, e is the error term.

After the second step, no other variable enters the regression model so in case of HAFED, opinion of the respondents relating to overall satisfaction level is affected by the procurement activity and the other opinion statements.

#### IV. Conclusion

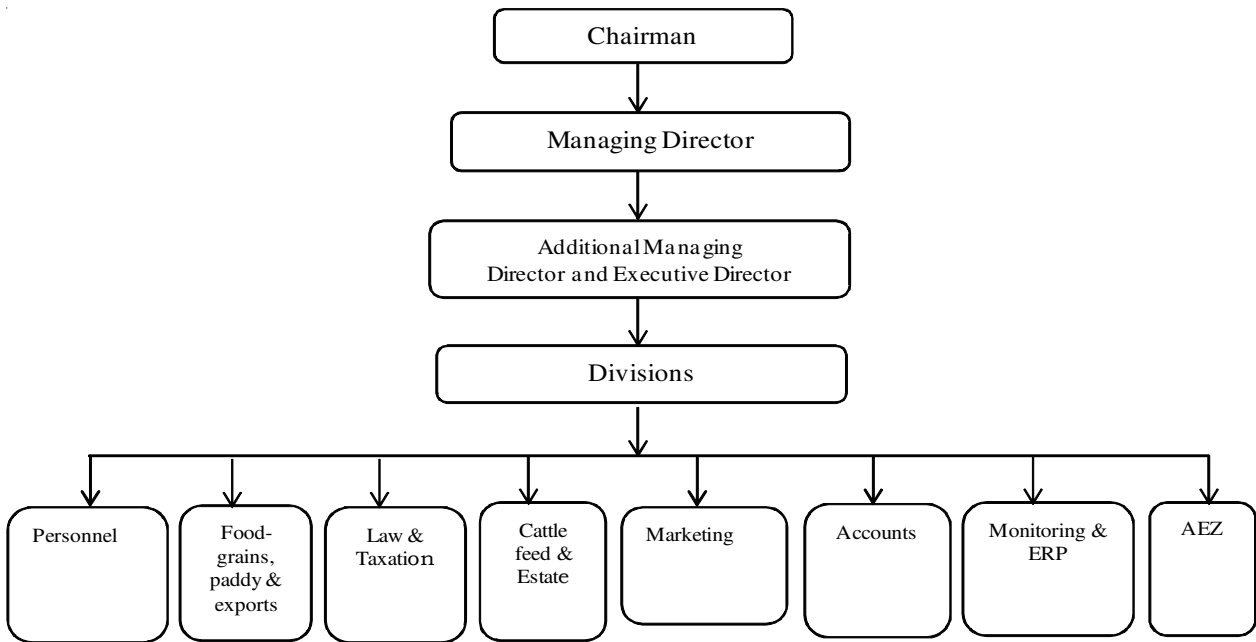
MARKFED and HAFED are the main supply and marketing co-operatives in their respective states. They are playing a leading role in serving the farmers of the State by providing various services and products. The majority of the member farmers of MARKFED (98%) and HAFED (94%) have

expressed their satisfaction regarding the functioning of the federations. Overall the respondents of MARKFED are more satisfied with the procurement of the produce and products of their federation than the respondents of HAFED. In MARKFED, the opinion of the respondents relating to overall satisfaction level is significantly affected by procurement activity whereas in HAFED, procurement activities along with other opinion statements significantly affect the opinion of the respondents. The majority of the respondents were unaware about the varieties of the services provided by both the federations. Thus, both the federations should take more effective steps for improving further the procurement of agricultural produce, creating more awareness regarding the services provided by them and building a proper system of product enquiry and complaints. The federations should organize activities relevant to the members for becoming more successful in achieving member satisfaction. The state governments too should provide more financial and technical assistance to the federations.

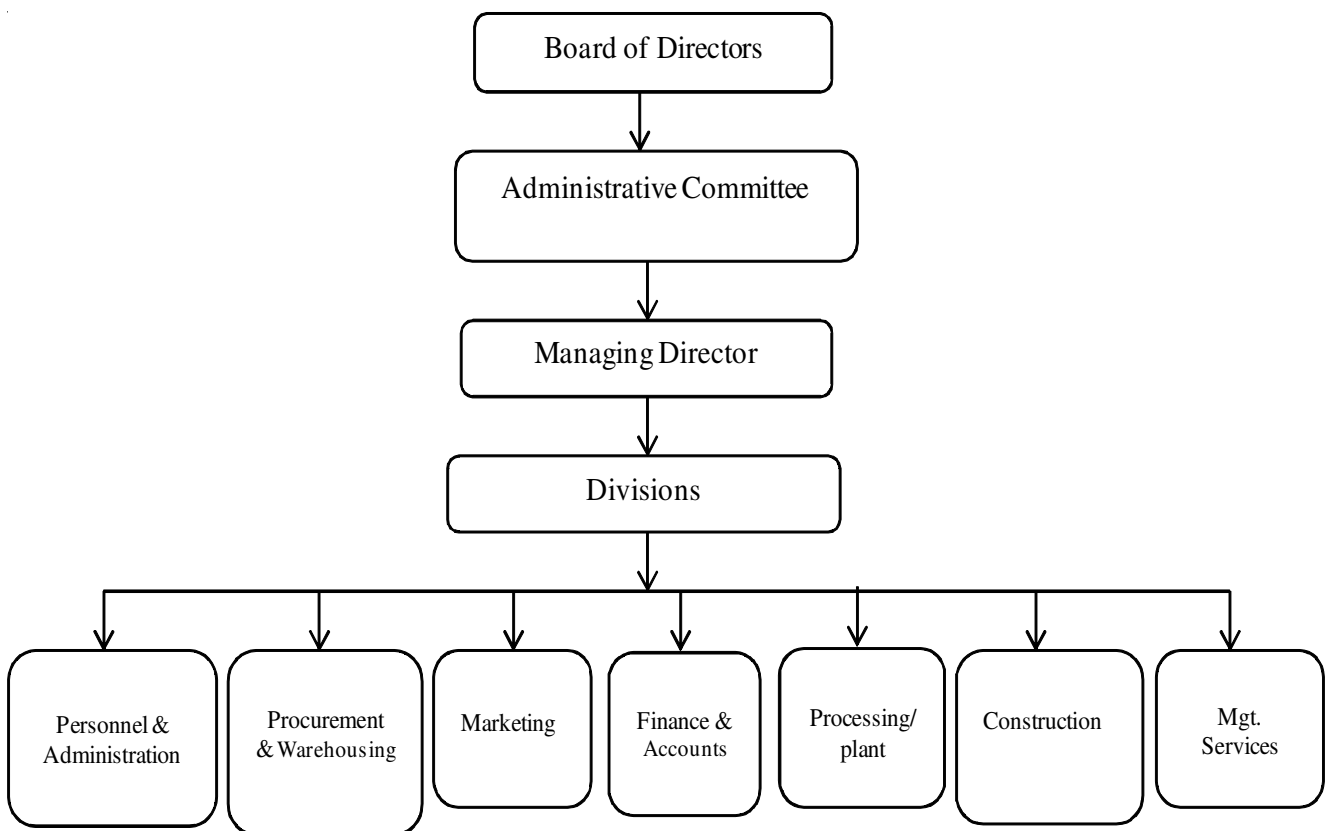
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**Figure 1: Organizational Structure of MARKFED**



**Figure 2: Organizational Structure of HAFED**



**Table 1: Demographic Profile of the Respondents of MARKFED and HAFED**

Demographic Variables	Sub-groups	Frequency		Chi-square
		MARKFED	HAFED	
Age-wise	Below 30 years	2	3	$x^2 = 3.893$ df= 3
	Between 30-40 years	19	30	
	Between 40-50 years	29	22	
	Above 50 years	50	45	
Educational Categories	Below matric	29	36	$x^2 = 6.171$ df= 3
	Matric	53	40	
	Graduate	16	24	
	Post graduate	2	0	
Categories	SC/ST	2	1	$x^2 = 11.495^*$ df= 2
	BC	5	21	
	General	93	78	
Size of Landholdings	Below 1 acres	1	2	$x^2 = 3.899$ df = 4
	Between 1-2.5 acres	8	9	
	Between 2.5-5 acres	23	34	
	Between 5-10 acres	34	27	
	Above 10 acres	34	28	
Annual Household Income Group	Below 1.5 lakh	10	17	$x^2 = 4.976$ df = 3
	Between 1.5-3 lakh	27	34	
	Between 3-5 lakh	30	27	
	Above 5 lakh	33	22	

Note: Figures show percentage share.

\* Significant at 5% level of significance.

**Table 2: AWS Corresponding to Satisfaction Level of Respondents Regarding Procurement of Agricultural Produce**

S. No.	Statements	AWS MARKFED	AWS HAFED	Total	Mann Whitney
1.	Mode of collection of produce/crop	4.14	4.08	4.11	Z = 1.427
2.	Mode of payment of produce/crop	4.11	4.06	3.99	Z = 0.863
3.	Procedure for weighing of produce	3.96	3.96	3.95	Z = 0.003
4.	Price paid for produce/crop	4.09	3.83	3.92	Z = 2.625*
5.	Time taken in selling of produce/crop	4.01	3.70	3.80	Z = 3.023*
6.	Packing facility (bags) provided for produce	3.65	3.60	3.55	Z = 0.198
Mean Value of AWS = MARKFED (3.99), HAFED (3.87) & Total (3.89)					

Note: \* Significant at 5% level of significance.

**Table 3: AWS Corresponding to Satisfaction Level of Respondents Regarding Products of Federation**

S. No.	Statements	AWS MARKFED	AWS HAFED	Total	Mann Whitney
1.	Quality of inputs	3.92	4.17	4.05	Z = 3.215*
2.	Timely availability of inputs	3.89	3.87	3.88	Z = 0.395
3.	Prices of inputs	3.90	3.83	3.87	Z = 0.747
4.	Weighing system of different inputs/feed	3.66	3.80	3.73	Z = 2.185*
5.	Packaging of inputs/feed	3.70	3.70	3.70	Z = 0.967
6.	Quality of consumer goods	4.09	4.01	4.05	Z = 0.843
7.	Prices of consumer goods	3.94	3.61	3.78	Z = 3.550*
8.	Quality of animal feed	3.91	3.85	3.88	Z = 0.978
9.	Price of animal feed	3.92	3.71	3.82	Z = 2.202*
10.	Location of mode from where you buy product	4.13	3.96	4.05	Z = 2.463*
Mean Value of AWS = MARKFED (3.91), HAFED (3.85) & Total (3.88)					

Note: \* Significant at 5% level of significance.

**Table 4: Camp/ Training Facility Aailed**

Categories	MARKFED	HAFED	Total	Chi-square
Yes	23	4	27 (13.5)	$x^2 = 15.457^*$ df = 1
No	77	96	173 (86.5)	

Note: Figures in parenthesis show percentage share to total.

\* Significant at 5% level of significance.

**Table 5: Farming Contracts**

Farming Contracts	Categories	MARKFED	HAFED	Total	Chi - square
Contract farming	Yes	7	11	18 (9.0)	$x^2 = 0.977$ df = 1
	No	93	89	182 (91.0)	
Organic farming	Yes	0	10	10 (5.0)	$x^2 = 10.526^*$ df = 1
	No	100	90	190 (95.0)	

Note: Figures in parenthesis show percentage share to total.

\* Significant at 5% level of significance.

**Table 6: AWS Corresponding to Agreement Level of Respondents Regarding Various Opinion Statements**

S.No.	Opinion Statements	AWS MARKFED	AWS HAFED	TOTAL	Mann Whitney
1.	Federation provides ready market to the farmers	4.03	3.80	3.92	Z = 2.273*
2.	Federation has helped in eliminating exploitation by private traders	3.27	3.85	3.56	Z = 4.695*
3.	Federation is playing multi-faceted role for you	4.08	3.66	3.87	Z = 5.141*
4.	Federation has proper grievance handling mechanism	3.29	3.57	3.43	Z = 3.321*
5.	Federation always inform the farmers regarding doses and usage of inputs	3.98	3.85	4.02	Z = 1.434
6.	The federation has helped in improving crop production	4.10	3.91	4.01	Z = 2.293*
7.	Federation provides general information regarding trends and prices.	3.63	3.83	3.73	Z = 1.904
8.	Federation arranges proper training camps regarding better cultivation of the existing and new crops	3.47	3.39	3.43	Z = 0.318
Mean Value of AWS = MARKFED (3.73), HAFED (3.73) & Total (3.75)					

Note: \* Significant at 5% level of significance.

**Table 7: Respondents' Overall satisfaction Level Regarding of Functioning of Federation and Societies**

Federations	Highly Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Total	Mean	Mann-Whitney
MARKFED	6	92	1	1	100	4.03	Z=0.396
HAFED	8	86	5	1	100	4.01	
Total	14 (7.0)	178 (89.0)	6 (3.0)	2 (1.0)	200	-	

Note: Figures in parenthesis show percentage share.

**Table 8: Respondents' Overall Satisfaction Level (Demographic variables-wise Distribution)**

Federations	Age	Educational Qualifications	Category	Size of Land Holding	Annual Household Income
MARKFED	H=5.746 df=3	H=8.607* df=3	H=0.162 df=2	H=7.562 df=4	H=4.196 df=3
HAFED	H=0.927 df=3	H=0.917 df=2	H=0.150 df=2	H=1.792 df=4	H=2.886 df=3

\* Significant at 5% level of significance

**Table 9: Relationship Model of the Activities of the Federation and Overall Satisfaction**

Federations	Steps	Intercept	X <sub>1</sub>	X <sub>3</sub>	R <sup>2</sup>	Adjusted R <sup>2</sup>	F-ratio
MARKFED	I	2.190 (8.785)	0.461* (7.420)	-	0.360	0.353	55.062*
HAFED	I	2.135 (7.388)	-	0.502* (6.536)	0.304	0.296	42.723*
	II	1.577 (4.245)	0.202* (2.318)	0.442* (5.557)	0.340	0.327	25.001*

Note: The figures in parenthesis represent the t-values.

\* Refers to 5% significance level

# KNOWLEDGE MANAGEMENT IN INDIAN HIGHER EDUCATIONAL INSTITUTES FOR DEVELOPING AS A LEARNING ORGANIZATION-AN EXPLORATORY STUDY

Saniya Chawla ★ Usha Lenka★★

*Dynamic business environment has shifted the focus of organizations from being traditional to learning one. Business environment is too conglomerate to form immobile strategies, therefore organizations must have the ability to learn, adapt, and change. Complexity theory states that organizations need to adapt to either the complex or adaptive structure owing to the uncertainty in the environment. It is tantamount to educational sector as well. Educational institutes are proliferating at a rapid pace. Intense competition is coming to education institutes as well. Every educational institute aims to benchmark its practices with those of already existing as world-class institutes like IIT's, IIM's, and NIT's. Thus, in a fast pace environment, importance of knowledge and learning workers have been increasing rapidly. Organizations develop new insights through its effective knowledge management practices thereby promoting continuous learning. This paper attempts to study the relationship between knowledge management and learning organization in a way that knowledge management leads to continuous learning. The paper also aims to formulate the items of knowledge management for the survey. Based on an extensive literature review and expert judgment, 300 faculty members have been taken as respondents for this exploratory study. The result obtained is an extraction of 4 factors of 21 items of knowledge management. With this survey, knowledge management as one of the antecedents of learning organization in Indian higher education has been introduced. Discussions and conclusions are drawn in the context of the present literature. The paper also discusses the implications for academicians and researchers.*

*Keywords: Learning organizations, knowledge management, Indian higher educational institutes, item formulation.*

Rapid globalization over recent years has embarked intense competition around the globe. Both manufacturing and service organizations are striving for sustainable business. The most demanding point for organizations is to achieve a competitive advantage. Therefore, every organization endeavors to be a learning organization. Learning organization is an organization where individuals continuously engage themselves in sharing knowledge. However, this is possible when there are knowledge workers in the organizations. Knowledge workers are the employees of an organization engaged in processing of existing and new knowledge to add value to the organization. Such organizations develop new ideas and insights through the process of knowledge creation and sharing thereby generating learning opportunities. Effective knowledge management practices are much needed in educational sector as well. The notion of knowledge management has been encircling around the decade but educational institutes have only accepted it in theory and not in practice. Thus, there is a great need for educational institutes to understand the relevance of knowledge management practices.

The aim of this study is to describe the formulation of items of knowledge management (KM) that measures

learning organization in Indian higher educational institutes. The researchers shall first discuss the theoretical foundations of the link between knowledge management and learning organizations by citing previous literature. The next step would be towards description of item formulation followed by exploratory factor analysis.

## Research Question

RQ1: What role does knowledge management have on transforming Indian higher educational institutes into a learning organization?

## I. Review of Literature

### Knowledge management and learning organizations

Knowledge is a key resource that gives organizations a competitive advantage over others (Drucker, 1993). Knowledge based theory of the firm (Grant, 1996), theory of dynamic capability (Baskerville and Dulipovici, 2006), and strategic management theory (Earl, 1997) states that

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organizational knowledge is an inimitable resource of sustainable business for use in situations of rapid change to compete more effectively in market. Therefore, knowledge must be managed to ensure effective knowledge sharing practices in an organization.

Organizations cannot function as knowledge-based organizations because of their lack of ability to learn (Senge, 1993). In the competitive and dynamic scenario, organizations cannot develop as learning organizations unless they have that urge to continuously learn through effective knowledge management practices. Successful organizations are those that create and disseminate knowledge at all levels- individual, team, and organizational and quickly showcase that knowledge in the form of new technologies and products (Nonaka, 1991). Thus, KM has been defined as an “organized and systematic process of generating and disseminating information through tacit and explicit knowledge that strengthens teaching-learning environment” (Adhikari, 2010). Higher educational institutes are regarded as knowledge-intensive organizations because their functions are based on knowledge production, codification, and distribution (Cronin and Davenport, 2001; Goddard, 1998; Rowley, 2000). Several authors have discussed the link between learning organizations and knowledge management. They have regarded knowledge management and learning organization as complimentary to each other (Baines, 1997; Loermans, 2002). Whereas, some have discussed that knowledge results in learning (Hong and Kuo, 1999) and others have discussed that learning enhances knowledge of individuals (Macdonald, 1995). Previous literature on learning organization and knowledge management has discussed that knowledge management exploits the ability to learn which results in improved decision making and customer relations, increased worker independence, and offers better products and services (Baines, 1997). Open knowledge management environment and easy access of information leads to distribution of knowledge across levels thereby increasing the ability to learn (Firestone and McElroy, 2004). Knowledge management involves developing a culture of sharing, utilizing, and creating knowledge. It facilitates decision making through knowledge workers, teamwork, and horizontal knowledge transfer. This creates opportunities for embracing learning and maintaining communities of practice (Walczak, 2005). Knowledge sharing is necessary for combining knowledge of team members that leads to creation of new knowledge (Manohar Singh and Gupta, 2014). A study conducted in India has reported that knowledge management has a greater impact on learning organizations in IT/ITES sector rather

than manufacturing, power generation, and distribution sector. This is because IT/ITES are knowledge intensive industries and are proactive in re-examining their resources and in adopting management practices. Such industries create, analyze, store, disseminate, and apply knowledge to facilitate a learning-oriented culture (Chawla and Joshi, 2011). Similarly, educational institutes as a part of service sector aim for knowledge intensive organizations. A study conducted in Bangkok University found that knowledge collaboration facilitates communication through meetings and seminars among teachers and staff thus making them work more effectively. The university has also started many international programmes and a knowledge centre having international professors that makes knowledge sharing more challenging (Arntzen et al., 2009). Indian study has emphasized on the effective knowledge management practices. It states that teachers are prepared for such practices to meet the needs of the students and society. Teaching, research, technology, collaboration of institutes, networking, and sound teaching-learning environment are the prerequisites for strengthening educational institutes (Adhikari, 2010). A study conducted in Canadian schools addresses that knowledge management practices involve collaboration of knowledge workers, continuous learning, and revision of mental models. School’s initiatives towards developing a new vision, restructuring cultural practices, active leadership, and collaborative dialogue practices facilitate social interaction among teachers which results in a decentralized structure for an easy sharing of knowledge across and within schools (Hannay et al., 2013). Another study conducted in Hong Kong identified the relationship between knowledge strategies and learning capacity found that interpersonal interactive sharing has been identified as the major knowledge strategy used in schools because teachers communicate through face-to-face. Knowledge retrieval, sharing, and utilization were identified as the predictive factors for individual and organizational learning capacity. Knowledge retrieval involves retrieving information from internet, intranet, seminars, and meetings that promotes organization communication. Knowledge sharing is done through discussion and collaboration. Knowledge utilization helps to apply knowledge in decision-making and problem solving process. Hence, community of practice as a knowledge strategy can be implemented to enhance learning capacity of schools and building it as a learning community (Cheng, 2012).

Thus, it can be said that effective knowledge management practices are needed to foster learning at all levels. Culture of trust and sharing of knowledge is created so that higher

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educational institutes cater to the needs of international students as well (Omerzel et al., 2011). Intellectual repositories are created to generate collection of knowledge to ensure quick availability of information. It is also updated and maintained with the addition of new knowledge. This knowledge gets transformed into documents, databases, rules, tables, and graphs that are used by the stakeholders when required (Bhusry and Ranjan, 2011).

### **Process of knowledge management in higher educational institutes**

Several authors have given dimensions of knowledge management. Table 1 indicates the various dimensions given by them. In this paper, the dimensions given by Bhusry and Ranjan, 2011 have been taken into consideration. These dimensions are knowledge creation and acquisition, transformation and storage, feedback and improvement, dissemination and usage. The main reason that differentiates this process with those of others is that it considers feedback and improvement as significant step in knowledge management process that provides constructive feedback on the knowledge stored so that it is regularly updated and enriched by academicians and industry experts. This knowledge is then disseminated to everyone in the institute. Let us study the process of knowledge management in detail.

#### **Knowledge creation and acquisition:**

It refers to the generation and assembling of knowledge by all the stakeholders. It involves the conversion of tacit to explicit knowledge and vice versa (Nonaka, 1994).

#### **Knowledge transformation and storage:**

It refers to transfer and storing of knowledge that has been created and acquired individually i.e. to share the knowledge with one and all. This means that knowledge must be transformed into various forms such as case studies, databases, structured documents, reports, and rules and procedures. This knowledge is stored at one place and is easily accessible by all the stakeholders.

#### **Knowledge feedback and improvement:**

The stored knowledge undergoes continues evaluation by senior academicians and industry experts to enrich and update its content and make it even more productive.

#### **Knowledge dissemination and usage:**

It refers of deployment of knowledge, which is done in the form of development of new curriculum, new research projects, and teaching pedagogy.

Thus, all the four levels are vital in order to facilitate effective knowledge management practices in higher educational institutes. (Table 1 and Figure 1)

## **II. Research Design & Methods**

The methodology of this paper has been to make a primary survey of 300 faculty members across 19 states from Indian higher educational institutes. Table 2 shows the number of higher educational institutes covered in 19 states.

**Measures:** The items of knowledge management that were formulated were given to the experts in selected Indian higher educational institutes. Based on their judgment from the original pool of 27 items, 9 have been removed and 3 were added making the total to 21 items of knowledge management. Every item was positively worded. The responses were captured by making personal visits and therefore response rate is 100 percent. The respondents were given adequate time to respond to the items and were assisted whenever required. The responses were gathered on 5-point Likert type scale (1 to 5). Table 3 gives a snapshot of the different scales given by various researchers to develop researcher's own scale of knowledge management.

**Reliability:** Knowledge management has 21 items grouped into 4 dimensions, namely, knowledge creation and acquisition (5 items), knowledge transformation and storage (7 items), feedback and improvement (6 items), and knowledge dissemination and usage (3 items). The sample items are "our head of the department encourages us to attend conferences/seminars/workshops" (creation and acquisition); "our institute has a repository of video-lectures and e-books" (transformation and storage); "our institute regularly updates teaching and research material" (feedback and improvement); and "our institute adopts best practices on educational processes and practices" (dissemination and usage). Reliability analysis was done and the value of Cronbach's alpha was reported between 0.80 and 0.94. The reliability coefficients higher than the .60 are minimally acceptable in the literature and support the internal consistency of the items (Black et al., 2009).

## **III. Results & Discussions**

Exploratory factor analysis was done using SPSS 21.0. The data was subjected to normal distribution and it came out to be normal. The values of Kaiser-Meyer-Olkin test (KMO) and the Bartlett's test of sphericity were reported that meet the required criterion (Table 4). Factor analysis was performed and number of factors was extracted from

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the data. 4 factors have been extracted with an Eigen Value higher than 1. The total variance explained by these six factors accounted for 64% variance. Mean and standard deviation were also found (Table 5). Table of Item-total statistics was also reported (Table 6).

### Discussion

Through review of literature, we have tried to unearth certain facts of learning organization and knowledge management. The present study aims at formulating the items of knowledge management that would be suitable for Indian higher educational institutes. After an extensive review of literature and expert judgment certain common items have been formulated with respect to knowledge management. Knowledge management facilitates knowledge creation and acquisition, transformation and storage, feedback and improvement, and disseminates and uses the stored knowledge to develop new insights and dispel learning. Thus, all the four levels are vital in order to facilitate effective knowledge management practices in the institute.

In higher educational institutes, knowledge is created through joint projects, guest lectures, and by attending conference/seminars/workshops, which ensures networking with academicians and industry experts. The institute also ensures that faculty from other fields of research are invited to carry out interdisciplinary research so that every individual gains new knowledge. In this way, existing knowledge is updated and new knowledge is created and acquired through different sources. This knowledge is used by faculty members in their classroom teaching for enriching the content. The lectures delivered by them are stored at one place either digitally or physically. The institutes makes sure that it has a repository of educational processes and practices, research projects, video lectures of classroom teaching and those of well-known academicians and industry experts, faculty and study achievements, technical reports, and CD's of various conferences/seminars/workshops held in the institute. Thus the knowledge is assembled at one place and is made easily accessible for everyone in the institute. The institute also provides every faculty member and student with username and password to fetch out the digital material whenever required. However, it is important to get regular constructive feedback on the stored material for which institute invites senior academicians and industry experts to answer every query related to the stored material. This also ensures that this material meets the industry demands. Educational processes and practices and curriculum are then revised according to such demands. The updated

knowledge is then disseminated among all the individuals, which is used for adopting best practices in teaching and research and in developing curriculum and pedagogy for next session. The whole process of knowledge management involves interaction with everyone thereby promoting knowledge-sharing process leading to continuous learning. Individuals learn from each other and from their experiences that enhances their learning ability. This also makes them competent in writing interdisciplinary research papers and in teaching different subjects, which was not part of their field. It results in the overall professional and personal development of individuals at all the levels. Therefore, the institute must ensure active involvement of faculty members in such practices, as faculty is the centrifugal guiding force that can facilitate enhanced learning activities through knowledge sharing process.

The questionnaire items that have been formed ensure if the institute is following effective knowledge management practices or not. This paper suggests that effective knowledge management practices are likely to result in continuous learning of all the stakeholders. The institute is required to create, transfer, maintain, and utilize the knowledge. Institutes facing tough times should engage by managing the knowledge productively. However, inspite of its implications, the study is not free from few limitations. Firstly, the paper only focuses only on the formulation of items aspect and its exploratory factor analysis. Secondly, the respondents were the faculty members. However, further study can be taken up with students and administrative staff as respondents and the model can be tested in Indian higher educational institutes.

### IV. Conclusion

The practices of management in the 21<sup>st</sup> century call for a new knowledge and insight to respond to the growing sustainable awareness (Arnoldi, 2012). In higher educational institutes, knowledge management forms a crucial part of learning. Institutes first analyze the level of connection between faculty member's and different institutes to share knowledge. Therefore, mapping of knowledge is done and best practice is used to create knowledge. Faculty members often create knowledge on their own through different channels. The institutes emphasize on taking knowledge management initiatives in teaching, research, and learning to create, share, protect, and use knowledge to meet the needs of the stakeholders. To build a radiating knowledge atmosphere in teaching-research-learning process, the institutes need to cultivate the culture of knowledge management in its practices. Thus, in today's scenario, educational institutes will be racked and ruined without

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knowledge management initiatives. In order to remain competitive, knowledge management system is instilled in the culture of the organization and this becomes paramount when the organization deals in international markets (Soley and Pandya, 2003). There is a strong need to protect educational institutes through their knowledge management practices by providing continuous learning opportunities.

### Implications

This paper identifies significant team level antecedent of learning organizations i.e. knowledge management. The study bears significant implications for academicians and researchers. From the perspective of academicians and researchers, they may incorporate the examples from this research in classrooms to introduce the scenario to the students about how important it is to develop into a learning organization. They can also take on further in-depth exploration in the relevant subject matter. The institutes involved in facilitating knowledge management practices result in better collaboration and social networking. Therefore, head of the institutes should ensure a proper knowledge sharing culture that supports implementing of such policies to facilitate good interaction among all the organizational members. They can use this scale to determine knowledge management practices in their institute and focus on pertinent dimensions of knowledge management that emphasize on use of knowledge resources available with the institute.

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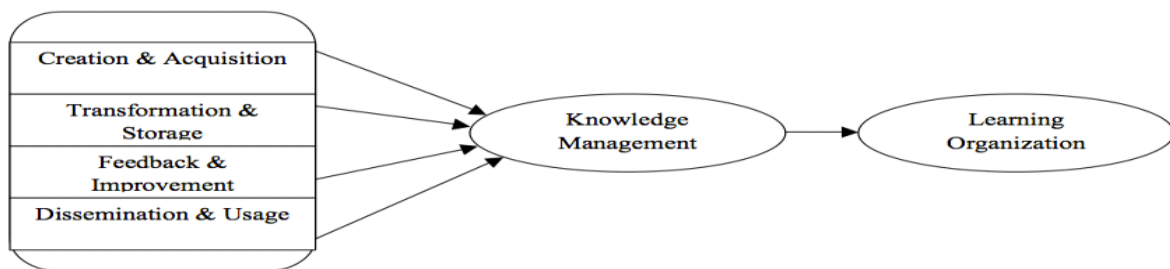
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**Figure 1: Knowledge Management leads to learning organization**



**Table 1: Various processes of Knowledge Management (by several authors)**

<i>Author, year</i>	<i>Process of Knowledge Management</i>
Gold, Malhotra, & Segars, 2001	Acquisition, conversion, application, and protection
Wilkins, Menzel, & Pawlowsky, 2004	Creation, diffusion, integration, and action
Moollan, 2004	Creation, sharing, application, and retention
López, Peón, & Ordás, 2004	Acquisition, distribution, interpretation, and organizational memory
Wei-he & Qui-yan, 2006	Creation, organization, transfer, and application
Li, Anand, Ragu-Nathan, & Thawatchai, 2008	Identification, sharing, and transfer
liao & Wu, 2009	Acquisition, conversion, and application
Adhikari, 2010	Acquisition, sharing, and use
Omerzel, Biloslavo, & Trnavcevc, 2011	Creation, storage, transfer, and application

**Table 2: Number of Management Institutes Covered in 19 States across India**

<b>States</b>	<b>Number of Institutes in private sector</b>	<b>Number of Institutes in government sector</b>
Andhra Pradesh	6	2
Bihar	2	3
Chattisgarh	2	2
Delhi	15	14
Gujarat	8	7
Haryana	16	9
Himachal Pradesh	5	3
Jharkhand	1	2
Karnataka	2	1
Madhya Pradesh	8	3
Maharashtra	11	4
Meghalaya	0	3
Punjab	37	13
Rajasthan	19	13
Sikkim	1	0
Tamil Nadu	2	1
Uttar Pradesh	58	8
Uttrakhand	10	3
West Bengal	2	4
Total	205	95

**Table 3: Various scales given by researchers**

<b>Variable</b>	<b>Scales Referred</b>	<b>Author, Year</b>
Knowledge Management	The instrument to measure KM processes	Wei-he & Qiu-yan, 2006
	Knowledge management in higher education institutions	Omerzel, Biloslavo, & Trnavcevic, 2010

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

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.933
Bartlett's Test of Sphericity	Approx. Chi-Square	4138.390
	df	210
	Sig.	.000

**Table 5: Mean, SD, and rotated component matrix**

Variables	Items	Component					
		Mean	SD	1	2	3	4
Knowledge creation and acquisition	Our director:						
	Encourages us to attend conferences/ seminars/ workshops.	4.09	1.10	.730			
	Our institute:						
	Encourages joint projects with other institutions.	3.71	1.18	.816			
	Invites renowned academicians for lectures.	4.05	1.09	.867			
	Invites faculty from other departments.	3.88	1.14	.883			
	Facilitates networking with academicians/ industry experts.	4.03	1.04	.821			
Knowledge transformation and storage	Our institute has a repository of:						
	Educational processes and practices.	3.93	.98		.712		
	Research Projects.	3.89	.98		.702		
	Video lectures and e-books.	3.81	1.05		.715		
	Faculty and student achievements.	4.03	.92		.784		
	Working research papers and technical reports.	3.95	1.05		.926		
	Video lectures of well-known academicians and researchers.	3.49	1.18		.861		
CD's of conferences/ seminars/ workshops.	3.73	1.07		.784			
Knowledge feedback and improvement	Our institute regularly updates:						
	Teaching and research material.	4.00	.98			.737	
	Educational processes and practices.	3.94	.98			.774	
	Faculty and student achievements.	4.07	.92			.706	
	Intranet for quick dissemination of campus news and information.	4.10	.96			.767	
	Student's feedback about classroom lectures and pedagogy.	4.21	.93			.755	
	Video lectures of well-known academicians and researchers.	3.62	1.11			.763	
Knowledge dissemination and usage	Our institute:						
	Adopts best practices in teaching, pedagogy, and research activities.	4.08	.99				.754
	Adopts best practices in educational processes and practices.	4.02	1.04				.825
	Develops curriculum and pedagogy.	3.96	1.08				.768

**Table 6: Item-Total Statistics**

	<b>Scale mean if item deleted</b>	<b>Scale variance of item deleted</b>	<b>Corrected item total correlation</b>	<b>Cronbach's Alpha if item deleted</b>
Knowledge creation and acquisition	78.56	206.20	.513	.942
Knowledge creation and acquisition	78.94	203.10	.567	.941
Knowledge creation and acquisition	78.60	201.86	.664	.939
Knowledge creation and acquisition	78.77	201.56	.639	.940
Knowledge creation and acquisition	78.62	201.76	.706	.939
Knowledge transformation and storage	78.72	203.95	.667	.939
Knowledge transformation and storage	78.76	205.82	.597	.940
Knowledge transformation and storage	78.84	202.75	.661	.939
Knowledge transformation and storage	78.62	207.15	.592	.941
Knowledge transformation and storage	78.70	201.88	.694	.939
Knowledge transformation and storage	79.16	200.50	.653	.940
Knowledge transformation and storage	78.92	204.95	.574	.941
Knowledge feedback and improvement	78.65	202.60	.720	.939
Knowledge feedback and improvement	78.71	201.54	.757	.938
Knowledge feedback and improvement	78.58	204.74	.682	.939
Knowledge feedback and improvement	78.55	207.27	.559	.941
Knowledge feedback and improvement	78.44	207.35	.574	.941
Knowledge feedback and improvement	79.03	203.70	.593	.941
Knowledge dissemination and usage	78.57	202.39	.716	.939
Knowledge dissemination and usage	78.63	200.43	.754	.938
Knowledge dissemination and usage	78.69	202.20	.659	.939

# AN ANALYSIS OF PUBLIC TRANSPORTATION SYSTEM IN SAQQEZ CITY USING SWOT TECHNIQUE

Kamaleddin Rahmani★ Mohamad Baghbani★★

*One of the most serious and significant challenges facing cities is the issue of transportation. Transportation and its drivers are comparable to the blood in the body of a creature named city. Based on a modern definition, a city is deprived of necessary functions without an efficient transportation system. Identify the different aspects of transport, particularly public transport play significant roles in achieving the objectives of a city. This identification requires knowledge of various aspects of urban transportation. The present study as an exploratory and descriptive survey aimed at identifying the internal and external dimensions of the transportation in Saqqez city. In this study, by a holistic view, different internal (strengths and weaknesses) and external (opportunities and threats) dimensions are identified, and by using strategic management techniques, necessary guidelines and strategies are proposed for improving the current situation governing the transport system in Saqqez city.*

*Keywords: Public Transportation; Vehicle; Bus Services, Taxi Services, Strategic Analysis*

Transportation has always been a major part of human life and has accounted for a considerable part of the resources and facilities directly or indirectly (Seyed Hossaini, 2008). Forty years of road transportation activities at the global level shows an increase in the level of dependency on vehicles and a shift of direction in social life style, which has in turn led to increased sensitivity to the environmental impacts as well as pertinent reflections in the area of health (Hine, 2000). The main goals to launch the public transportation system is to enable a fast and cheap transport system for all sections of society and at the same time reducing the negative effects of transport such as air pollution, congestion, noise pollution, etc. (Zhao, 2004). Therefore, in order to achieve these goals, the first step is a strategic analysis of the situation of public transport, so as to improve the current situation and achieve a desirable situation by formulating practical strategies.

## I. Review of Literature

### Research Background

The following research has been done in the field of research topic in Iran:

Keramattollah Ziyari, Professor of Geography and Human Sciences of Tehran University, in a study entitled "Evaluation of public transit system (BRT) in Tabriz using the approach of strategic factors analysis (SWOT)" provides strategies for improvement of public transit system (BRT) in the city of Tabriz (Ziyari, Kamal al-Din, et al., 2011).

Moussa Husseinzadeh in a study entitled "Pathology of

transport and urban traffic in Bojnoord and Esfaraen" has extracted a number of weaknesses in these cities, which a thorough investigation was not done in the study and only ten weaknesses of the transport and urban traffic system are considered (Hosseinzadeh et al., 2013).

Saman Sahraei in a research entitled "Pathology of the regulations related to urban transport" has regarded regulation of within the city transportation as a public right and ultimately has explored the damages caused by these laws and regulations (Sahraei, 2009).

Vahid Saeidian in a report called "pathology of transportation system in Tehran" mentions the main problems as the uneven distribution of public transport services, physical heterogeneous structure of neighborhoods, safety, environmental pollution, lack of attention to the elderly with disabilities and young children, the ease and convenience of travel, travel reducing equipments, energy consumption, a variety of transportation systems and methods for their use, network conditions and facilities, traffic behavior of citizens, investment, and lack of financial and foreign exchange resources, intervention of several institutions in decision making and accidents (Saeidian, 2012).

Ali Khaksari in his study "pathology of public and private transport for the disabled and veterans" has shown that there is significant relationship between the public and

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private transport with some factors such as urban furniture suitability, social acculturation, officials' priorities and needs of veterans and disabled people and modeling after the successful implementation of urban furniture suitability (Khaksari, et al., 2012).

## II. Research Design & Methods

### Research typology and methodology

The present study is applied in terms of objective and it is descriptive-analytic in terms of methodology. In the present study, depending on the nature of the research questions, different data collection techniques and tools are utilized. In this research, the public transport fleet in the city of Saqqez is explored, investigated and analyzed, and using library and field studies and, if necessary, interviews and questionnaire, data collection is done. First, using several meetings with the head of the Municipal Bus and Taxi Service Organization in Saqqez the current status of the public transport fleet was investigated; then using the above research techniques, the problems of the fleet were highlighted and some effective executive strategies were proposed to resolve these problems through meetings with experts and authorities in the field of urban management.

### Data collection tool

In this study, the preliminary data was collected based on library studies, and the necessary information on the status of municipal transport fleet were collected through interviews and study of periodic statistical reports. Identify the problems in public transportation fleet was done through distribution of questionnaires among people and interviewing people and drivers.

### Statistical population, sample size, sampling

Given the number of drivers of urban taxis, bus services, call taxi services, a specified percentage of them were selected as the statistical sample, and as Saqqez city has a population of 175 thousand people, 170 persons per thousand people were selected in the form of random sampling among the people and in urban areas. It is worth noting that due to the presence of about 1,700 road taxi service and call taxi, 5 percent of them ( $n = 85$ ) was selected as the sample for extraction of the weaknesses of taxi service system; meanwhile, all buses in the city were selected as the statistical sample of bus system.

## III. Results & Discussion

The stages of the strategic analysis of the city's public transportation system in Saqqez City

The first step: identifying the internal and external factors:

First, internal and external factors were analyzed. After recognition of all the strengths and weaknesses, opportunities and threats, internal factors evaluation matrix (IFE) and external factors evaluation matrix (EFE) were determined.

Internal strengths and weaknesses in IFE Matrix and the opportunities and external threats in EFE Matrix were analyzed. After identifying and scoring internal and external factors, these strategies were placed in the matrix table. Then, the strategies were scored by QSPM matrix and the priority of implementation of each is determined.

Using the research literature and specialized interviews, the most important indicators of any of the above criteria were identified and then classified in terms of strengths and weaknesses. In a similar way, by means of the research literature and specialized interviews the most important indicators of any of the external factors were identified and then classified in terms of opportunities and threats.

Step Two: Determine the weights of internal and external factors:

After identifying the internal and external factors and classifying them in terms of strengths and weaknesses and the opportunities and threats, the importance of each of them were identified by experts.

Step Three: Create a matrix of the evaluation of internal and external factors:

To provide internal factors evaluation matrix (IFE), the strengths and weaknesses were first listed, and a weight coefficient between zero (insignificant) to a (very important) were allocated to each factor, in a way that the sum of the assigned weight coefficients was equal to one.

Step Four: Develop SWOT Analysis Model

For the analysis of both internal and external factors, internal and external matrix was used. This matrix is used to determine the status of the industry or organization. To form this matrix, it is necessary to incorporate the scores obtained from the matrix for the evaluation of internal factors and external factors into the horizontal and vertical dimensions in order to specify the status of industry or organization in the market, and be able to identify relevant appropriate strategies. This matrix is based on the SWOT matrix and specifies appropriate strategies for organization. Please see Figure 1.

SWOT technique systematically analyzes the strengths,

weaknesses, opportunities and threats identified in the previous step, and reflect the strategies appropriate to the situation. In SWOT model, after listing each of the strengths, weaknesses, opportunities and threats identified in the previous step and write them in their respective cells in terms of the weighted scores of the confluence of each of them, the strategies desired are determined. Therefore, this strategy always leads to four types of strategy including ST, WT, WO and SO.

### Quantitative strategic planning matrix or QSPM

A) Internal Factors Evaluation (IFE) – Please see Table 1.

B) External Factor Evaluation (EFE) – Please see Table 2.

C) Formulate macro strategies (IE)

In this stage, in terms of the final scores obtained from the evaluation matrix of internal and external factors, the situation of transportation in the city of Saqqez was determined based on four-fold positions including invasive, contingency, adjustment and defensive. For this purpose, the total weighted scores of the internal factors matrix and total weighted scores of the external factors matrix are extracted and they are outlined in the internal-external matrix table.

According to the results obtained from the evaluation of internal factors matrix (IFE), the total score obtained is 2.16 and the total weight score of the external matrix (EFE) is equal to 2.77. Then we draw them in X and Y axis to show the position of transportation in Saqqez considering all the pertinent factors. According to the results obtained from the study, the situation of sustainable transportation development in Saqqez city is conservative and to some extent invasive. Please see Figure 2.

D) Operating strategy (SWOT)

SWAT matrix provides the possibility of choosing four different choices or strategies including defensive, adaptive, contingency and invasive through a combination of internal factors matrix and external factors matrix. However, during operation, some strategies have overlapping with each other, or come into force simultaneously and consistent with each other. In terms of the system situation, four categories of the strategies that are different in terms of interaction can be formulated as follows.

In addition, it could be seen that through the combination of various aspects of the SWOT matrix in this case study, 36 different strategies can be identified. See Table 3.

(E) Select and prioritize strategies (QSPM)

Given the evaluation matrix of the internal and external factors, the strategies that should be considered are SO strategies that are based on the strengthening of the strengths and use of opportunities. Now, by forming quantitative strategic programming matrix (QSPM), the existing strategies in the SO matrix of SWAT are prioritized.

The steps to form quantitative strategic planning matrix include:

- 1 The external opportunities and threats, and internal strengths and weaknesses are listed in the right column in QSPM. Then, in the second column, the weight of each factor (from tables IFE and EFE) is entered in the second column.
- 2 With regard to the second stage of formulating (synthesis and composition), workable and executable strategies or the same combinational strategies (SO which aims to prioritize them) are written in the top row of the matrix QSPM. Each strategy consists of two columns, AS attractiveness score and TAS strategy attraction
- 3 Based on the extent of effect and attractiveness of any internal and external factor, the experts assign the scores 1-4 to the relevant strategy that is called AS attractiveness score.
- 4 By multiplying the weight of each factor in the AS attractiveness score, TAS strategy attractiveness is calculated, and to obtain the attractiveness of each strategy, the numbers of attractiveness column of each strategy is added up.
- 5 Strategies will be prioritized based on the score obtained from the attractiveness of each strategy from the highest to lowest score. Please see Table 4.

12- Develop goals and operational programs

According to the calculations obtained in the previous stage, the priority of the operational strategies to improve public transport in Saqqez city is as follows. As it can be seen, the first priority is related to the strategy of the modernization of the public transport system (fleet), and the second priority is related to the use of volunteers in traffic control plans. Please see Table 5.

## IV. Conclusion

Transport, especially public transport is one of the fundamental issues that many people deals with it every day. Some people are the users of public services and some people probably do not use these services publicly. However, what is clear is that the management of this area

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entails broad knowledge of shortcomings and weaknesses of the current status and potential threats of the external environment, which this will not be achieved without a systematic insight to analyze all aspects of public transport.

The current study attempted to perform a comprehensive analysis of the problems of public transport in Saqqez city by using the opinions of experts and practitioners involved in the field of transport in order to present some strategies to develop and improve public transport in Saqqez City.

The study results show a general weakness of public transport infrastructures in Saqqez city. It is proposed to take fundamental measures to provide a fertile ground for implementing the basic strategies provided and to ensure the development and modernization of the transport fleet, and the officials in charge of transport system in this city are required to adopt somewhat invasive and conservative strategies in order to improve the situation.

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Figure 1: Evaluation Model and Strategy Selection

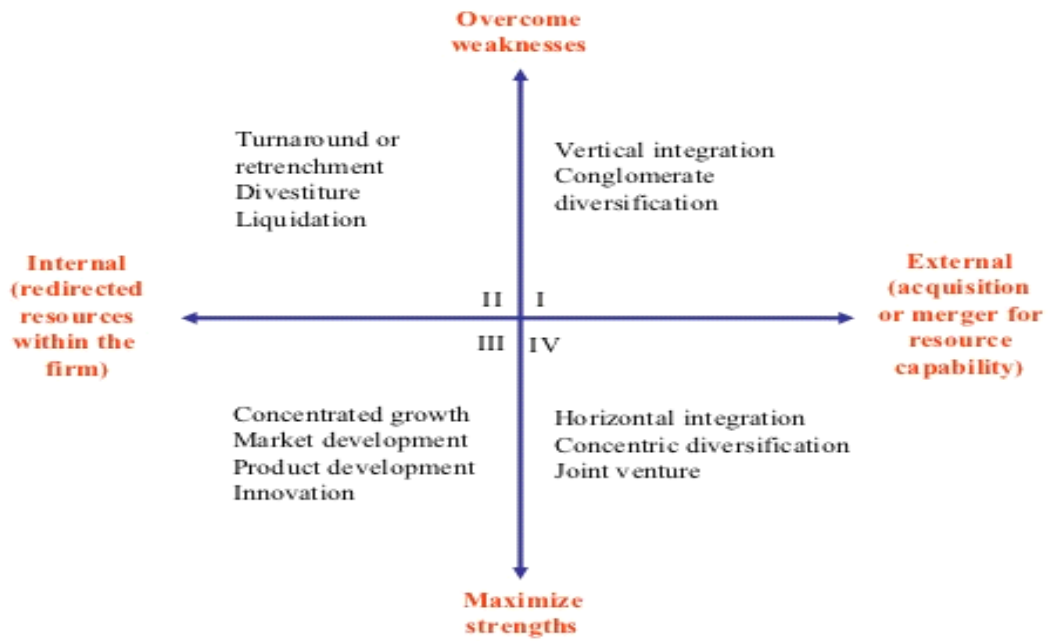
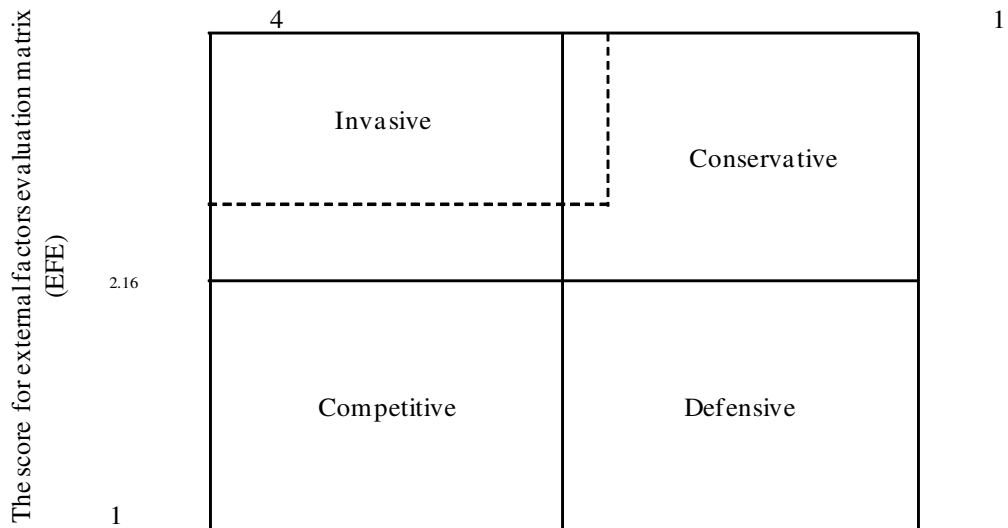


Figure 2

The score for external factors evaluation matrix (IFE)



**Table 1: Evaluation matrix of internal factors (strengths and weaknesses)**

Row	Strengths	Weight	Relative Weight	Ranking	Weight Score
1	Tendency to use intelligent transport systems within the city	0.90	0.10	4	0.42
2	Traffic restrictions such as traffic area plan or restricting the entrance of heavy vehicles	0.70	0.08	3	0.24
3	Capability of the manpower involved in bus and taxi service organization	0.80	0.09	4	0.37
	<b>Total Score</b>				1.03
Row	Weakness	Weight	Relative Weight	Ranking	Weight Score
	The lack of a coherent and competent organization in the administration of traffic plans	0.6	0.07	1	0.07
	Limited hours of public service transport system	0.3	0.03	1	0.07
	Lack of spare systems in buses	0.4	0.05	1	0.09
	The presence of manual system of traffic warden along the most major streets of city center	0.4	0.05	2	0.09
5	Exhaustion of urban transportation fleet	0.3	0.03	1	0.03
6	Inadequate distribution of subsidized fuel, according to busy traffic routes	0.4	0.05	2	0.09
7	Unavailability of bus stations with comfortable seats	0.4	0.05	2	0.09
8	Lack of mechanization and automation of bus stations	0.6	0.07	2	0.14
9	Manual system of receiving bus fare	0.6	0.07	2	0.14
10	Time consuming nature of refueling of CNG for taxis and call taxi services	0.4	0.05	2	0.09
11	Lack of attention to the disabled and veterans in public transport furniture	0.7	0.08	1	0.08
12	Lack of proper road traffic pedestrian bridges in congested routes	0.6	0.07	1	0.07
13	Limited hours of public service transport system	0.5	0.06	1	0.06
	<b>Total Score</b>				1.13

**Table 2: Evaluation matrix of the external factors (opportunities and threats)**

Row	Opportunities	Weight	Relative Weight	Ranking	Weight Score
1	Change in the view of citizens on traffic issue	0.80	0.06	3	0.18
2	National laws and regulations to support urban transport	0.70	0.05	3	0.16
3	Tendency to use integrated public transport system	0.60	0.05	3	0.14
4	The high number of unemployed youth to be employed in the public transport fleet	0.60	0.05	4	0.18
5	National support for the modernization of public transport fleet	0.50	0.04	4	0.15
6	Implementation of traffic regulation in Saqqez City	0.30	0.04	3	0.07
7	The request of new neighborhoods to have bus service	0.50	0.04	2	0.08
	<b>Total Score</b>				0.95
Row	Threats	Weight	Relative Weight	Ranking	Weight Score
1	Narrow width of most of streets for bus traffic	0.8	0.06	1	0.06
2	Lack of overpass within the city to ease traffic	0.8	0.06	1	0.06
3	The multiplicity of not registered taxi drivers	0.2	0.02	2	0.03
4	Passengers' avoidance of doing urban travel by taxi	0.4	0.03	1	0.03
5	Use of personal vehicles in a single-passenger form by most of people	0.50	0.04	1	0.04
6	The low number of public parking within the Bazaar area (market)	0.6	0.05	2	0.09
7	Some taxis' avoidance of using taximeter	0.5	0.04	2	0.08
8	Transit of pedestrians across every part of the streets	0.30	0.02	1	0.02
9	The small size of some sidewalks and traffic of people in the streets	0.2	0.02	1	0.02
10	Traffic behaviors in contrast to driving rules	0.6	0.05	1	0.05
11	High traffic in city center and difficulty in movement	0.8	0.06	1	0.06
12	Lack of awareness and required training in the area of transport and traffic	0.30	0.02	2	0.05
13	Increase in urban population and the seasonal accommodation of most of rural people in the city	0.50	0.04	1	0.04
14	Lack of traffic and transportation organization to make integrated and unified decisions	0.50	0.04	1	0.04
15	Unbalanced development of the city in the southern and western parts	0.60	0.05	2	0.09
16	Noise, air and visual pollution of transport fleet	0.30	0.02	1	0.02
17	Passage of highway through Saqqez city and transit of passing vehicles inside the city	0.60	0.05	1	0.05
18	High traffic in the city center and difficulty in movement and transit	0.7	0.05	1	0.05
	<b>Total Score</b>		1		1.82

**Table 3: The list of SWOT Strategic**

The current status of the public transportation system in Saqez City		Strengths			Weakness																		
		S1	S2	S3	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	
		Tendency to use intelligent transport systems within the city	Traffic restrictions such as traffic area plan or restricting the entrance of heavy vehicles	Capability of the manpower involved in bus and taxi service organization	The lack of a coherent and competent organization in the administration of traffic plans	Limited hours of public service transport system	Lack of sparey stems in buses	The presence of manual system of traffic warden along the most major streets of city center	Exhaustion of urban transportation fleet	Inadequate distribution of subsidized fuel, according to busy traffic routes	Unavailability of bus stations with comfortable seats	Lack of mechanization and automation of bus stations	Manual system of receiving bus fare	Time consuming nature of refueling of CNG for taxis and call taxi services	Lack of attention to the disabled and veterans in public transport furniture	Lack of proper road traffic pedestrian bridges in congested routes	Limited hours of public service transport system						
Opportunities	Change in the the view of citizens on traffic issue	O1	SO1:Traffic restrictions and implement the integrated system	WO1: Empowerment of traffic authorities in educating citizens																			
	National laws and regulations to support urban transport	O2	SO2:Efforts to attract goveremnt funds in the development of the transport system	WO2: Obtaining funding for urban transport fleet renewal																			
	Tendency to use integrated public transport system	O3	SO3:Implementation of an integrated public transport system	WO3: Prepare taxi and bus organization personnel for the implementation of an integrated transport system																			
	The high number of unemployed youth to be employed in the public transport fleet	O4	SO4:The use of volunteers for traffic control	WO4: Approval of call van, call minibus and organizing personal taxis and issuing license for call taxi offices																			
	National support for the modernization of public transport fleet	O5	SO5:Modemization of the urban transport system	WO5: trying to attract the support of national and provincial budgets																			
	Implementation of traffic regulation in Saqez City	O6	SO6:Studies on Traffic Organization Master Plan	WO6: prepares studies and implement traffic regulation plan																			
	The request of new neighborhoods to have bus service	O7	SO7:Guidance of some taxis toward marginal neighborhood	WO7: Organizing the not registered taxis in the neighborhoods without taxi service																			
Threats	The request of new neighborhoods to have bus service	T1	ST1: Change in the detailed design in accordance with the Traffic Master Plan Traffic	WT1: Issue license for middle bus and van for servicing as a taxi on the narrow streets																			
	Narrow width of most of streets for bus traffic	T2	ST2: Create overpass and underpasses based on observation & study	WT2: Guide vehicles toward the exit ports of city center streets																			
	Lack of overpass within the city to ease traffic	T3	ST3: Organize private taxi	WT3: traffic restrictions for private taxis																			
	The multiplicity of not registered taxi drivers	T4	ST4: perform Special taxi lines in high-traffic streets	WT4: Promotion of a culture with such traffic methods as entrance of some basic and simple traffic issues into training course of students, providing advertising trailers, etc.																			
	Lack of attention of passengers to do urban travel by taxi	T5	ST5: Traffic restrictions for single-seat cars	WT5: prevent the entry of single-seat cars to high-traffic areas																			
	Use of personal vehicles in a single-passenger form by most of people	T6	ST6: Create multi-floor parking in streets filled with traffic	WT6: Not giving the license and deed to the buildings with parking shrinkage abuse																			
	The low number of public parking within the Bazaar area (market)	T7	ST7: Control taxis with tracking devices and implement an online complaints system	WT7: Fine the cars that do not use taximeter																			
	Some taxis' avoidance of using taxi meter	T8	ST8: Make protection along the sidewalks	WT8: Promotion of a culture of traffic																			
	Transit of pedestrians across every part of the streets	T9	ST9: Converting some streets to pavements	WT9: Attempting to widening streets with incentive plans approved by the City Council																			
	The small size of some sidewalks and traffic of people in the streets	T10	ST10: Penalties for traffic offenders	WT10: Create a traffic park and educate citizens																			
	Traffic behaviours in contrast to driving rules	T11	ST11: More traffic restrictions in the city center	WT11: dismantling of the Parkban system on the s busy and crowded streets																			
	High traffic in city center and difficulty in movement	T12	ST12: Create Information and teach citizens about traffic rules and traffic parks	WT12: Educating citizens in the field of transport and traffic																			
	Lack of awareness and required training in the area of transport and traffic	T13	ST13: More measures to raise the level of citizens' access	WT13: Increased frequency of public service during peak hours in the city, pendulum movement of rural people to the city during certain hours of the day																			
	Increase in urban population and the seasonal accommodation of most of rural people in the city	T14	ST14: Establish the organization of transport and traffic	WT14: Greater coordination among municipal transport authorities																			
	Lack of traffic and transportation organization to make integrated and unified decisions	T15	ST15: More focus on developing services in residential areas	WT15: alignment of transport programs with the development of residential areas																			
		T16	ST16: Control technical examination of																				
	Noise, air and visual pollution of transport fleet	T17	ST17: the implementation of the city ring road boulevards and ramps	WT17: Avoid the traffic of heavy vehicles during certain hours of the day																			
	Passage of highway through Saqez city and transit of passing vehicles inside the city	T18	ST18: establish time limits or odd and even time limitations in the city center	WT18: Decentralization of medical and administrative site in peripheral areas of the city																			

**Table 4: Quantitative strategic planning matrix (QSPM)**

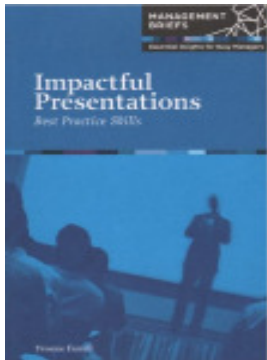
Opportunity	Weight	Strategy SO1		Strategy SO1		Strategy SO1		Strategy SO1		Strategy SO1		Strategy SO1		Strategy SO1	
		Traffic restrictions and implement the Integrated System		Efforts to attract government funds in the development of the transport system		Implementation of an integrated public transport system		The use of volunteers for traffic control		Modernization of the urban transport system		Studies on Traffic Organization Master Plan		Guidance of some taxis toward marginal neighborhood	
		AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS
Change in the view of citizens on traffic issue	0.06	2	0.12	1	0.06	2	0.12	1	0.06	1	0.06	1	0.06	2	0.12
National laws and regulations to support urban transport	0.05	1	0.05	4	0.2	3	0.15		0.05	4	0.2	3	0.15	1	0.12
Tendency to use integrated public transport system	0.05	4	0.2	3	0.15	4	0.2	1	0.05	2	0.1	1	0.05	1	0.05
The high number of unemployed youth to be employed in the public transport fleet	0.05	1	0.05	1	0.05	1	0.05	3	0.15	1	0.05	1	0.05	1	0.05
National support for the modernization of public transport fleet	0.04	4	0.16	4	0.16	4	0.16	1	0.04	3	0.12	4	0.16	1	0.04
Implementation of traffic regulation in Saqqez City	0.02	3	0.06	3	0.06	3	0.06	1	0.02	2	0.04	4	0.08	1	0.02
The request of new neighborhoods to have bus service	0.04	2	0.08	2	0.08	1	0.04	1	0.04	1	0.04	1	0.04	4	0.16

Threat	Weight	Traffic restrictions and implement the Integrated System		Efforts to attract government funds in the development of the transport system		Implementation of an integrated public transport system		The use of volunteers for traffic control		Modernization of the urban transport system		Studies on Traffic Organization Master Plan		Guidance of some taxis toward marginal neighborhood	
		AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS
Narrow width of most of streets for bus traffic	0.06	4	0.24	2	0.12	1	0.06	1	0.06	2	0.12	3	0.18	1	0.06
Lack of overpass within the city to ease traffic	0.06	2	0.12	3	0.18	2	0.12	1	0.06	2	0.12	3	0.18	1	0.06
The multiplicity of not registered taxi drivers	0.02	3	0.06	1	0.02	1	0.02	3	0.06	1	0.02	1	0.02	3	0.06
Lack of attention of passengers to do urban travel by taxi	0.03	4	0.12	2	0.06	1	0.03	1	0.03	2	0.06	1	0.03	1	0.03
Use of private vehicles in a single-passenger form by most of people	0.04	3	0.12	2	0.08	2	0.08	1	0.04	2	0.08	2	0.08	1	0.04
The low number of public parking within the Bazaar area (market)	0.05	3	0.15	3	0.15	3	0.15	1	0.05	2	0.1	2	0.1	1	0.05
Some taxis' avoidance of using taxi meter	0.04	1	0.04	1	0.04	4	0.16	1	0.04	4	0.16	1	0.04	1	0.04
Transit of pedestrians across every part of the streets	0.02	1	0.02	1	0.02	1	0.02	1	0.02	1	0.02	2	0.04	1	0.02
The small size of some sidewalks and traffic of people in the streets	0.02	1	0.02	1	0.02	1	0.02	1	0.02	1	0.02	2	0.04	1	0.02
Traffic behaviors in contrast to driving rules	0.05	1	0.05	1	0.05	1	0.05	1	0.05	1	0.05	1	0.05	1	0.05
High traffic in city center and difficulty in movement	0.06	3	0.18	1	0.06	2	0.12	1	0.06	1	0.06	1	0.06	1	0.06
Lack of awareness and required training in the area of transport and traffic	0.02	1	0.02	1	0.02	1	0.02	1	0.02	1	0.02	1	0.02	1	0.02
Increase in urban population and the seasonal accommodation of most of rural people in the city	0.04	2	0.08	1	0.04	1	0.04	1	0.04	3	0.12	2	0.08	1	0.04
Lack of traffic and transportation organization to make integrated and unified decisions	0.05	2	0.08	3	0.12	1	0.04	1	0.04	3	0.12	1	0.04	1	0.04
Unbalanced development of the city in the southern and western parts	0.05	2	0.1	3	0.15	2	0.1	1	0.05	3	0.15	1	0.05	1	0.05
Noise, air and visual pollution of transport fleet	0.02	4	0.08	2	0.04	2	0.04	1	0.02	3	0.06	3	0.06	1	0.02
Passage of highway through Saqqez city and transit of passing vehicles inside the city	0.05	4	0.2	2	0.1	2	0.1	1	0.05	3	0.15	3	0.15	1	0.05
High traffic in the city center and difficulty in movement and transit	0.05	4	0.2	3	0.15	2	0.1	2	0.1	3	0.15	1	0.05	1	0.05
<b>Total External Factors</b>		2.6		2.18		2.05		1.22		2.19		1.86		1.25	

Strengths	Weight	Strategy SO1		Strategy SO1		Strategy SO1		Strategy SO1		Strategy SO1		Strategy SO1		Strategy SO1	
		Traffic restrictions and implement the Integrated System		Efforts to attract government funds in the development of the transport system		Implementation of an integrated public transport system		The use of volunteers for traffic control		Modernization of the urban transport system		Studies on Traffic Organization Master Plan		Guidance of some taxis toward marginal neighborhood	
		AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS
Tendency to use intelligent transport systems within the city	0.1	1	0.1	1	0.1	3	0.31	1	0.1	4	0.4	2	0.2	1	0.1
Traffic restrictions such as traffic area or restricting the entrance of heavy vehicles	0.08	4	0.32	2	0.16	2	0.16	1	0.08	3	0.24	3	0.24	1	0.08
Capability of the manpower involved in bus and taxi service organization	0.09	2	0.18	1	0.09	3	0.27	1	0.09	2	0.18	3	0.27	1	0.09
Weaknesses	Weight	Traffic restrictions and implement the Integrated System		Efforts to attract government funds in the development of the transport system		Implementation of an integrated public transport system		The use of volunteers for traffic control		Modernization of the urban transport system		Studies on Traffic Organization Master Plan		Guidance of some taxis toward marginal neighborhood	
The lack of a coherent and competent organization in the administration of traffic plans	0.07	2	0.14	2	0.14	3	0.21	2	0.14	2	0.14	3	0.21	1	0.07
Limited hours of public service transport system	0.03	1	0.03	1	0.03	1	0.03	1	0.03	1	0.03	1	0.03	3	0.09
Lack of spare systems in buses	0.05	1	0.05	1	0.05	1	0.05	1	0.05	2	0.1	1	0.05	3	0.15
The presence of manual system of traffic warden along the most major streets of city center	0.05	3	0.15	1	0.05	1	0.05	2	0.1	2	0.1	3	0.15	3	0.15
Exhaustion of urban transportation fleet	0.03	1	0.03	1	0.03	1	0.03	1	0.03	4	0.12	1	0.03	1	0.03
Inadequate distribution of subsidized fuel, according to busy traffic routes	0.05	1	0.05	1	0.05	1	0.05	1	0.05	2	0.1	2	0.1	3	0.15
Unavailability of bus stations with comfortable seats	0.05	1	0.05	1	0.05	1	0.05	1	0.05	4	0.2	2	0.1	1	0.05
Lack of mechanization and automation of bus stations	0.07	1	0.07	1	0.07	3	0.21	1	0.07	4	0.28	2	0.14	1	0.07
Manual system of receiving bus fare	0.07	1	0.07	1	0.07	4	0.28	1	0.07	4	0.28	2	0.14	1	0.07
Time consuming nature of refueling of CNG for taxis and call taxis	0.05	1	0.05	2	0.1	2	0.1	1	0.05	2	0.1	2	0.1	1	0.05
Lack of attention to the disabled and veterans in public transport furniture	0.08	3	0.24	2	0.16	4	0.32	2	0.16	3	0.24	3	0.24	1	0.08
Lack of proper road traffic pedestrian bridges in congested routes	0.07	3	0.21	2	0.14	2	0.1	1	0.07	1	0.07	3	0.21	1	0.07
Limited hours of public service transport system	0.065	3	0.18	2	0.12	3	0.18	2	0.12	2	0.12	1	0.06	3	0.18
Total Score of Internal Factors		1.92		1.41		2.43		1.26		2.7		2.27		1.48	
Total Score of Internal and external Factors		4.52		3.59		4.48		2.48		4.89		4.13		2.72	

**Table 5: Priority of the Strategies**

Name of Strategy	The final score of attractiveness of strategy	Priority of Strategy
Modernization of the urban transport system	4.89	First Priority
Traffic restrictions and implement the integrated system	4.52	Second Priority
Implementation of an integrated public transport system	4.48	Third Priority
Studies on Traffic Organization Master Plan	4.13	Fourth Priority
Government efforts to attract funds in the development of the transport system	3.59	Fifth Priority
Guidance of some taxis toward marginal neighborhood	2.73	Sixth Priority
The use of volunteers for traffic control	2.48	Seventh Priority



## A BOOK REVIEW ON “IMPACTFUL PRESENTATIONS: BEST PRACTICE SKILLS”

Author: Yvonne Farrell

Publisher: Viva Books Private Ltd.

ISBN:978-81-309-3102-9

Jyoti Kukreja ★

“There are always three speeches, for every one you actually gave. The one you practiced, the one you gave, and the one you wish you gave.” –Dale Carnegie

Ever bewildered with the imminent task of making and delivering the presentations; do you still wonder why do certain presentations make an everlasting impact and many a presentation seem so lean that they struggle to grab attention of the audience but still fail. More often than not, we do recall the failed presentations or the ones that lack in creating an impact and focus. Many presenters make the mistake of producing slides without any consideration for the purpose of the presentation or the audience that they should focus on. Many a times their own material sways them away! If we categorize speakers, they are understood to be underprepared, deficient in confidence and thereto anxious and nervous. Thorough reading unveils many important aspects for a presenter to be with the ‘art of presentation’.

This book provides all the necessary directions for those who want to improve the way in which they approach and deliver presentations. The book is full of useful tips that would create a huge impact on building audience attention and keeping them agog. The book contains eight chapters and aims in developing and honing the presentation skills of amateurs and professionals. It very insightfully discusses the art and science of how to keep your audience engaged by stimulating both sides of the brain: The left side of the brain lends logic and the right side of the brain lends creativity. Various interesting models have been highlighted like CAB Model, SHE Model, where Content, Audience and Body language (CAB) play a very crucial role in crafting and delivering the presentation. Any presentation has these three vital components of weaving content for audience and wrapping the contents with such body language that makes the impact effective. Sight, Hearing and Emotion (SHE) are the three forms of appeal that make the presentation lively and keep the audience well-connected

throughout the presentation. Visual appeals in the form of background color, color of text, video, animations, all make the presentation attractive for the audience.

It is quite plausible that the audience might get distracted or might experience boredom during the presentation. The book underscores a natal process of brain having the capacity of synthesizing 800 words every minute and speech ratio is 175 words per minute, thus the gap of 625 words initiates boredom for the audience, which is an ulterior task for the presenter to manage.

Last but never the least; the presenter also needs to keep in mind, the types of question that emanates from the audience. Questions could be of varied types: hypothetical, probing, specific, reflective, open, etc. Sometimes, you as the presenter may not know the answer, in such cases; it would not be indecorous to ask the audience member to repeat the question, so that you can understand the background of the question. Additionally, if you find that the audience has lost its interest in the middle, you can revive it up by using signposts like, ‘I hope, I have not lost you in between’, or by being a bit humorous.

Overall, it is a reader-friendly, must-read book for all the people who are likely to be engaged in the world of presentations. The insights into this arena would rescue many of the presenters from the oft-repeated boredom factors.

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