



The Journal of Indian Management & Strategy

Indexed/Abstracted: J-Gate, EBSCO Discovery, Summon (Proquest), Google Scholar, Indian Science Abstracts, Indian Citation Index (RII - 0.016), InfoBase Index (IB Factor 2016 - 2.6), Emerging Sources Citation Index (Thomson Reuters), SJIF Impact Factor 2016 - 4.756, Cosmos Impact Factor.

Impact of Dividend Policy on Share Prices: A Study on Select Indian Pharma Companies <i>P. R. Venugopal, Rajesh C Jampala</i>	4
Antecedents and Consequences of Work Life Balance among Women Bank Employees: A Study on Selected Individual Level Factors <i>Mona Ratnesh, Ashish Ranjan Sinha, Amjad Ali</i>	12
An Analysis of Migration in India and its Effect on Health <i>Shankar S. Kandhare, H. H. Bharadi</i>	21
Evaluating Role of Individuals' Subjective Career Success in Organization <i>Tan Le Trinh, Trang Dai Thi Dao</i>	25
Impact of Sensory Marketing on Consumers' Purchase Intention in Restaurants <i>Govind Narayan, Abadh Narayan Singh</i>	35
Does Minimum Support Price Supporting the Farmers: A Comparative Study in Andhra Pradesh and Telangana States <i>Kishore Kumar Yathamsetty</i>	42
Knowledge Management for Sustainable Development - A Critical Analysis <i>Parveen K. Bangotra, Bhupinder P S Chahal</i>	51
A Never Die Entrepreneurial Spirit - Case of A Struggling Entrepreneur <i>Shabana Abdulkhaliq Memon</i>	59
A Book Review on "Data Warehousing, Data Mining, & OLAP" <i>Palak Gupta</i>	64

◀ Research

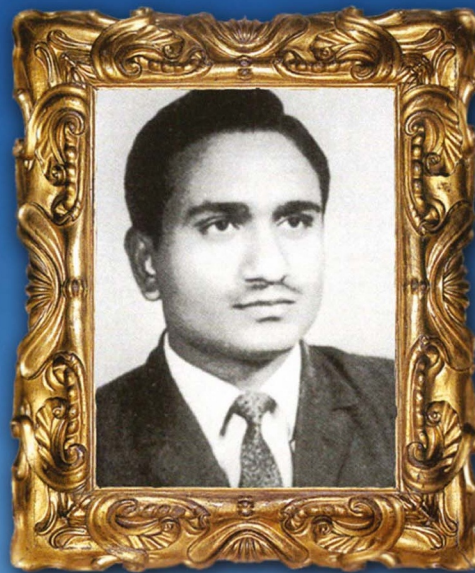
◀ Case Study

◀ Book Review

A TRUE VISIONARY

*“You see things and you say **Why?** But I dream of things that never were and say **Why not?**”*

- George Bernard Shaw



Shri Jagannath Gupta
(1950 - 1980)

*Also a true visionary...who dared to dream!
He lives no more but his dreams live on....and on!*

JIMS (Rohini)	-	1993
JIMS (Kalkaji)	-	1997
JIMS (Vasant Kunj)	-	2003
JIMS (Jaipur)	-	2003
JNIT (Jaipur)	-	2004
JIMS (Greater Noida)	-	2008
Jagannath University (Jaipur)	-	2008
Jagannath University (Bahadurgarh)	-	2013

And more dreams to come!

EDITOR IN CHIEF
AMIT GUPTA

PUBLISHER
MANISH GUPTA

CONSULTING EDITOR
SATISH SETH

MANAGING EDITOR
PREETI SINGH

ASSOCIATE EDITORS
SATISH KUMAR DOGRA
NEELAM TANDON

EDITORIAL ADVISORY BOARD
D. K. BANWET
Ex. VC, Univ. of Eng. & Mgt., Kolkata

MADHU VIJ
Prof. FMS, Univ. of Delhi

VISHNU KIRPALANI
Prof., Emrts., Concordia University, Canada

WOLFGANG VEIT
Prof., Cologne Univ. Germany

ISTAVAN MOLNAR
Prof., Corvinus Univ., Budapest, Hungary

HIDEKAZU SONE
Prof., Shizuoka Univ. of Hamamatsu, Japan

ADITYA SHARMA
Senior Technology Consultant Deloitte Consulting
USA

PRODUCTION ASSISTANTS
SHIVAKAR KUMAR
ANKITA AHUJA
N. K. JOSHI

Editorial Offices & Subscriber Service
Strategic Consulting Group
OCF, Pocket-9, Sector-B, Vasant Kunj
New Delhi-110070
Phone: 011-40619300, Fax:011-40619333
E Mail: jims.8m@jagannath.com, Website:
www.jimsd.org
Available Online at www.indianjournals.com
RNI No. 64562/96
Online ISSN No: 0973-9343
Exclusively Marketed and Distributed by
indianjournals.com

Editor's Desk

The BJP won a landslide victory in the polls giving them a chance to form their government in India. While the swearing in ceremony of Modi as Prime Minister and other cabinet ministers was taking place in India on 30th May, international trade related problems became a very big challenge. The US decided to end preferential tariffs to \$5.6 billion of Indian exports from June 5th, as according to them India had not assured them that they would provide "equitable and reasonable access to its markets. the United States would however, exempt Indian steel and aluminum from the higher tariff regime, But the exemption was expected to be with riders. President Trump gave India a jolt by bringing about new tariffs on other products too. The ensuing trade war of US with China was already affecting many countries as US laid restrictions on other countries too. These changes were expected to create instability for manufacturers, consumers and the global economy in 2018, Trump had declared a foreign policy for a "free and open Indo-Pacific" with a group of countries called "the Quad": United States, India, Japan and Australia. Removing India's preferential tariffs would be like a fall back on the policy and a big setback to international trade for India. The US President Trump had taken authority through the Trade Act of 1974, to unilaterally impose tariffs on \$250 billion of Chinese goods after determining through the United Trade Representative that China's trade practices were unfair towards U.S. exports. The U.S. announced a list of 1,333 Chinese product categories that would have 25 per cent tariffs. China retaliated with tariffs on 128 varieties of products from U.S which included pork, fruit and nuts, steel pipe for the oil industry, and ethanol. Thus, a trade war escalated between the two countries.

What will be the effect on India as an ally to counter China.? Will the trade be affected like in China? Trump has already announced its decision to put tariffs on Indian solar panels and washers. It is unhappy over India's protection to its own internet industry and tariffs on US motor cycles, dairy products, medical devices and e-commerce companies. New tariffs by U.S on Indian goods are expected to hit the Indian exporters in products like textiles, jewelry, auto parts and agricultural products. India on its part has not yet put tariffs on American products like almonds, apples and finished metal products though it had identified the products, because it did not want to disturb the pattern of trade as U.S trade was extremely important for India.

However, problems have started simmering as both China and India retaliated against the US policy to stop them from purchasing oil from Iran. President Trump has also been active on trade fights and negotiations with China, Europe and Japan, and discussions on ratifying a new trade agreement with Canada and Mexico. U.S. has increased tariffs of Mexican imports to 5% and threatened to increase it to 25% to reduce the inflow of migrants from Mexico. While Trump is looking at trade concerns of U.S. the other countries have their own development concerns and there is a deepening clash between U.S., China, Mexico and India.

(Preeti Singh)

About the Journal

JIMS 8M: The Journal of Indian Management and Strategy is committed to publishing scholarly, empirical and theoretical research articles that have a high impact in the field of Management. The Journal is peer-reviewed and is published quarterly. It covers domains such as business strategy and policy, human resource management, organizational behavior, operations, finance, entrepreneurship, organizational theory and research methodology. The journal provides an intellectual platform for advancement and dissemination of management knowledge and also fosters collaborative research. It has an inclusive ethos and is open to a wide range of methodological approaches and philosophical underpinnings.

Views and factual claims expressed in individual contributions are personal to the respective contributors and are not necessarily endorsed by the editors, their advisors, or the publishers of the journal.

Guidelines for Authors

Authors are strongly encouraged to submit their manuscripts electronically via email to jims.8m@jagannath.org and on receipt of the manuscript, an acknowledgement is emailed to the author. The manuscript after passing through the Plagiarism check through software is evaluated for the original content. If the original content is less than 75% excluding the references, then the author is advised to revise and rewrite the original content upto 75% permitting the author three times. Once this is achieved by the author, the manuscript is sent to the reviewer for review. Based on the final report of the reviewer the final decision for publishing the article is taken by the Managing editor and same is conveyed to the author.

Guidelines for Research Papers/Case Studies/ Perspectives/Book Reviews

- Articles must be sent by e-mail to jims.8m@jagannath.org.
- Each manuscript must be accompanied with an abstract of 150-200 words.
- Manuscript should not exceed 5000 words.
- The font should be 12 points and Times New Roman with 1.5-line spacing.
- The author's name, designation, affiliation, complete address with mobile number must be provided on a separate sheet.
- All drawings, graphs, and tables should be provided on separate pages.
- Case Studies should be original and not published anywhere.
- Book reviews should include name of the author, publisher, price and year of publication and ISBN number. If any references are used, details of the same have to be provided.
- Perspectives should depict emerging issues and ideas that contribute to the think-tank of managers, administrators and policy makers.
- Authors must acknowledge the sources consisting of other author's concepts or data or findings and exhibits. References cited in the main text should also be listed in the reference list. Citation should also be included as a reference in the end of the paper which should be in APA style in alphabetical and chronological order.
- Articles submitted for consideration in JIMS 8M have to be accompanied with a declaration by the author/authors that they have not published or submitted the manuscript for publication elsewhere.
- Editorial decisions are communicated within a period of 8 weeks of the receipt of manuscript.
- In case the reviewer suggests revision of the manuscript, the author has to modify the manuscript and submit the revised manuscript within 7-10 days.
- The first author will receive one hard copy of the journal.
- The format of the article should start with the Title, Authors, Abstract, Keywords, Introduction, I. Review of Literature, II. Research Design and Methods, III. Results and Discussion, IV. Conclusion, References (APA Style) and in the end Tables and Figures.
- Plagiarism: Authors should contribute their original work. To ensure originality and essence of the research contribution of authors we use plagiarism software and the authors are bound to adhere to it.

***For details of the guidelines, please refer the link <http://jimsd.org/jims8m.php>**

SUBSCRIPTION FORM

Subscription Rates-2019

Subscription Rates (4 Issues)			
CATEGORY	Period	Print*	Online
Institution/Individuals	1 Year	1,500.00	863.00
	2 Year	2,800.00	---
	3 Year	4,200.00	---
Students**	1 Year	750.00	500.00
Foreign (USD)			
CATEGORY	Period	Print*	Online
Institution/Individuals	1 Year	125.00	118.00
Students**	1 Year	100.00	80.00

Terms & Conditions:

1. *Print** Subscription includes online access.
2. *Students*** should send a photocopy of their identity cards.
3. Print Subscription is Volume Based, whereas Online Subscription is Calendar Year Based and is subject to renewal.
4. Online Subscription includes current subscriptions + back files from 2005, if available.

Ordering Information

Subscriptions: Payment has to be made in favor of "indianjournals.com" payable at New Delhi, India.

The Manager
Sales and Marketing
indianjournals.com
B-9, Basement, Local Shopping Complex, "A" Block,
Naraina Vihar, Ring Road, New Delhi - 110028

Dear Sir,

I/We would be interested in subscribing to Mass Communicator for _____ year(s). I/We would be interested in availing myself/ourselves of the subscription offer in the _____ category. I/We am/are enclosing a cheque/DD No. _____ dated _____ drawn on _____ (specify Bank), favouring **indianjournals.com** for Rs. _____.

My/Our particulars are as under:

Name: Mr./Ms./M/s: _____

Profession: _____

Address: _____

Tel No: _____ Fax: _____

For subscription please contact:

indianjournals.com
B-9, Basement, Local Shopping Complex, "A" Block
Naraina Vihar, Ring Road, New Delhi-110 028
Ph: 91-11-45055535,55

IMPACT OF DIVIDEND POLICY ON SHARE PRICES: A STUDY ON SELECT INDIAN PHARMA COMPANIES

P. R. Venugopal* Rajesh C Jampala**

This research studied the impact of dividend policy and the prices of equity shares of select companies in Indian Pharmaceutical sector. For the study, the data of Market prices of equity shares along with the Dividend Payout Ratio and Dividend Yield of time series for the period from 2008-09 to 2017-18 has been considered. The vector error correction model is applied to measure the long and short run relationship between the dividend payout ratio and dividend yield with the equity share prices which indicated that share prices of Dr Reddy's and Sun Pharma have short run relation whereas Cipla, Gsk Pharma and Torrent Pharma have long run relation. Results of the robust least square method results showed that the dividend payout ratio has significant impact on the share prices. This research paper will interest retail, HNI, QIB and other institutional investors in that that they can comprehend the changes in the share prices with reference to the dividend policies of the subject companies.

Keywords: Dividend Payout, Dividend Yield, Equity Prices Growth, Long run Relation.

Dividend policy is one of the major corporate decisions and guides the companies in paying dividends to the shareholders which is considered as a major return by the shareholders on their investments. Since the dividend receipt is valued by the shareholders, every company adopts a dividend payout pattern in line with its dividend policy and such a payment pattern stands out as one of the financial indicators of the company. Thus, interest of investors for equity share of a particular company would, to some extent, depends on the company's dividend policy as well. In the finance field dividend policy is one the most widely researched topic but whether and to what extent the dividend policy affects the stock prices has remained debatable among the investors, fund managers, policy makers and academic researchers for many years. Investors attribute the in a matured sector is in a position to generate sufficient cash or not from its operating dividend receipts as an indicator to understand whether a matured company or company's business. Correspondingly, they may not expect any or lower dividend from companies in growth phase or companies in growing sectors since they may appreciate that the profits will be reinvested for growth or expansion towards achieving capital appreciation for the equity shares and therefore creating capital gains to remunerate the shareholders over a period of time and not immediately. The present study is made on companies operating in pharmaceutical sector which has growth companies and also matured companies so that the impact of the dividend policy and dividend payment on the prices of the equity shares in the market. The sample for the study is constructed with five popular stocks, which are part of Sensex. While there could be various factors which

impacts the stock prices, the present study is made only with reference to the impact of dividend policy on the prices of equity share prices.

I. Review of Literature

Joseph Kurwo Chelimo (2017): This paper determines the effect of dividend policy on share price performance of insurance companies listed at the Nairobi Securities Exchange (NSE). The study has focused on the relationship between dividend policy on the share price of the listed insurance companies by establishing the dividend pay-out, dividend yield, earnings per share and inflation. The study found that management should be prudent responsive in declaring the dividends as they have great power on influencing share prices. It has been concluded that management of insurance companies should declare higher dividends to spur share price upwards.

Ilyas Sharif, Adnan Ali, Farzand Ali (2015): This study investigates the effect of dividend policy on stock prices and to view if there is any relationship between dividend policy and stock prices. It has described that Profit after tax, earning per share and Return on Equity are the three control variables which indicates it has negative and

* **Assistant Professor, Bhavan's Vivekananda College of Science, Humanities and Commerce Sainikpuri, Secunderabad, Telangana, India.**

** **Director, PG Studies Dean, Department of Commerce and Business Administration, P.B. Siddhartha College, Vijayawada, AP, India.**

insignificant relationship to stock prices excluding the earning per share. The study found that Firms should pay the regular dividends as it will impact an upward movement in the stock market prices and also profit retention by firms will decrease in the value of the stock market prices.

Byson B. Majanga (2015): This article examines the direct relationship between firm's dividend and its stock price in particular emphasis on the Malawi stock exchange. It has been established on MSE that there is strong positive relationship between the firm's dividends and its stock market. This study states the findings as stock price is an outcome of number of factors and dividend is also one among them which is having the significant contribution towards the stock market.

Kavita Chavali, Nusratunnisa (2013): The study represents the impact of dividends on share price performance of companies on India context. This article focused on the measure which shows the effect of dividend announcements and its impact on the share price. The analysis is done on the fast-moving consumer goods companies who made the announcements of dividends from 2007 to 2011. The findings of this study indicate that the market has given the significant positive average abnormal returns (AAR) and also reacted positively to dividend announcements according to their respective dates.

Mian Sajid Nazir (2012): This study is based on the dividend policy affects volatility of stock prices of financial sector firms of Pakistan listed in the Karachi stock exchange after examining the earning volatility, assets growth, firm size and leverage. The study found that there is negative relationship between dividend yield and price volatility as well as among the dividend pay-out and price volatility in Karachi Stock Exchange listed firms. It has been concluded that KSE in Pakistan declared that dividend policy is an important tool in setting share prices.

Research Gap:

The dividend policy is a choice in payment of dividend and profit retention that is followed by any organization. The impact of dividend as always been controversial for decades and there are two schools of thought on this topic i.e., few organizations consider the dividend policy relevant to have a relevant impact on the stock prices and few organizations have considered the dividend policy irrelevant impact on the stock prices. Many researchers have proved both the theories. The present topic has been emphasized on the pharmaceutical industries dividend policy. I M Pandey (11th edition of Financial management)

examined to dividend policy determinants impact on market price of the stocks. Many researchers say, dividend policy has insignificant impact on the market price of the stocks. The present study aims to find the impact of the dividend policy determinants on the market prices of Pharmaceutical sector. Previous studies have focused on the stocks which are paying higher dividends before financial recession period. Many studies proved that FMCG and Pharmaceutical sectors are defensive sectors and most of the times give stable performance. Kavita Chavali, Nusratunnisa (2013) studied the consumer durable stocks and they found that market has given the significant positive average abnormal returns (AAR) and also reacted positively to dividend announcements according to their respective dates. Few studies Ilyas Sharif, Adnan Ali, Farzand Ali (2015) have examined the dividends relationship with the stock prices. But no study previously attempted to examine the index stocks of Sensex dividend determinants impact on the market prices. Hence present study has made an attempt to fill the gap with the help of index pharma sector stocks dividend determinants impact on market prices of the stocks.

Objectives of the Study:

1. To study the relationship of Dividend Policy with Market Prices of Equity Stocks of select Indian Pharmaceutical companies.
2. To study the Impact of Dividend Policy on Market Prices of Equity Stocks of select Indian Pharmaceuticals companies.

Hypothesis of the Study:

H0: There is no Long-run and Short-run relationship of Dividend Policy with Market Prices of Equity Stocks of select Indian Pharmaceutical companies.

H0: There is no Impact of Dividend Policy on Market Prices of Equity Stocks of select Indian Pharmaceutical companies.

Scope of the Study:

The present research extends to and confines to the study of impact of dividend policy and dividend payment on share prices of 5 select Pharmaceuticals companies which are part of the base index of BSE India. The period of the study is from 2008-09 to 2017-18. The select stocks are Dr Reddy's, Sun Pharmaceuticals, Cipla Pharma, Glaxo Smithkline Pharma and Torrent Pharma.

II. Research Design & Methods

The study has considered the time series data of pharmaceutical stocks prices from base index Sensex to calculate the dividend payout ratio and dividend yield. The

study applied the Vector Error Correction (VECM) Model to measure the long-run and short-run relationship between the equity market price and dividend policy (i.e., dividend payout ratio and dividend yield). The robust least square method has been applied to measure the impact of independent variables (dividend payout ratio and dividend Yield) on the dependent variable (equity market price).

III. Analysis, Discussion & Findings

Vector Auto regressive model is used to describe the dynamic interrelationship among stationary variables and also used to estimate the relationship among the series. A VECM is used to estimate the Co-integrating relationship among the time series data (Variables). To study whether and how the share prices vary depending upon the dividend policy and dividend payment, the equity share prices have been considered as dependent variable and the causes viz, dividend policy and dividend payment are considered as independent variables. VECM also considers the relationship between the dependent variable and independent variables, long-run and short-run relationship. VECM can be framed with three steps, step one- to evaluate VAR lag selection for model selection, second step – to generate the error corrected regression weight of the variable and finally Wald-test have been framed to validate whether the relationship is long or short run with the help of Chi-Square test. The collected data has been subjected to the described VECM tests and the outcome of the tests is depicted in sets of 3 tables each for each of the 5 selected companies.

VAR lag order selection table depicts that the lag order criteria among the endogenous variables namely Market price, Dividend payout ratio and Dividend yield of Cipla Pharmaceutical. Result indicates that LR test statistic, FPE, AIC, SIC and HQ criterion are observed to be fit at lag 2 which signifies that Lag 2 is the best order selection to estimate the model. On the other hand, the lower the values in Criterion the better the model fit, in this lag 2 satisfy the condition. Hence it signifies that Lag 2 is the best model to fit the VECM. Wald test table signifies that short or long run relationship between the Market price of Cipla with its Dividend payout ratio and Dividend yield. Analysis result indicated that Null Hypothesis Dividend payout ratio is not having long run relationship with the Market price, since the Chi-square calculated value is above the critical value and P-value seems to be statistically significant. Hence it is indicated that there is a long-run relationship between market price and Dividend payout ratio of Cipla. Similarly, Dividend yield of this company seems to be having chi-square value above the critical value and signifies that

there is a long run relationship between Market price of the Cipla and Dividend yield.

VAR lag order selection table depicts that the lag order criteria among the endogenous variables namely Market price, Dividend payout ratio and Dividend yield of Dr Reddy Pharmaceutical. Result indicates that LR test statistic, FPE, AIC, SIC and HQ criterion are observed to be fit at lag 2 which signifies that Lag 2 is the best order selection to estimate the VECM model.

Wald test table indicates that short or long run relationship between the Dr Reddy pharmaceutical companies' Market price with its Dividend payout ratio and Dividend yield. Analysis result indicated that Null Hypothesis Dividend payout ratio is not having long run relationship between the Market price, since the Chi-square calculated value is less than the critical value and P-value seems to be statistically significant. Hence it is indicated that there is a long-run relationship between market price and Dividend payout ratio of Dr Reddy. Similarly, Dividend yield of this company seems to be having chi-square value below the critical value and signifies that there is no long run relationship between Market price and Dividend yield. Hence it is concluded that there is a short run relationship between the Market price with Dividend payout ratio and Dividend yield.

VAR lag order selection table illustrates that the lag order criteria among the endogenous variables namely Market price, Dividend payout ratio and Dividend yield of Glaxo Smith Kline Pharmaceutical. Result indicates that LR test statistic, FPE, AIC, SIC and HQ criterion are observed to be fit at lag 2 which signifies that Lag 2 is the best order selection to estimate the VECM model.

Wald test table indicates that short or long run relationship between the Glaxo smith kline pharmaceutical companies' Market price with its Dividend payout ratio and Dividend yield. Analysis result indicated that Null Hypothesis Dividend payout ratio is not having long run relationship between the Market price, since the Chi-square calculated value is less than the critical value and P-value seems to be statistically significant. Hence it is indicated that there is a long-run relationship between market price and Dividend payout ratio. Similarly, Dividend yield of this company seems to be having chi-square value below the critical value and signifies that there is no long run relationship between Market price of the Glaxo Smith kline and Dividend yield.

VAR lag order selection table depicts that the lag order criteria among the endogenous variables namely Market

price, Dividend payout ratio and Dividend yield of Sun Pharmaceutical. Result indicates that LR test statistic, FPE, AIC, SIC and HQ criterion are observed to be fit at lag 2 which signifies that Lag 2 is the best order selection to estimate the VECM model.

Wald test table indicates that short or long run relationship between the Sun pharmaceutical companies' Market price with its Dividend payout ratio and Dividend yield. Analysis result indicated that Null Hypothesis Dividend payout ratio is not having long run relationship between the Market price, since the Chi-square calculated value is less than the critical value and P-value seems to be statistically significant. Hence it is indicated that there is no long-run relationship between market price and Dividend payout ratio of Sun pharmaceutical. Similarly, Dividend yield of this company seems to be having chi-square value below the critical value and signifies that there is no long run relationship between Market price and Dividend yield. Hence it is concluded that there is a short run relationship between the market price of the sun pharmaceutical with Dividend payout ratio and Dividend yield.

VAR lag order selection table depicts that the lag order criteria among the endogenous variables namely Market price, Dividend payout ratio and Dividend yield of Torrent Pharmaceutical. Result indicates that LR test statistics, FPE, AIC, SIC and HQ criterion are observed to be fit at lag 2 which signifies that Lag 2 is the best order selection to estimate the VECM model.

Wald test table indicates that short or long run relationship between the Torrent pharmaceutical companies' Market price with its Dividend payout ratio and Dividend yield. Analysis result indicated that Null Hypothesis Dividend payout ratio is not having long run relationship between the Market price, since the Chi-square calculated value is less than the critical value and P-value seems to be statistically significant. Hence it is indicated that there is a long-run relationship between market price and Dividend payout ratio of Torrent. Similarly, Dividend yield of this company seems to be having chi-square value below the critical value and signifies that there is a long run relationship between Market price and Dividend yield.

The descriptive table depicts the mean, median, standard deviation, Skewness, kurtosis and Jarque-Bera for data of Dividend payout ratio, Dividend yield and Market price of Select pharmaceutical companies.

The result of Dividend payout ratio indicated that, mean value and its median and Standard deviation of cipla

pharmaceutical company are 0.14697, 0.132857, 0.039292 respectively which signifies the central tendency of data. Skewness (0.14415) of data is positive which signifies the symmetric of data and Kurtosis of it is observed to be ranging between (+3,-3). Jarque-Bera of the data signifies the data is normally distributed. Similarly, descriptive statistic for Dividend yield and Market price, its' means value and Median are observed to be center tendency, since means value is observed to be greater than median, Hence the standard deviation signifies that spread set of value under both. Whereas skewness and Kurtosis values indicate that data is normally distributed.

Further Descriptive statistics summarized that Dr Reddy, Market price of the company has a higher mean Value (2067.056) and high variation (1025.661) than Remaining companies such as Cipla, Sun Parma, Glaxo SmithKline and Torrent Pharma. Similarly, Skewness of these pharmaceutical companies indicates a symmetric distribution with long right tail (positive skewness) and kurtosis seems to be less than three (<3), by observing these two equations of Jarque-Bera defines the normal distribution of the data.

Table shows the result of robust regression for equity market price of select pharmaceutical company. It illustrates that for Cipla Pharmaceutical, for each unit increase in Dividend Payout ratio, the market price has increased by 456.6838. Similarly, for each unit increase in Dividend yield, the market price has increased by 1.7406. This can also be seen by R-squared value strong, which indicates adequate goodness fit model.

Table also exhibit that dividend payout ratio under Dr. Reddy increase by each unit, the market price won't have any influence in it, due to the p-value greater than 0.05. Since p-value for the Dividend yield of the company seems to be less than 0.05. hence it signifies that Dr Reddy pharmaceuticals company has efficiently incorporating rate of return in the form of cash dividend to its shareholders. Similarly, Sun pharmaceutical companies' dividend payout ratio seems to be insignificant, P-value is greater than 0.05 (0.3492>0.05). Whereas Dividend yield of this company observed to be significant which indicates that, dividend yield is having positive relation and influence on Market price of this company.

Further, GlaxoSmithKline and Torrent pharmaceutical companies' p-value seems to be statistically significant at 5% level. It depicts that for each unit increase in dividend payout ratio increase, the market price of both the company is increase by 904.6778 & 540.384 respectively. Similarly,

Dividend yield increase by one unit, the market price of both companies is increase by 13.25823 & 15.43713.

Findings of the Study:

1. The results of the case of selected 5 companies namely Cipla, Dr Reddys, GSK Pharma, Sun Pharma, Torrent Pharma that are subjected to the VECM model revealed that their coefficient values are not equal to zero, which states that dividend policy (dividend payout ratio and dividend yield) has co integration with their respective equity Market prices.
2. It also found from VECM model that Dividend policy of Dr Reddy and Sun Pharma has shown short run relationship with their respective equity market prices. The other three companies namely Cipla, GSK and Torrent Pharma are having long run relationship with equity market prices.
3. The study illustrated with the statistical method of vector error correction model that dividend policy does have significant relationship with the market prices of equity shares of the selected pharmaceutical companies.
4. The applications of the robust least square method that dividend payout ratio and dividend yield do influence the equity market prices. The equity price of Cipla Pharmaceutical (456.68 & 1.74), Glaxo SmithKline (904.67 & 13.258) and Torrent Pharmaceutical (540.38 & 15.43) seems to be positively influenced by the dividend payout ratio and dividend yield.
5. The study observes from Robust least square that dividend payout ratios of Dr Reddy and Sun Pharma are insignificant which indicates that dividend payouts by these Pharma companies are not having influence on their equity market prices. However, Dividend yield of these companies seems to be having influence on market prices.
6. It is also found with the leverage plots of the selected Pharma companies that the Dividend yields are pushing their respective market prices towards upwards direction.

IV. Conclusion

The present research studied the impact of dividend policy on the equity market prices in the pharmaceutical sector. The study, which is done on five selected stocks included in the BSE Sensex for a historical period of 2008-09 to 2017-18 was made by applying the stationary test to remove the seasonality effect. The relationship has been measured with the help of vector error correction model

between the dividend payout ratio and dividend yield with the equity market prices of the selected pharma companies. The VECM result indicated that the Dr Reddy and Sun Pharma equity market prices are having the short run relationship with the dividend payout ratio and dividend yield whereas the Cipla, Gsk and Torrent Pharma equity market prices are found to be having long run relationship. The results of the robust least method stated that the dividend payout ratio impact on the equity market prices is evident. Thus, this study endorsed the common sense logic that since investors do expect periodical returns as well as capital gains on their hard earned investments, the dividend payout would have impact on the share prices. Having reiterated that dividend policy and dividend payout does have evident impact on the share prices of the companies, to find out the other reasons that could have impact and thereafter, if possible, towards assessing and quantifying the impact of each of the independent variables on the stock prices, further research is warranted.

References

- Joseph Kurwo Chelimo (2017)**, Effect of Dividend Policy on Share Price Performance: A Case of Listed Insurance Companies at the Nairobi Securities Exchange, Kenya. *International Journal of Accounting, Finance and Risk Management*. Volume 2, Issue No. 3, pp. 98-106.
- Kavita Chavali, Nusratunnisa (2013)**, Impact of Dividends on Share Price Performance of Companies on India Context, *Informative Journals*, Volume 4 Issue 1
- Ilyas Sharif, Adnan Ali, Farzand Ali (2015)**, Effect of Dividend Policy on Stock Prices, *Journal of Management* Volume 6 Issue 1 Page 55-85.
- Byson B. Majanga (2015)**, The Dividend Effect on Stock Price-An Empirical Analysis of Malawi Listed Companies *AFR Accounting and Finance Research Journal* Volume 4, Issue No. 3, Published by Sciedu Press 99 ISSN 1927-5986 E-ISSN.
- Mian Sajid Nazir (2012)**, Dividend Policy Affects Volatility of Stock Prices of Financial Sector Firms of Pakistan *American Journal of Scientific Research* ISSN 1450-223X Issue 61(2012), pp.132-139 Euro Journals Publishing, <http://www.eurojournals.com/ajsr.html>. Please remove picture format from the tables. Format and draw the table and send in word.

Table 1: Cipla Pharmaceutical VAR Lag Order Selection Criteria.

Endogenous variables: MP_C DPR_C DY_C						
Exogenous variables: C						
Included observations: 32						
Lag	Log L	LR	FPE	AIC	SC	HQ
0	-318.8597	NA	109388.4	20.11623	20.25364	20.16178
1	-299.8202	33.31904	58634.40	19.48876	20.03842	19.67096
2	-258.0347	65.28988*	7689.383*	17.43967*	18.40156*	17.75851*
3	-253.7871	5.840458	10806.95	17.73669	19.11082	18.19218

Source: Compiled on Secondary Data

Note: MP - Market Price, DPR – Dividend Payout Ratio DY- Dividend Yield, FPE- Final Prediction Error, AIC-Akaike Information Criterion, SC- Schwarz Information Criterion, HQ- Hannan-Quinn Information Criterion.

Table 2: Cipla pharmaceutical Wald Test.

	Test Statistic	Value	Df	Probability
Dividend Payout ratio	Chi-square	23.56642	3	0.0000
Dividend Yield	Chi-square	67.29212	3	0.0000
Null Hypothesis: C(1)=C(4)=C(5)=0				
Null Hypothesis: C(1)=C(6)=C(7)=0				

Source: Compiled on Secondary Data

Table 3: Dr Reddy pharmaceutical VAR Lag Order Selection Criteria.

Endogenous variables: MP_D DPR_D DY_D						
Included observations: 28						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-307.6600	NA	870183.1	22.19000	22.33274	22.23363
1	-290.7935	28.91396	499009.2	21.62811	22.19905	21.80265
2	-259.9393	46.28130*	107574.5*	20.06709*	21.06625*	20.37254*

Source: Compiled on Secondary Data

Table 4: Dr Reddy Pharmaceutical Wald Test.

Test Statistic	Value	Df	Probability
Chi-square	7.003475	3	0.0718
Chi-square	5.900020	3	0.1166
Null Hypothesis: C(1)=C(4)=C(5)=0			
Null Hypothesis: C(1)=C(6)=C(7)=0			

Source: Compiled on Secondary Data

Table 5: Glaxo SmithKline Pharmaceutical VAR Lag Order Selection Criteria.

Endogenous variables: MP_G DPR_G DY_G						
Included observations: 30						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-300.5210	NA	123151.9	20.23473	20.37485	20.27956
1	-276.0060	42.49262	43983.07	19.20040	19.76088	19.37970
2	-245.3280	47.03956*	10591.86*	17.75520*	18.73604*	18.06898*

Source: Compiled on Secondary Data

Table 6: Wald Test.

Test Statistic	Value	Df	Probability
Chi-square	253.7039	3	0.0000
Chi-square	384.2344	3	0.0000
Null Hypothesis: C(1)=C(4)=C(5)=0			
Null Hypothesis: C(1)=C(6)=C(7)=0			

Source: Compiled on Secondary Data

Table 7: Sun Pharmaceutical VAR Lag Order Selection Criteria.

Endogenous variables: MPS DPRS DYS						
Included observations: 30						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-420.2511	NA	3.61e+08	28.21674	28.35686	28.26156
1	-388.7839	54.54303	81010615	26.71893	27.27941	26.89823
2	-370.8323	27.52581*	45571608*	26.12216*	27.10299*	26.43593*

Source: Compiled on Secondary Data

Table 8: Wald Test.

Test Statistic	Value	Df	Probability
Chi-square	5.716347	3	0.1263
Chi-square	4.666289	3	0.1979

Source: Compiled on Secondary Data

Table 9: Torrent Pharmaceutical VAR Lag Order Selection Criteria.

Endogenous variables: MP_T DPR_T DY_T						
Included observations: 32						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-346.0993	NA	600271.6	21.81871	21.95612	21.86426
1	-331.7535	25.10524	431448.7	21.48459	22.03424	21.66679
2	-306.9595	38.74056*	163635.4*	20.49747*	21.45936*	20.81631*

Source: Compiled on Secondary Data

Table 10: Wald Test.

System: %system			
Test Statistic	Value	Df	Probability
Chi-square	20.93374	3	0.0001
Chi-square	39.05264	3	0.0000

Source: Compiled on Secondary Data

Table 11: Dividend Determinants of Select Pharmaceutical Industries Descriptive Statistics.

Companies	Ratios	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Jarque-Bera
Cipla	D P R	0.14697	0.142857	0.234114	0.106553	0.039292	0.14415	2.7411	2.1696
	D Y	190.3933	186.6042	305.3375	105.0083	72.54072	0.563924	2.2120	0.7098
	M P	410.9356	377.2	610.675	210.0167	146.0949	0.308753	1.6723	0.8041
Dr. Reddy	D P R	0.259213	0.224461	0.584966	0.158353	0.125787	0.199642	1.3987	1.5894
	D Y	129.6388	136.6528	176.666	83.28933	30.68942	0.15089	2.0285	0.3880
	M P	2067.056	1761.971	3533.321	520.5583	1025.661	0.016899	1.7572	0.5795
Glaxo	D P R	0.823294	0.842156	1.13071	0.496032	0.211505	0.126313	2.1753	0.2789
	D Y	27.03591	25.67257	48.85281	14.31818	9.698411	0.209677	0.8112	2.6332
	M P	1159.272	1078.235	1696.487	572.7271	354.5668	0.16019	2.1417	0.3147
Sun Pharma	D P R	-0.1731	-0.22222	1	-0.95238	0.623046	0.43462	2.5321	0.3654
	D Y	224.7248	191.5785	839.425	9.034091	259.5599	0.574326	1.5941	2.6706
	M P	452.6035	360.4458	852.5708	124.2188	297.1507	0.268152	1.4321	1.0293
Torrent Pharma	D P R	0.300096	0.277338	0.491573	0.221976	0.086893	0.20564	1.5688	2.3017
	D Y	44.86733	35.15495	102.0202	14.6971	29.0662	0.015334	2.7675	1.5666
	M P	599.7238	338.0333	1428.283	75	522.7703	0.770611	1.9674	1.2905

Source: Compiled through secondary data

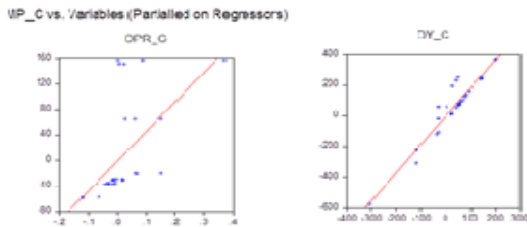
Table 12: Impact of Dividend Policy on Stock Price Growth.

Dependent Variable: Market Price							
Method: Robust Least Squares							
Sample: 1 10. Included observations: 10, Method: M-estimation							
M settings: weight=Bisquare, tuning=4.685, scale=MAD (median centered)							
Huber Type I Standard Errors & Covariance							
	Variable	Coefficient	Std. Error	Z-Statistic	Prob.	R-squared	Adjusted R-squared
Cipla	D P R	456.6838	65.10795	7.014256	0	0.642145	0.597413
	D Y	1.740607	0.070598	24.6553	0	0.642145	0.597413
Dr Reddy	D P R	109.8038	1931.599	0.056846	0.9547	0.664794	0.616907
	D Y	16.52801	4.145273	3.987194	0.0001	0.664794	0.616907
GSK Pharma	D P R	904.6778	125.9386	7.183485	0	0.667979	0.620547
	D Y	13.25823	3.737961	3.546915	0.0004	0.667979	0.620547
Sun Pharma	D P R	-200.724	214.4357	-0.93606	0.3492	0.285363	0.183272
	D Y	1.186703	0.395244	3.002454	0.0027	0.285363	0.183272
Torrent Pharma	D P R	540.384	672.7383	0.80326	0.0018	0.500267	0.437801
	D Y	15.43713	3.984272	3.874517	0.0001	0.500267	0.437801

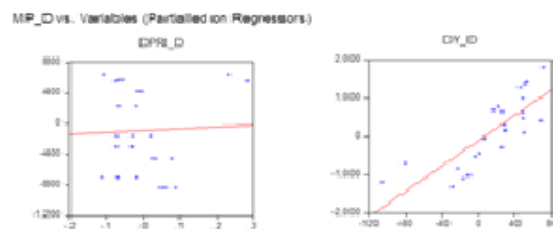
Source: Compiled through secondary data

Leverage plots

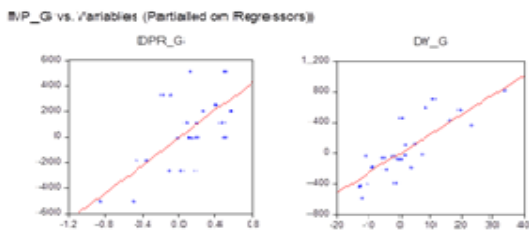
Cipla Pharmaceutical



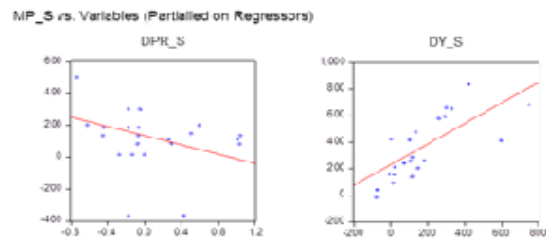
Dr.Reddy Pharmaceutical



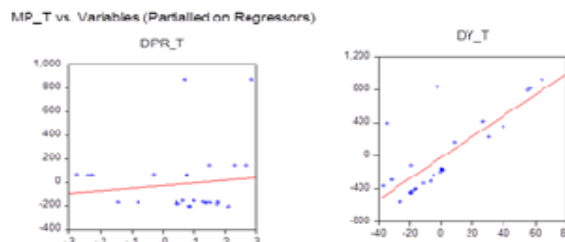
Glaxo smithKline Pharma



Sun pharmaceutical



Torrent Pharmaceutical



ANTECEDENTS AND CONSEQUENCES OF WORK LIFE BALANCE AMONG WOMEN BANK EMPLOYEES: A STUDY ON SELECTED INDIVIDUAL LEVEL FACTORS

Mona Ratnesh* Ashish Ranjan Sinha Amjad Ali*****

The purpose of present study is to identify the most relevant individual level antecedents and consequences of work life balance with special reference to women bank employees in India. The sample of present study consists of (N=148) women bank employees working at managerial level. All the respondents were selected from different private banks located in India. The data of the present study was collected with the aid of carefully designed questionnaire through convenient random sampling technique. Analysis of data was done using multiple regression analysis. This study has identified certain individual level antecedents such as family demands, career stage, personality, emotional stability and self-efficacy as well as consequences like health, well-being, family satisfaction and life satisfaction. The identified antecedents found to have significant influence on consequences of work-life balance among women bank employees. The finding implies that private banks need to understand the importance of individual level factors to manage employees work life balance. Findings of the study are explained with respect to the existing scenario in private banks located in India.

Keywords: Work-Life Balance, Women employee, Private Banks, Antecedents, Consequences, India.

In recent years the Indian labor force has experienced tremendous change as far as its workforce composition and working patterns are concerned. It has progress along with economic development and transformation of labor legislation. The growth in the Indian labor force has experienced significant contribution of women employees especially in banking sector. Expansion of banking sector has open new windows of opportunity for women to find employment. Historically, till 1980's banking sector in India was largely dominated by male employees. However, in the late 70s women started to join banks and generally at clerical levels. They represent a slightly over 11% of the work force in the banking industry. Financial sector reforms in India since 1991 have significantly changed the definition of Indian banking system. In the last thirty years of banking services the gender equality became fairly balanced as women heads of different banks contributing significantly towards the growth of banking.

However, banking industry is still being considered as emerging industry in India where the entry of private sector and foreign banks has passed a mile journey from its start. The increase in number of women joining the banking sectors for their overall growth is evident from the data available that it has grown to 2, 77,792 in the year 2014, from 1, 30, 489 in 2005, out of which 1, 29, 345 are in the officer's positions. Table-1 indicates Group-Wise Distribution of Employees of All Scheduled Commercial Banks (see Table 1).

Researches on work-life balance among women employees have provided blurred picture of women participation in different sectors and purely unclear among banking sectors. Webster (2002) contended that structure of family and female roles are different across countries, but by and large women perpetuate to be the most important care giver for domestic and childcare obligations. The women in employment faced an extraordinary circumstance. The employment equipped them with opportunities for self-improvement in psychological, social as well as material terms resulting in never-ending demands on their energy and time. The family and its commitments also show a contradictory position for women as they have to devote family time in order to perform work related obligations.

Moreover, women in India keep on bearing the responsibility of family in spite of their employment status (Bharat, 1994). Taking into consideration the

*** Research Scholar, Department of Humanities and Social Sciences, National Institute of Technology Patna, India.**

**** Assistant Professor, Department of Humanities and Social Sciences, National Institute of Technology Patna, India.**

***** Assistant Professor, Department of Humanities and Social Sciences, National Institute of Technology Patna, India.**

escalating number of females in the work pool and their drive for profession necessitate to evaluate the scenario of the work life balance of women employed in private banks. Hence keeping in mind the significance of women workforce in the banking sector especially private commercial banks, the present study is planned to identify the antecedents of work-life balance and their consequences on women employees of private banks in India.

Work Life balance

Work Life Balance is a matter of concern for both the organizations and employees. Work-life balance for every individual is the 'right' amalgamation of participation in professional and personal lives. However, this amalgamation shifts as individuals' move through different stages of life as per the changing obligations and commitments in work and personal lives.

The term "work-life balance" was coined in the United Kingdom in late 1970s to illustrate the balance between an individual's personal and professional life. In the United States, this phrase was first instituted in 1986. Work as well as family represents two most consequential realms of an individuals' life and their interface has a matter of consideration among growing number of work and family researcher's worldwide. In general, research on the work family balance has been seen as a conflict idea because it was assumed that work and family are the two separate domains that are mutually incompatible and conflict is seen inevitable (Greenhaus & Parasuraman, 1999). A growing body of researcher is accentuating on integrating work and family research to rectify the preconception on the negative outcomes of the work family interface (Lauring & Selmer, 2010).

There are several proposed theoretical concepts which include positive spillover (Demerouti, Geurts, & Kompier, 2004) enhancement and enrichment (Greenhaus & Powell, 2006) and facilitation (Wayne, Grzywacz, Carlson, & Kacmar, 2007). The conception of facilitation is getting importance on the work-family map and is characterized as "the extent to which involvement at work (or home) is made more facile by virtue of the experiences, skills, and opportunities gained or developed at home (or work)" (Frone, 2003).

Work-life balance has been defined from various points of view (Poelmans, Odle-Dusseau & Beham, 2009). Greenhaus, Collins & Shaw (2003) have defined work-life balance as a multidimensional construct where people experience equivalent amounts of consideration, time, involvement or obligation in work. In broadest sense,

work-life balance has been characterized as an acceptable level of contribution or 'fit' between the multiple roles in an individual's life (Hudson, 2005). Carlson, Grzywacz & Zivnuska (2009) anticipated and analyzed a significance of work-life balance predicated on evenly congregating prospects of both work and family roles.

Susi & Jawaharrani (2011) contended that there is no single definition for work- life, subsequently work- life is seen in a wide sense as the capability of an employee to have a well-balanced time between work and other commitments. According to Tomazevic, Kozjek & Stare (2014) the significance of work family balance is to efficaciously coalescing personal life with professional obligations and engenders a harmony between these two important aspects of life.

Recently, Horie (2016) in her recent report explained work- life balance as a work- life design and emphasized on "balance". She described either balance would be right or wrong or black or white. In her words "I recommend people to consider 'work-life design' because it gives you a healthier perspective".

I. Review of Literature

Work-life balance has always been a significant contributor in the study of organizational behavior. It has gained paramount importance due to its prevailing impact both on professional and personal life of an employee. A recent study conducted by Padmasiri (2016) contemplated the effect of demographical factors on Work Life Balance among academicians of University of Kelaniya. She concluded that gender and marital status are the significant demographic factors which influence Work Life Balance.

A study conducted on married women employees by Kapoor, Bhardwaj, & Pestonjee (1999) revealed that women confront challenges in maintaining a harmony between their personal and professional life and subsequently the careers of these women suffer due to family commitments.

Darcy, McCarthy, Hill & Grady (2012) suggest that variables which affect work-life balance vary across different stages of career, thus, balance between personal and professional life is not only the conserve of parents with young children yet in addition it's a matter of concern for employees at all career stages.

O'Neil & Bilimoria (2005) analyzed the nature of women's career experiences over the life course and

discovered different patterns of how women's careers develop over time. They proposed, on the basis of obtained results, a three-phase, age-linked model of women's career development such as the idealistic achievement phase, the pragmatic endurance phase and the re-inventive contribution phase.

Personality attributes not just influence of how individuals interpret and respond to a circumstance but proactively form the situation also (Parasuraman & Greenhaus, 2002). Kinnunena, Vermulstb, Gerrisb & Makikangasa (2003) examine the function of the Big Five personality attributes as probable moderating element among two kinds of work-family conflicts like work interference with family (WIF) and family interference with work (FIW) and their connection to well-being in the domains of work and family. The outcome revealed that emotional stability moderated the relationships between WIF and job exhaustion and between WIF and depression. Simultaneously, agreeableness moderated the relationship between FIW and marital satisfaction. As a result, emotionally stable fathers were shielded from negative impacts of WIF on well-being at work (job exhaustion) and on general well-being (depression). Similarly, agreeable fathers were protected from negative effects of FIW on marital satisfaction. In addition to these moderating effects, both WIF and FIW, agreeableness and emotional stability have significant influence on well-being.

Self-efficacy specifies individual's faith about their abilities to perform a given job successfully (Bandura, 1997). Self-efficacy is not just about the skills or aptitudes that one has, rather it's a judgment of what one can do with them (Liu, Song & Wang, 2011). Mustapha, Ahmad, Uli & Idris (2011) conducted a survey in Malaysia on 240 single mothers aged 45 and below and having at least one child. The results of study showed that as the level of self-efficacy of single mothers increased, their level of work-family facilitation also increased.

Khan, Ahmad, Tariq & Farooq (2014) in their study discloses that job satisfaction is positively influenced by emotional stability of individual's personality. The study concluded that emotional instability will result into person's dissatisfaction with the job. It also revealed that emotionally stable individuals are highly satisfied with their jobs and hence efficiently contribute towards organizational goal.

A study on men and women by Parasuraman, Greenhaus & Granrose (1992) showed that support from work was related with increased job satisfaction whereas support

from spouse was related with greater family satisfaction. Van, Sanders & Willemsen (2005) revealed that females have higher life satisfaction than males and acquire more social support from contemporaries than males, while both receive equal support from their manager. As for the non-work related sources of social support, men received more social support from their spouse while women received more social support from relatives and friends.

Panisoara & Serban (2013) analyzed the effect of marital status on work-family balance across four categories of employees (unmarried, married without children, married with children under 18, married with children over 18). They concluded that the work life balance is not only for parent or married employees as the unmarried employees will never be hesitant to start a happy married life. Simultaneously the married working couples will also never avoid having children, thinking that such a decision will have a negative effect on their career.

Allen, Herst, Carly & Sutton (2000) presented a topology that grouped work life conflict outcomes into three categories such as work related, non work related and stress related outcomes. The results revealed that considerable and critical outcomes are associated with work family conflict. They concluded that consequences of work life conflict is related with job, family, marital and ultimately life satisfaction. They also emphasized that work family conflict is dysfunctional and collectively have a valuable influence on individual's personal life, professional life, general well-being and health. Keeping in mind the available literature in the area of work life balance and their relevance to working women employees, following objectives were outlined.

Objective

The major objective of the present study was to identify the most relevant individual level factors in the form of antecedents and consequences of work life balance among women employees of private banks in India. There were some other objectives of the present study which are as follows:

- To identify the individual level antecedents responsible for work life balance among women employees of private banks in India.
- To identify the individual level consequences responsible for work life balance among women employees of private banks.
- To see the influence of identified antecedents on consequences of work life balance among women employees of private banks.
- To suggest important measures to improve work life balance among women employees of private banks.

Hypotheses

A literature review conducted to highlight the antecedents and their consequences of work life balance revealed significant influenced on the concerned variable. Hence, following hypotheses were formulated to analyze the said notion:

H-1: Antecedents of work life balance will influence Health (consequence) among women employees of private banks.

H-2: Antecedents of work life balance will influence Wellbeing (consequence) among women employees of private banks.

H-3: Antecedents of work life balance will influence Family Satisfaction (consequence) among women employees of private banks.

H-4: Antecedents of work life balance will influence Life Satisfaction (consequence) among women employees of private banks.

II. Research Design & Methods

Sample

The sample of present research consisted of a total of 148 employees. All the respondents were randomly selected through purposive sampling method from different private banks located in India. The data has been collected from female employees of following private sector banks like ICICI, HDFC, Axis Bank, Kotak Mahindra, Yes Bank, Indusind Bank and Bandhan Bank (See Table-2). The age of the participant ranges between 25 to 40 yrs. The methods adopted systematically keeping in mind the objective of the present study.

Measures

Work Life Balance: A self developed Work Life Balance questionnaire was used to evaluate different individual factors which constitute work life balance. The individual factors are Family Demand, Career Stage, Personality, Self Efficacy, Emotional Stability, Health, Well being, Family Satisfaction and Life Satisfaction. This scale contains 54 items spread over 9 dimensions. All the items were rated on 5-point scale (strongly disagree to strongly agree) with the score 54 to 270. The reliability of the scale was found to be $r = .82$ whereas validity of the scale was found to be $r = .78$ respectively. The data was analyzed through SPSS using step wise multiple regression analysis to find appropriate results.

III. Analysis, Discussion & Findings

The results of the present study have been presented through different tables of regression analyses. Table 3.1 depicts the model summary indicating only three predictors of the model.

Multiple correlations (R) were found to be .317 for self efficacy, .458 for emotional stability and .525 for career stage respectively. Moreover, R Square represents the contribution of independent (antecedent) variables to the dependent (consequence) variable was also clearly indicated as .101 for self efficacy, .210 for emotional stability and .276 for career stage respectively. Another considerable aspect is R Square change which shows the magnitude of independent variable which contributed to the dependent variable (Health) was found to be 10.1 for self efficacy, 11.0 for emotional stability and 6.6 for career stage. It shows that self efficacy contributed 10.1% variance, emotional stability contributed 11.0 % variance and career stage contributed 6.6 % variance respectively to the criterion variable health. The t - value given in the table shows $t=3.31$ for self efficacy which is significant at .01 level, $t= 3.66$ for emotional stability which is significant at beyond .01 level and 2.95 for career stage which is significant at .05 level of significance respectively. It means that these three factors emerged as significant predictors and influences health to maintain work life balance. The other two factors (antecedents) like family demand and personality did not emerge as significant contributor of work life balance. Thus, it partially proves the underlying hypotheses (H-1) of the present study that “Identified antecedents of work life balance will influence Health (consequence) among women employees of private banks”.

Table 3.2 indicates the model summary depicting only two predictors of the model. Multiple correlations (R) were found to be .534 for Personality and .557 for emotional stability. Moreover, R Square which shows the contribution of antecedent variables to the consequence variable was found to be .285 for Personality and .333 for Emotional Stability. Another considerable aspect is R Square change which depicts the magnitude of antecedents which contributed to the consequence (Well being) was found to be 28.5 for Personality and 4.8 for Emotional Stability. It shows that Personality contributed 28.5 % variance and Emotional Stability contributed 4.8 % variance to the criterion variable Well being. The t-value given in the table indicates $t=6.24$ for Personality which is significant at beyond .01 level and $t= 2.65$ for Emotional Stability which is significant at .01 level of significance. This means that these two factors significantly influence the Well being of women employees and rest of the predictors did not emerge as significant contributor to the criterion variable. Hence, it partially proves the underlying hypotheses (H-2) of the present study that “Identified antecedents of work life balance will influence Wellbeing (consequence) among women employees of private banks”.

Table 3.3 shows the influence of Family Demand, Career Stage, Personality, Emotional Stability and Self Efficacy on Family Satisfaction among women employees of private banks. In all five independent variables only one variable emerged as predictor, namely, Self Efficacy. Hence, table 3.3 indicates the model summary of only one independent variable of the model. Multiple correlation (R) has been found to be .206 for Self Efficacy. Moreover, R Square which indicates the contribution of predictor variables to the criterion variable has been found .042. Another significant aspect is R Square change which came to be .042 which means that 4.2 % variance was contributed by Self Efficacy to the criterion variable Family Satisfaction. Moreover, t- value for self efficacy shows $t=2.08$ which was found significant at .05 level of significance. It means that Self Efficacy has a positive influence on family satisfaction and other independent variables did not have significant impact on dependent variable. Hence, it partially proves the underlying hypotheses (H-3) of the present study that “Identified antecedents of work life balance will influence Family Satisfaction (consequence) among women employees of private banks”.

The table (3.4) depicts the model summary which indicates only two predictors of the model. Multiple correlations (R) have been found .383 for Family Demand and .462 for Emotional Stability respectively. Moreover, R Square indicates the contribution of independent (antecedent) variables to the dependent (consequence) variable was also clearly indicated as .146 for Family Demand and .213 for Emotional Stability respectively. Another considerable aspect is R Square change which revealed the magnitude of independent variable which contributed to the dependent variable (Life Satisfaction) was found to be 14.6 for Family Demand and 6.7 for Emotional Stability. It shows that Family Demand contributed 14.6 % variance and Emotional Stability contributed 6.7 % variance respectively to the criterion variable Life Satisfaction. The t- value given in the table shows $t=4.09$ for Family Demand which is significant at beyond .01 level and $t= 2.86$ for Emotional Stability which is significant at .01 level of significance respectively. It means that these two factors significantly influence the Life Satisfaction of women employees in private banks. The other three factors like Career Stage, Personality and Self Efficacy did not emerge as significant contributor of work life balance. Thus, it partially proves the underlying hypotheses (H-4) of the present study that “Identified antecedents of work life balance will influence Life Satisfaction (consequence) among women employees of private banks”.

Table 4 highlighted the results on the basis of level of acceptance of formulated hypothesis. The present table clearly indicates that none of the hypothesis have been fully accepted or rejected. It means that all the antecedents’ dimensions of work life balance have partial consequential effect on different consequences dimensions of work life balance.

Model of Work Life Balance

The findings of the present study provide working model of work life balance applicable to women employees of private banking sectors. The model has been presented in figure 1 which clearly highlights the interacting effect of antecedents on consequences of work life balance. In the present model it appears that health was influenced by career stage, emotional stability and self efficacy. Well being of women employees of private banks was influenced by emotional stability and personality. However, family satisfaction was only influenced by self efficacy. Further life satisfaction was influenced by both family demand and emotional stability. Therefore, it can be clearly revealed that all the identified antecedents have certain influence on one or other consequences of work life balance among women bank employees.

IV. Conclusion

The purpose of the present study was to identify the most relevant individual level factors in the form of antecedents and consequences of work life balance with special reference to women bank employees in India. Analysis of data revealed partial influence of identified antecedents of work life balance on the different consequences dimensions among women employees of private banks. The findings clearly revealed that among all the identified antecedents career stage, emotional stability and self efficacy found to have influence on health consequences of work life balance. On the other hand, emotional stability and personality have affected wellbeing of women employees of private banks. Further, family satisfaction was only influenced by the self efficacy. Moreover, family demand and emotional stability have influence the life satisfaction among women employees of private banks.

On the basis of findings, it can be concluded that there is a need to focus on employed women and providing them all the necessary support at work so that their family life can be improved. An acceptant atmosphere at home and sharing in household responsibilities by other family members may also have a beneficial effect on health, wellbeing, family and life satisfaction of these employed women and they may have full opportunity to reach their

potential. Therefore, the findings suggest that management should concentrate on the identified antecedents and consequences dimensions of work life balance and try to develop suitable atmosphere which can positively influence the work life balance of employees.

As the present investigation was conducted only on smaller sample of women bank employees working in different locations in India, hence, to widen up its scope a study on larger sample can be conducted and compared. Further, studies on different level of employees from different private and public banks considering socio demographic variables can also be planned and carried out.

References

- Allen, Tammy D., Herst, David E.L., Carly, S., & Sutton, M. (2000). Consequences Associated with Work-to – Family Conflict: A review and Agenda for Future Research. *Journal of Occupational health psychology*, 5 (2), 278-308.
- Bandura, A. (1997). Self- efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84 (2), 191-215.
- Bharat, S. (1994). Alternate family patterns and policies: Alternate family pattern (*Unit for Family Studies Report*, pp.72-76). Bombay, India: TISS.
- Carlson, D. S., Grzywacz, J. G., & Zivnuska, S. (2009). Is work family balance more than conflict and enrichment? *Human Relations*, 62, 1459-1486.
- Darcy, C., McCarthy, A., Hill, J., & Grady, G. (2012). Work–life balance: One size fits all? An Exploratory Analysis of the Differential effects of Career Stage. *European Management Journal*, 30, 111-120.
- Demerouti, E., Geurts, S.A.E., & Kompier, M. (2004). “Positive and negative work-home interaction: prevalence and correlates”. *Equal Opportunities International*, 23(1/2), 6-35.
- Frone, M. R. (2003). Work-family balance. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational psychology. occupational health psychology* (pp. 143-162). Washington, DC, US: American Psychological Association.
- Greenhaus, J. H., & Parasuraman, S. (1999). Research on work, family, and gender: Current status and future directions. In G. N. Powell (Ed.), *Handbook of gender and work* (pp. 391– 412). Newbury Park, CA: Sage.
- Greenhaus, J.H., Collins, K.M., & Shaw, J.D. (2003). The relation between work-family balance and quality of life. *Journal of Vocational Behavior*, 63,510–531.
- Greenhaus, J. H., & Powell, G. N. (2006). “When work and family are allies: A theory of work- family enrichment”. *Academy of Management Review*, 31, 72-92.
- Horie, A. (2016). Women of Influence 2015, Women's Startup Lab's Ari Horie. Retrieved from <https://www.bizjournals.com/sanjose/news/2015/04/03/womens-startup-labs-ari-horie-women-of-influence.html>
- Hudson Highland Group. (2005). “The Case for Work-Life Balance – Closing the Gap between Policy and Practice” 20:20 Series- A Hudson Initiative to help business compete and succeed in the future.
- Kapoor, J., Bhardwaj, G., & Pestonjee, D.M. (1999). An enquiry into the various facets of women’s career. Working paper no. 99-08-02. Ahmadabad, India: Indian Institute of Management.
- Khan, R., Ahmad, S.N., Tariq, M., & Farooq, M. (2014). Impact of Emotional Stability on Job Satisfaction. *European Academic Research*. 1(12).
- Kinnunena, U., Vermulstb, Ad., Gerrisb, J., & Makikangasa, A. (2003). Work – family conflict and its relations to well- being: the role of personality as a moderating factor. *Personality and individual differences*, 35, 1669-1683.
- Lauring, J., & Selmer, J. (2010). “The supportive expatriate spouse: an ethnographic study of spouse involvement in expatriate careers”. *International Business Review*, 19, 59-69.
- Liu, H., Song, G., & Wang, D. (2011). The influence of self - efficacy on flight dispatchers’ stressor-strain relationships. *Social Behavior and Personality*, 39(6), 839-850.
- Mustapha, N., Ahmad, A., Uli, J. & Idris, K. (2011). Work - Family Factors and its Relationships between Dispositional, Occupational characteristics and Intention to Stay. *International Journal of Business Research and Management*. 2(3), 74-92.
- O’Neil, D. A., & Bilimoria, D. (2005). Women’s career development phases idealism, endurance, and reinvention. *Career Development International*, 10(3), 168-189.
- Padmasiri, M. K.D., & Mahalekamge. W.G.S. (2016). Impact of Demographical Factors on Work Life Balance among Academic Staff of University of Kelaniya, Sri Lanka. *Journal of Education and Vocational Research*, 7(1), 54-59.

Panisoaraa, G., & Serbana, M. (2013). Marital Status and Work- Life Balance. *Procedia- Social and Behavioral Sciences*, 78, 21-25.

Parasuraman, S., & Greenhaus, J.H. (2002). Toward Reducing Some Critical Gaps in Work-family Research. *Human Resource Management Review*, 12, 299-312.

Parasuraman, S., Greenhaus, J.H., & Granrose, C.S. (1992). Role stressors, social support, and well-being among two-career couples. *Journal of Organizational Behavior*, 13, 339-356.

Poelmans, S., Odle-Dusseau, H., & Beham, B. (2009). Work-life balance: Individual and organizational strategies and practices. In S. Cartwright & C. L. Cooper (Eds.), *The Oxford handbook of organizational well-being* (pp. 180-213). Oxford, England: Oxford University Press.

Susi, S., & Jawaharrani, K. (2011). Work life balance: The key driver of employee engagement. *Asian Journal of Management Research*, 2(1), 474-483.

Tomazevic, N., Kozjek, T., & Stare, J. (2014). The Consequences of a Work-Family Balance: From the Point of View of Employers and Employees. *International Business Research*, 7, 83-100.

Van Dallen, G., Sanders, K., & Willemssen, T. (2005). Sources of Social Support as Predictors of Health, Psychological Well- Being and Life Satisfaction: Among Dutch Male and Female Dual Earners. *Women and Health*, 41(2), 43-62.

Wayne, J. H., Grzywacz, J. G., Carlson, D. S., & Kacmar, K. M. (2007). "Work family facilitation: a theoretical explanation and model of primary antecedents and consequences". *Human Resource Management Review*, 17, 63-76.

Webster, J. (2002). Widening women's work in information and communication technology: integrated model of explicative variables. European Union for Information Society Technologies Programme, (2002).

Table 1: Group-Wise Distribution of Employees of All Scheduled Commercial Banks According To Category since March 2005-2014.

Year	Total Employees				Of Which : Females			
	Officers	Clerks	Subordinates	Total	Officers	Clerks	Subordinates	Total
2014	6,40,869	4,31,842	1,81,244	12,53,955	1,29,345	1,25,795	22,652	2,77,792
2013	5,51,712	4,84,975	1,84,044	12,20,731	95,507	1,15,233	22,436	2,33,176
2012	5,02,938	4,81,421	1,90,790	11,75,149	84,375	107,826	23,113	215,314
2011	4,70,144	4,02,521	1,78,220	10,50,885	67,958	100,999	17,827	186,784
2010	4,01,060	3,49,360	1,75,608	9,26,028	50,507	86,351	16,525	1,53,383
2009	3,51,841	3,42,930	1,74,641	8,69,412	41,538	79,174	17,382	138,094
2008	3,34,884	3,33,414	1,70,471	8,38,769	36,091	72,102	15,208	1,23,401
2007	3,47,662	3,66,700	1,85,045	8,99,407	34,441	81,031	17,252	1,32,724
2006	330,093	3,84,821	1,85,210	9,00,124	30,566	84,843	17,339	1,32,78
2005	313,863	396,812	189,758	900,433	27,282	86,094	17,113	130,489

Source - <https://rbi.org.in/Scripts/AnnualPublications.aspx?head...>

Table 2: Sample Detail.

Bank	No. of Participants	Total
ICICI	41	148
HDFC	35	
Axis Bank	28	
Kotak Mahindra	9	
Yes Bank	22	
Indusind Bank	8	
Bandhan Bank	5	

Table 3.1: - Antecedents of work life balance (Family demand, Career stage, personality, Emotional Stability and Self efficacy) on consequences of work life balance (Health) among women employees of Private Banks:

- Predictors: (Constant), Self-Efficacy
- Predictors: (Constant), Self-Efficacy, Emotional Stability
- Predictors: (Constant), Self-Efficacy, Emotional Stability and Career Stage

Table 3.1: Model Summary of Regression Analysis.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		t	Sig.
					R Square Change	F Change		
1	.317 ^a	.101	.091	2.71342	.101	10.961	-3.311	.001
2	.458 ^b	.210	.194	2.55593	.110	13.449	3.667	.000
3	.525 ^c	.276	.253	2.46002	.066	8.711	2.951	.004

Table 3.2: - Antecedents of work life balance (Family demand, Career stage, personality, Emotional Stability and Self efficacy) on consequences of work life balance (Wellbeing) among women employees of Private Banks:

a. Predictors: (Constant), Personality

b. Predictors: (Constant), Personality, Emotional Stability

Table 3.2: Model Summary of Regression Analysis.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		t	Sig.
					R Square Change	F Change		
1	.534 ^a	.285	.277	2.25417	.285	39.005	6.245	.000
2	.577 ^b	.333	.319	2.18779	.048	7.037	2.653	.009

Table 3.3: - Antecedents of work life balance (Family demand, Career stage, personality, Emotional Stability and Self efficacy) on consequences of work life balance (Family satisfaction) among women employees of Private Banks.

a. Predictors: (Constant), Self-Efficacy

Table 3.3: Model Summary of Regression Analysis.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		t	Sig.
					R Square Change	F Change		
1	.206 ^a	.042	.033	1.819	.042	4.341	2.084	.040

Table 3.4: - Antecedents of work life balance (Family demand, Career stage, personality, Emotional Stability and Self efficacy) on consequences of work life balance (Life satisfaction) among women employees of Private Banks:

a. Predictors: (Constant), Family Demand

b. Predictors: (Constant), Family demand, emotional stability

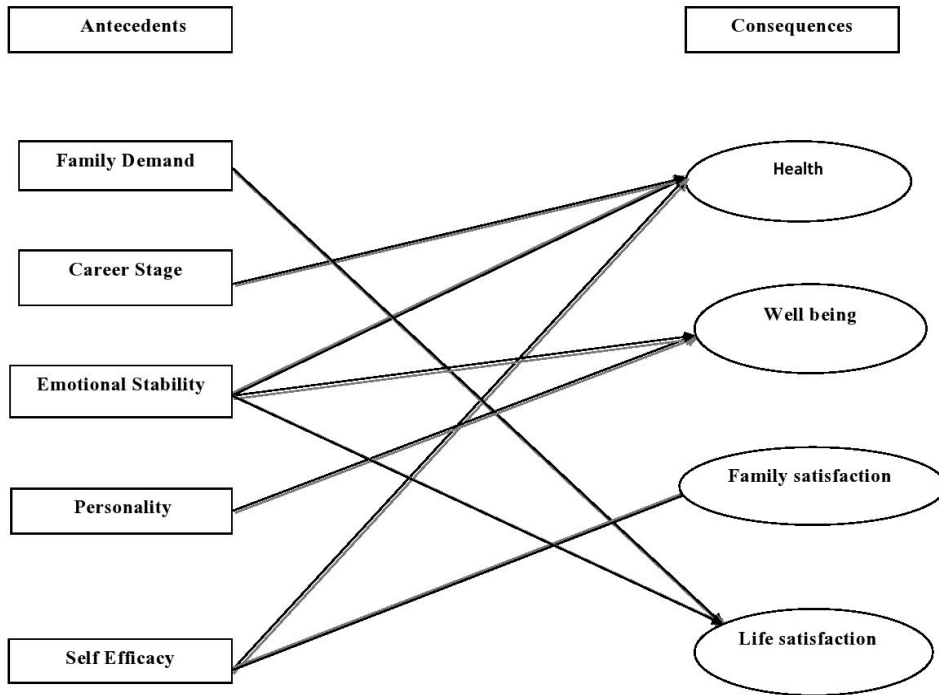
Table 3.4: Model Summary of Regression Analysis.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		t	Sig.
					R Square Change	F Change		
1	.383 ^a	.146	.138	2.97465	.146	16.803	.383	.000
2	.462 ^b	.213	.197	2.87068	.067	8.227	2.868	.005

Table 4: Results on the Basis of Laid Down Hypotheses.

S. No.	Hypotheses	Result
1	Antecedents of work life balance will influence Health (consequence) among women employees of private banks.	Partially accepted
2	Antecedents of work life balance will influence Wellbeing (consequence) among women employees of private banks.	Partially accepted
3	Antecedents of work life balance will influence Family Satisfaction (consequence) among women employees of private banks.	Partially accepted
4	Antecedents of work life balance will influence Life Satisfaction (consequence) among women employees of private banks.	Partially accepted

Fig – 1: Interaction effect of Antecedents of work life balance on consequences of work life balance among women in private sector banks.



Model of Work Life Balance (Individual factors)

AN ANALYSIS OF MIGRATION IN INDIA AND ITS EFFECT ON HEALTH

Shankar S. Kandhare* H. H. Bharadi**

Effects of globalization influencing people to migrate one place to another, seeking more opportunities for their livelihood. There are many reasons like poverty, unemployment, lack of civic amenities etc, for people choose to migrate one place to another in particularly, internal migration figures tend to be dominated by youngsters. As per the data in 2001 census, 309 million persons were migrants based on their last residence, which constitute about 30 percent of the total population of the country. This figure indicates an increase of migration around 37 percent from the census 1991 which recorded 226 million migrants. Moreover, due to climate and environmental changes migrants tend to feel sick, and for those who migrates one region to another have faced adjustment problems. As migration in increase ratio in present scenario the same way health issues of the migrants also increasing. The present paper reviews the relationship between migration and health in India and this paper is analytical in nature and it is entirely based on secondary sources of data for analysis of migration in India and its effect on health, sex wise distribution, and Regional patterns of Migration in India. Which are collected from various sources such as NSSO, Census of India and Government Reports for a period of 30 years from 1971 to 2001. Simple tabulation and percentage method were used for analysis.

Keywords: Globalization, Population change, Migration, Health, Unemployment.

If we look at in the all censuses while studying migration, rural to rural migration stream has been the most important phenomenon. Females constitute a significantly higher percentage of rural migrants mainly because of Indian culture or social factor, particularly marriage. Regarding long distance migration of people in India, a clear sex degree of difference is found from census 2001. Among the male internal migrants, rural to urban stream emerged as the major accounting for 47 percent. On other way, rural to rural migration has remained the major pattern of female migration, with 36 percent of them migrating from rural to rural areas. In the agricultural sector, unprotected exposure to pesticides and other chemical products is a common problem, and chronic exposure to them has been linked to depression, neurologic disorders, and miscarriages among migrant workers. The incidence of other injuries among people working in greenhouses is also high, and muscular disease, dehydration, and heart complaints linked to high temperatures are common. Because many agricultural businesses are small and harvests seasonal, health authorities tend to have limited access to them, and little routine evaluation of working conditions and safety takes place.

The rapid growth of urbanization and migration brought about some serious consequences for developing countries, including India, such as high population density, inadequate housing, population diversity,

population heterogeneity, income inequality, poverty concentration, and population segregation and stratification. These factors directly or indirectly affect health of urban residents. Health services accessibility, pollution, the spread of disease associated with high population density, and diverse demands to health services of different groups of migrants are some among various concerns on migration and health in urban areas in developing countries.

The Definition of Health

The 1946 constitution of the World Health Organization defines health as a “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” “Migration health” refers to the well-being of migrants, mobile populations, their families, and communities affected by migration”.

Migrants and travelers also contribute to the spread of certain communicable diseases within national populations, in particular from urban to rural areas (Wilson, 1995). Shorter (1992) shows that a classic

* **Ph.D., Research Scholar, Department of Economics, Karnataka University, Pavatnagar, Dharwad, India.**

** **Professor, Department of Economics, Karnataka University, Pavatnagar, Dharwad, India.**

example is provided by the sexually transmitted diseases, which are transmitted primarily in cities within core groups often involving prostitution and other forms of multiple partnership, and are spread to the rural areas by returning migrant workers, merchants and travelers. Syphilis was spread this way throughout Europe, especially in the 19th century at the time of fast industrialization and urbanization. New job opportunities attracted young single men and women from the rural areas, who were particularly susceptible to multiple partnerships, and sexually transmitted diseases.

The dynamics of the HIV/AIDS epidemic in sub-Saharan Africa bears much similarities with the earlier syphilis epidemic in Europe, and is also closely linked to rapid urbanization. Another aspect of the relationship between migration and communicable diseases is the peculiarities of urban health prior to modern water supply and sanitation. Rosen, (1958) study indicates that cities were places of high disease transmission and high mortality until the public health revolution

I. Review of Literature

Most of the available evidence leads to the inference that migrants are usually young people who are healthier than the population they left and it is a result of the selective nature of migration. Freedman (1947) pointed out that there are contradict evidences about the hypothesis that migrants are healthier than population they join. He also pointed out age and income as important variables affecting health differences between migrants and non-migrants.

According to Bhaskar Rao (1930) Migration among persons affected by leprosy was hinted at as early as in the year of 1929. Chakraborty et al (2006) discussed about the way of life of the persons affected by leprosy who commute daily and migrate for their livelihood. Chudasama et al (2007) supposed the increase in the leprosy cases in Surat district of Gujarat due to migration. Shen et al (2010) found a small proportion of migrants among new leprosy patients detected in China. Soultter and White (2010) have reviewed the problems faced by the migrants affected by leprosy and also the negative image prevailing among public because of insufficient or inadequate knowledge on leprosy.

Objectives:

The prime objectives of the present study are;

- 1) To analyse the sex wise distribution of migration in India
- 2) To know the health status of migrants
- 3) To examine the determinants of health.

II. Research Design and Methods

The present paper is analytical in nature and it is entirely based on secondary sources of data for analyse of migration in India and its' effect on health, sex wise distribution, and Regional patterns of Migration in India. which are collected from various sources such as NSSO (National Sample Survey Organization), Census of India and Government Reports for a period of 30 years from 1971 to 2001. Simple tabulation and percentage method were used for analysis. Census of India and Government Reports, 'Health Survey' and so on. Utilize this data, is expected to open up unknowns from previous limited studies and provide significant insights to migration policies.

III. Analysis, Discussion & Findings

Distribution of Migrants by sex and type of Migration in India.

The table no.1 shows that the share of migrant's males and females, in the year of 1971 to 2001 there is a decline in rural to rural migration. If we see the sex wise, it has been found that female migrates more than that of males, because of due to social reasons like marriage of females to urban areas. And in the case of rural to urban migration, increasing rapidly during 1971 to 2001. The percentage of males migrates more than that of females in the same period. This may be due to better employment and earning disparities that male can tap.

If we look at the urban to urban migration, the table shows that all urban to urban migration increased during 1971 to 2001. Hear also males migrate much faster than that of females in the case of urban to rural migration. The percentage of migrants from urban to rural marginally increased during the same period. And there was a quite noticeable for males as in opposition to females.

Effects of Migration on Health

Migration patterns shows that people generally move away from conditions of relative poverty to more comfortable societies, or at least to seek better lives for themselves. It is debatable whether they come from more 'unhealthy' conditions in terms of poverty or disease stricken environments, but often the better life that they are in search of eludes them. Demographics shows that migrant communities survive in difficult conditions in host countries as well, living in often crowded, unsanitary and inferior quality housing, often unable to afford healthy or sufficient food, and working in low-paid, insecure and sometimes dangerous areas of work. In

many cases they are affected by a new set of health concerns. According to Manuel Carballo and Aditi Nerukar of the International Centre for Migration and Health, in the journal *Emerging Infectious Diseases* note that, there are added risks and vulnerabilities of psychosocial disorders, drug abuse, alcoholism and violence. This gives us the impression that the experience of migration is a negative experience. However, there is also enough evidence to show that migration, especially for women, offers them an opportunity to escape many strictures and allows them to find many freedoms and realize many of their human rights that were not possible in their places of origin because of rigid social structures and watertight gender roles in the society. Migrants carry their “health prints” with them, which is essentially their own immune system often borne of their socio-economic conditions at the place of their own place or origin that will determine how susceptible or how resilient they are to some conditions, such as differences in weather, for example. If they come from places where there has been less focus on immunization, this “non-immunity” moves with them; migrants are therefore likely to carry with them vulnerabilities present in their original communities.

The question of immunity is particularly important in the case of diseases like tuberculosis (TB) or HIV/AIDS which are directly related to immunity. In the case of diseases like TB, for instance, migrants’ proclivity to contract the disease has been reflected in some national statistics where the data have been disaggregated. For example, Carvallo and Nerukar note that in nine countries of Europe, the incidence of TB was low till the 1990s, when increased migratory flows saw TB levels increasing too. In the Netherlands, TB rose by 45% between 1987 and 1995; over 50% of the known cases occurred amongst migrants. In England and Wales approximately 40% of all TB infections are estimated to occur in people from the Indian subcontinent. In Germany, migrants are three times more likely – and in France six times more likely – to be diagnosed with TB. There is a higher prevalence of TB in migrants, and given the connection between TB and HIV/AIDS, this is a concern for HIV policy also. Patterns of HIV prevalence, though, are not so stark or consistent: for example, HIV incidence is higher among migrants in Sweden, especially those from Africa, but in Italy, HIV among migrants is less than among nationals.

Migrants also bring with them their own cultural beliefs about what is hygienic, healthy or unhealthy, and approaches in general to death and disease. Sometimes, acknowledging mental health problems is taboo, making

it difficult for people of that community to acknowledge that they need medical intervention for psycho social problems. In other communities’ sex-related health issues are taboo, making it difficult for women or young people to obtain information about contraception or sexually transmitted diseases. Practices like eating with chopsticks from the same plate or sharing a meal are seen as communal behavior by Vietnamese but in Australia are considered unhygienic and conducive to spreading of disease (Liem T. Nguyen 2002).

Determinants of Health:

Nature of migration: Temporary migrants tend to be younger than permanent migrants and non-migrants. Therefore, they might have different health risks and health status. **Age and Sex:** Sex differential in health status is not different from previous studies in different settings; females are significantly more likely to get sick than males regardless of their migrant status. female non-migrants, temporary migrants are accordingly more likely to get sick than their male counterparts. **Education:** Education has a significant effect on health status of the non-migrants: spending one more year in school might decrease likelihood of getting sick. The education might have indirect effects through other socioeconomic variables. Education is still an important determinant of health status for both non-migrants and migrants and the effect seems greatest for temporary migrants. **Occupation:** commercial and service workers, skilled workers and professional (including skilled workers, technicians, managers, office workers, and other professionals) Commercial and service workers among non-migrants and permanent migrants are less likely to get sick than their non-working counterparts. There is a tendency that working people are less likely to get sick than non-working people. **Income:** Data are not available to measure directly the effect of income to health for all migrant groups. However, its effect is measured indirectly through roof condition of the house. Roof types are classified into three categories: cement roof, tiled roof, and other, which is used as reference group. Those who live in cement roof house are considered richer than those live in tiled roof house, and the rest are usually the poorest. **Water:** Access to clean water appears as one of the important determinants of health; those who have access to piped water, including piped water in compound and from the public tap, regardless their migrant status, are less likely to get sick than others. However, its effect is different for different type of migrants for non-migrants, those who have access to piped water are 30 percent less likely to get sick than those who are accessing to other sources of water, such as well, rain, river, and lake (Liem et al-2002)

IV. Conclusion

The association between urban migration and health is mixed. A number of studies highlight the benefits of access to health services, information, education, safe drinking water, and cash incomes afforded by urban living. Other studies found that poverty, housing and living environments, inadequate water services and waste disposal limit the benefits of urban environments and intensify health problems.

However, in order to improve the health of migrants as well as non-migrants, health policy makers may want to have a good partnership with their counterparts in other departments. Promoting education and reducing unemployment rate also mitigate health problems in urban areas. Lack of effective coordination and cooperation among different health investment partners including the government has discussed. The management and collaboration between government offices as well as interested partners like NGO are important to improve health status of migrants.

References

Banerjee A, Raju S. (2009). “Gendered mobility: women migrants and work in urban India”. *Economic & Political Weekly*, 54(28);115–23.

- Craig R. Janes (1990). “*Migration, Social Change, and Health*” Stanford University Press, California.
- Deaton A, Dreze J. (2002). “*Poverty and inequality in India: a re-examination*”, *Economic & Political Weekly*, Vol 37 No 36 (September 7–13);3729–48.
- Deshingkar P, Akter S. (2009). “*Migration and human development in India*”, Human Development Research Paper 2009/13; United Nations Development Funds.
- Keshri K, Bhagat R.B. (2010). “*Temporary and seasonal migration in India*”, 66(3):25–45.
- Kundu A, Sarangi N. (2007). “*Migration, employment status and poverty: an analysis across urban centres*”, *Economic & Political Weekly*; 42(4):299–306.
- Mehrotra S. (2008). “*Social Insurance System for India’s Unorganised Sector Workers: the case and the cost*”, *Indian Journal of Labour Economics*, April–June;51(2):183–96.
- Pai M, J et al, (1997). “*Malaria and migrant labourers: socio-epidemiological inquiry*” *Economic & Political Weekly*; 32(16);839–42.
- Mansuri G. (2006). “*Migration, school attainment, and child labour: evidence from rural Pakistan*”, World Bank Policy Research Working Paper 3945.
- Rogaly B, et al (2002). “*Seasonal migration and welfare in eastern India a social analysis*”, *Journal of Development Studies*. 2002;38(5):89–114.

Table 1: Distribution of Migrants by sex and type of Migration in India (in percent).

Sex	Year	Rural to rural	Rural to urban	Urban to urban	Urban to rural	Total	No. of migrants in million
Males	1971	51.4	24.2	16.8	7.6	100	49.1
	1981	46.0	27.6	18.9	7.5	100	59.7
	1991	43.5	30.0	19.0	7.5	100	60.8
	2001	36.4	34.2	23.0	6.3	100	93.0
Females	1971	77.0	10.3	07.5	5.2	100	109.6
	1981	73.5	12.0	09.0	5.5	100	141.4
	1991	72.3	13.2	09.1	5.4	100	164.1
	2001	72.3	13.5	10.0	4.2	100	221.0
Persons	1971	69.1	14.6	10.4	5.9	100	158.7
	1981	65.3	16.7	11.9	6.1	100	201.1
	1991	64.5	17.7	11.8	6.0	100	224.9
	2001	62.9	18.9	13.4	4.6	100	314.0

Sources: Census of India 2001 and NSSO Report no.470, Migration in India 1999-2001.

EVALUATING ROLE OF INDIVIDUALS' SUBJECTIVE CAREER SUCCESS IN ORGANIZATION

Tan Le Trinh* Trang Dai Thi Dao**

This study examines the factors affecting individuals' subjective career success based on the sponsor and contest mobility of career success (Turner, 1960; Rosenbaum, 1984). Authors this study tests hypotheses about the relations between organizational sponsorship, external marketability, person-organization fit, subjective career success, and life satisfaction. Therefore, managers and leaders know how to motivate their employees toward career achievement. To achieve this goal, authors use confirmatory factor analysis (CFA) and structural equation model (SEM) to examine all of the three perspectives individual structural, and behavioral- in which the individual and behavioral approaches belong to the contest-mobility model of career success while the structural one belongs to the sponsored-mobility model. Research findings indicate that organizational sponsorship and external marketability make significant impacts on subjective career success and these relationships are positive. This study also examines a number of personal information like gender, marital status, age, highest diploma, and occupation, number of working years, and monthly salary when it comes to perceived career success. In addition, subjective career success also positively affects life satisfaction. The findings have important practical implications for managers and leaders who generally seek to motivate their employees toward career achievement.

Keywords: Subjective career success, Organizational sponsorship, External marketability, Person-organization fit, Life satisfaction.

This study examines the factors affecting individuals' subjective career success based on the sponsor and contest mobility of career success (Turner, 1960; Rosenbaum, 1984). Subjective career success has been normally approached by three perspectives: individual, structural, and behavioral in which the individual and behavioral approaches belong to the contest-mobility model of career success while the structural one belongs to the sponsored-mobility model. With the four components of individuals' subjective career success: organizational sponsorship, external marketability, person-organization fit, and life satisfaction, the research makes an attempt to examine all of the three perspectives mentioned.

According to the sponsored-mobility model, those in positions of power within the organization pay special attention to those members who are deemed to have high potential. Because employees are more likely to be noticed and selected into an elite group, those who fit are more likely to express positive attitudes towards their career. Empirical evidence of associations between person-organization fit and positive employee attitudes proves this proposed association. Perceptions of person-organization fit and organizational sponsorship are therefore expected to also be associated with career success.

I. Review of Literature

Subjective career success is defined as individuals' perceptual evaluation and affective reaction to their careers (Greenhaus et al., 1990; Turban & Dougherty, 1994). This is a way to measure individuals' career success besides objective career success which refers to observable career achievements which relates to an external assessment of professional achievements such as wage, frequency of promotions, and hierarchical status (Hennequin, 2009, as cited in Haines et al., 2014; London and Stumpf, 1982). Researchers report that a growing proportion of employees determine their career success in terms of subjective indicators than in terms of objective indicators (Eith, Stummer, & Schusterschitz, 2011; Littler, Wiesner, & Dunford, 2003; Sturges, Guest, Conway, & Davey, 2002).

Subjective career success is often a drive for individuals' lives, as a result understanding how to continuously enhance subjective career success is a need. Meanwhile there are many researchers conducted to investigate the factors of subjective career success taken in developed

* Faculty of Accounting, Duy Tan University, Danang, Vietnam

economies (Shen et al., 2015; Tlaiss & Kauser, 2011; Lirio et al., 2007), there is less study of these drives carried out in such an emerging economy like Vietnam. In addition, after the global economic crisis since 2008, the unemployed has been increasing (Tanveer et al., 2012), therefore the labor force really needs to know how to remain their subjective career success by understanding the components of the career success. In Vietnam, the unemployed at the working age proportion had jumped from 2.38% in 2008 to 2.90% in 2009, followed by a dramatic decrease between 2010 with 2.88% and 2012 with 1.96%; however, the proportion tends to be increasing because there is 2.18% unemployment in the year 2013 (General Statistics Office of Vietnam, 2015).

Moreover, the competitiveness in the labor force in the global job market nowadays becomes fierce since Vietnam has been open and joining several associations to impulse the economic development of the nation such as the Association of Southeast Asian Nations (ASEAN), the ASEAN Free Trade Area (AFTA), the World Trade Organization (WTO), and the forthcoming Trans-Pacific Partnership (TPP). Therefore, doing such a study like this not only helps the unemployed but also the employed in the labor force remain and enhance their career success. This situation pushes a need to examine the factors affecting individuals' subjective career success.

The overall objective of this study is to examine some antecedences and consequences of individuals' subjective career success in the Vietnamese context. Specifically, it investigates four factors taken into consideration which are organizational sponsorship, external marketability, person-organization fit, and life satisfaction.

Hypothesis 1: Subjective person-organization fit is positively associated with subjective career success.

Hypothesis 2: Organizational sponsorship is positively associated with subjective career success.

Within the contest-mobility model of career success, the emphasis is on abilities, skills, accomplishments, devotion, involvement, performance on the job, and adding value to the organization. A person with valued skills and noteworthy accomplishments is likely to believe that he or she is valuable to other employers. That results in the third hypothesis needed to be tested as follows.

Hypothesis 3: Perceived external marketability is positively associated with subjective career success.

Satisfaction has been widely studied in the management literature (Spector, 1997). While it is a subjective variable that cannot be measured objectively, levels of reported satisfaction have been consistently related to a variety of behaviors; less satisfied employees are more likely to be absent, to quit their jobs, to change careers (Harrison and Martocchio, 1998), and to engage in counterproductive work behaviors (Spector et al., 2006; Harrison and Martocchio, 1999). Satisfaction therefore seemed to be an important variable to consider in the context of career success, because of the consequences of satisfaction or dissatisfaction.

Hypothesis 4: Subjective career success is positively associated with life satisfaction.

II. Research Design & Methods

Measurement scale

The survey instrument is administered in Vietnamese and all the scale items are translated by a translate-retranslate methodology (Brislin, 1970) to ensure that they accurately reflect the wording of the original version. To the extent that each of these items of the four constructs represents an employer inducement that applies to just about all of the respondents in the sample, the responses, codified on a scale ranging from 1 to 7, reflect the extent to which the respondent has received each inducement. Subjective career success (SCS) can be measured via self-reports and as a continuous variable. Researchers often use affect-based measures; participants are asked to evaluate the extent to which they are satisfied with their current career status or with different aspects of their career success (e.g., income or promotions) (Ng & Feldman, 2014). Subjective career success was measured with a five-item scale developed by Greenhaus et al. (1990). The response scale qualified degrees of satisfaction ranging from 1 (strongly dissatisfied) to 7 (strongly satisfied) and one of the items was reverse-scored.

Person-organization fit (POF) was assessed with a three-item scale that asked the respondents to rate the fit between themselves and their organization (Judge and Cable, 1997). The response scale ranged from 1 (strongly disagree) to 7 (strongly agree).

External marketability (EMA) was measured with a three-item scale used by Haines et al. (2014) and Eby et al. (2003). A sample item is "There are many jobs available for me given my skills and experience." The response format ranged from 1 (strongly disagree) to 7 (strongly agree).

Organizational sponsorship (OSP) was measured by seven items measuring the extent to which the respondent's employer had honored the promise to offer various work conditions (i.e. perceived employer inducements) using points from 1 (not at all) to 7 (very strongly). This scale was adopted from Haines et al. (2014).

Finally, life satisfaction (LS) was measured by seven items adopted from Diener (1985, as cited in Zhang (2015)) using 7-point scale ranged from 1 (strongly disagree) to 7 (strongly agree).

The demographic variables included in the analysis are age, gender, education level, the presence of a spouse, and wage level. Age was measured in years. Gender was measured as female (1) or male (2). The highest diploma measured education level with the following values: high school (1), college (2), undergraduate degree (3), university Master's degree (4), and doctorate (5). The presence of a spouse was measured as either "not living with a spouse" (1) or "living with a spouse" (2). Wage level is included in the conceptual model as a control variable and is measured with six levels: Under 2,000,000VND (1); 2,000,000- under 5,000,000VND (2); 5,000,000- under 10,000,000VND (3); 10,000,000- under 15,000,000VND (4); 15,000,000- under 20,000,000VND (5); 20,000,000VND and above (6).

Mix method

Conducting a qualitative study is the first phase for scale refinement. Based on the previous research and the Vietnamese context, the draft questionnaire consists of demographic variables and four constructs which are organizational sponsorship, external marketability, person-organization fit, and subjective career success. Then, the draft questionnaire is translated from English into Vietnamese. Through a qualitative study, in-depth interviews with six people are conducted in order to refine all observed items of the draft questionnaire to make improvement for the official questionnaire used for later stage.

In the quantitative study, the adjusted questionnaire is used to collect data and then to test the measurement models and structural models. The convenient sampling approach is employed for this study in order to obtain an expected sample size of about 300. This study specifically focuses on the employees who necessarily have at least two years of working experience in Vietnam after graduation and they have to be between 22 and 59 years old. According to Vietnam context, after two years of graduation, employees will normally be 22 years old if

they study vocational training or college and they will be 24 years old if they take university training. Due to the fact that the majority of the labor in the year 2013 was between 25 and 49 years old and accounted for 59.9% of the above-15 labor force (General Statistics Office of Vietnam, 2015) and the maximum age of employment is 60, this research recruits the employed who are in the range of 22 and 59 years old. Indirect method via an online survey will be used to deliver questionnaires to participants.

To sum up, this study specifically focuses on the employees who necessarily have at least two years of working experience in Vietnam after graduation and they have to be between 22 and 59 years old. Indirect method via an online survey will be conducted to deliver questionnaires to participants. The convenient sampling approach was employed for this study in order to obtain an expected sample size of about 200.4

III. Analysis, Discussion & Findings

SPSS 20 and Amos 20 or equivalent software will be used to test the model. The reliability and validity will be tested by running Confirmatory Factor Analysis (CFA). Then, Structural Equation Model (SEM) will be used to test the hypotheses.

Participant demographic

There were 150 valid people participated in the survey and the demographic description of participants has witnessed a diversity as indicated in table 2. The employment who participated in this study mainly includes Officers at a private company (39.3%), Professionals (31.3%), and Officers at a public organization (23.3%). The respondents whose longevity is ranging from 23 to 56 are about 32.3 years old on average. Their average number of working years is 9.2 with the highest year number is 31 and the lowest one is 2. Half of participants are female (48.7%) and living with a spouse (51.3%). The majority of respondents have earned an undergraduate degree (51.3%) as their highest diploma, followed by the second highest proportion of people who have had a master degree (39.3%). When it comes to the wage in terms of average monthly salary, 32.7% of the people joining in this study have earned from 10 to below 15 million VND per month. The rest is divided almost equally into three ranges of salary which are 5 to under 10 million VND (23.3%), 15 to 20 million VND (18.7%), and 20 million VND and above (24%).

With regards to the descriptive statistics of the measurement scale, there are 5 constructs including 23

question items coded as in table 3 below. The items employed in this study use the 7-point Likert scale where 1 is strongly disagree/dissatisfied and 7 is strongly agree/satisfied. All the items show the mean value which is above 4 and the standard deviation is below 2.

Scale reliability and validity

Reliability analysis

Cronbach's alpha coefficient is computed to evaluate the scale's reliability and assess the consistency of items within the scale. According to Hair et al. (2010), the reliability coefficient is considered as acceptable if it meets the value of 0.7. The Cronbach's alpha coefficients shown in table 4 indicate that the reliability of the scales is sufficiently good since all of the coefficients exceed 0.7. Before accessing the results of the hypothesis testing, it is crucial to first examine the convergent and discriminant validity of the measurement scale. The SEM technique of measurement model is one of statistical techniques for testing hypotheses about convergent and discriminant validity.

The convergent validity was tested by examining the composite reliability (CR) and the average variance extracted (AVE) from the measures (Hair et al., 2010). Four out of five CR scores of the constructs shown in table 5 exceed the threshold of 0.70 (Nunnally, 1978). The AVE values (in table 5) exceed the recommended cut-off value of 0.50 (Fornell and Bookstein, 1982). Proven as in table 5, all the indicators using in this study are satisfactory for the convergent validity. The discriminant validity was supported when the square roots of the AVE for each factor is greater than the correlations between that construct with others. The discriminant validity analysis in table 6 indicates that all square roots of the AVE scores are greater than the corresponding correlation coefficients. Bold values on the diagonal are square roots of AVE value of constructs.

Confirmatory factor analysis (CFA)

CFA for Subjective Career Success

The CFA result for subjective career success indicates that the measurement model of subjective career success acceptably fits to data because GFI = 0.871, TLI = 0.91, and CFI = 0.928. In this model, subjective career success consists of three sub-constructs which are person-organization fit, organizational sponsorship, and external marketability. All factor loadings of each item in this model are higher than 0.5.

CFA for Measurement Model

The CFA result for overall measurement model acceptably fits to data because GFI = 0.788, TLI = 0.891,

and CFI = 0.905. In this model, all factor loadings of each item in this model are higher than 0.5. The correlation between a pair of two constructs as shown in table 7 are relatively high

The overall fitness of the structural equation model

The structural equation model is proved to fit to the population data because of the following satisfactory indicators: two out of three indicators GFI, TLI, and CFI are above 0.9 (Steiger, 1990; Bentler & Bonett, 1980); $CMIN/df \leq 2$ (Carmines & McIver, 1981); RMSEA is nearly smaller than 0.08 (Steiger, 1990).

Hypothesis testing results

The P-value and the sign of the Estimate of the Regression weights in table 9 show that Organizational Sponsorship has a significantly positive effect on Subjective Career Success (P-value < 0.001), confirming H2, and External Marketability has a significantly positive impact on Subjective Career Success (P-value = 0.04 < 0.05), confirming H3. Between the two significant factors affecting Subjective Career Success, Organizational Sponsorship shows a predominant effect on career success in individual's perception due to higher standardized coefficient. Interestingly, Person-Organization Fit does not show a significant impact on individual Subjective Career Success due to P-value = 0.208 > 0.05. When it comes to individual life, Subjective Career Success reveals a strongly positive impact on Life Satisfaction. This is confirmed by the tremendously small P-value which is below 0.001.

IV. Conclusion

The findings have important practical implications for managers and leaders, who generally seek to motivate their employees toward career achievement. This research investigates the overview components of the individuals' subjective career success so every people in the labor force can take advantage of the research results. Based on the implication of the research, employees can understand more about what kind of components influence their career success in their organizations, which one weighs the largest and which one weighs the least so that they can recognize their strengths and weaknesses in order to make improvement where needed. In addition, the management board can also rely on the research insights to recognize whether the reward system and the company policy fit their employees' expectation or not.

Research findings indicate that organizational sponsorship and external marketability make significant impacts on subjective career success. These relationships

are positive and the effect of organizational sponsorship outweigh that of external marketability. Since subjective career success significantly and positively leads to life satisfaction, it is more than important to examine individuals' perceived success particularly sponsorship in an organization and external marketability. The organizational sponsorship based on individuals' view consists of 'Opportunities for professional development within the organization', 'Constructive employer-employee collaboration', 'Opportunities to use my skills and abilities', 'Interesting and challenging work', 'Recognition of my work', 'Recognition of my ideas and opinions', and 'Appropriate resources to perform the work'. This opens a number of topics regarding training, collaboration, leadership, motivation, and reward system. The management board also need to watch out the external marketability because it affects individuals' subjective career success. People express external marketability as 'There are many jobs available for me given my skills and my experience', 'Given my skills and my experience, other organizations consider me as a value-added', and 'I could easily obtain a comparable job with another employer'.

Reference

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological bulletin*, 88(3), 588.

Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of cross-cultural psychology*, 1(3), 185-216.

Carmines, E. G., & McIver, J. P. (1981). Analyzing models with unobserved variables: Analysis of covariance structures. *Social measurement: Current issues*, 65-115.

Eby, L. T., Butts, M., & Lockwood, A. (2003). Predictors of success in the era of the boundaryless career. *Journal of Organizational Behavior*, 24(6), 689-708.

Eith, T. K., Stummer, H., & Schusterschitz, C. (2011). Career success perception and work-related behavior of employees in geriatric care — A pilot study in a German geriatric care facility. *Scandinavian Journal of Caring Sciences*, 25, 45–52.

Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing research*, 440-452.

General Statistics Office of Vietnam (2015). Labor force survey. Available at <http://www.gso.gov.vn/>.

Greenhaus, J.H., Parasuraman, S. J., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, 33, 64–86.

Haines, V. Y., Hamouche, S., & Saba, T. (2014). Career success: fit or marketability? *Career Development International*, 19(7), 779-793.

Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate data analysis: A global perspective* (Vol. 7). Upper Saddle River, NJ: Pearson.

Harrison, D. A., & Martocchio, J. J. (1998). Time for absenteeism: A 20-year review of origins, offshoots, and outcomes. *Journal of management*, 24(3), 305-350.

Judge, T. A., & Cable, D. M. (1997). Applicant personality, organizational culture, and organization attraction. *Personnel Psychology*, 50(2), 359-394.

London, M., & Stumpf, S. A. (1982). *Managing careers* (Vol. 4559). Addison Wesley Publishing Company.

Littler, C. R., Wiesner, R., & Dunford, R. (2003). The dynamics of delayering: Changing management structures in three countries. *Journal of Management Studies*, 40, 225–256.

Lirio, P., Lituchy, T. R., Ines Monserrat, S., Olivas-Lujan, M. R., Duffy, J. A., Fox, S., & Santos, N. (2007). Exploring career-life success and family social support of successful women in Canada, Argentina and Mexico. *Career Development International*, 12(1), 28-50.

Ng, T. W., & Feldman, D. C. (2014). Subjective career success: A meta-analytic review. *Journal of Vocational Behavior*, 85(2), 169-179.

Nunnally, J. (1978). *Psychometric methods*.

Rosenbaum, J. E. (1984). *Career mobility in a corporate hierarchy*. Academic Press.

Shen, Y., Demel, B., Unite, J., Briscoe, J. P., Hall, D. T., Chudzikowski, K., & Zikic, J. (2015). Career success across 11 countries: Implications for international human resource management. *The International Journal of Human Resource Management*, 26(13), 1753.

Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of vocational behavior*, 68(3), 446-460.

Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences* (Vol. 3). Sage publications.

Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate behavioral research*, 25(2), 173-180.

Tanveer Choudhry, M., Marelli, E., & Signorelli, M. (2012). Youth unemployment rate and impact of financial crises. *International journal of manpower*, 33(1), 76-95.

Tlaiss, H., & Kauser, S. (2011). Career success of Arab women managers: an empirical study in Lebanon. *Education, Business and Society: Contemporary Middle Eastern Issues*, 4(1), 43-61.

Turban, D. B., & Dougherty, T. W. (1994). Role of protégé personality in receipt of mentoring and career success. *Academy of Management Journal*, 37(3), 688-702.

Turner, R. H. (1960). Sponsored and contest mobility and the school system. *American Sociological Review*, 855-867.

Zhang, C., Herrmann, A., Hirschi, A., Wei, J., & Zhang, J. (2015). Assessing Calling in Chinese College Students Development of a Measure and Its Relation to Hope. *Journal of Career Assessment*, 1069072715595804.

Table 1 Measurement Scale

Variable	Operationalization
Subjective Career Success	
SCS1	The success achieved so far in your career.
SCS2	The progress made to meet your career goals.
SCS3	The progress made to meet your goals salary.
SCS4	The progress made to allow you to advance in your career.
SCS5	The progress made in the development of new skills.
Person-Organization Fit	
POF1	My values, my goals and my personality fit my organization and its current staff.
POF2	My values and my personality prevent me from integrating my organization because they differ from those of most other employees
POF3	The values and the "personality" of my organization correspond with mine.
Organizational Sponsorship	
OSP1	Opportunities for professional development within the organization.
OSP2	Constructive employer-employee collaboration
OSP3	Opportunities to use my skills and abilities.
OSP4	Interesting and challenging work.
OSP5	Recognition of my work.
OSP6	Recognition of my ideas and opinions.
OSP7	Appropriate resources to perform the work.
External Marketability	
EMA1	There are many jobs available for me given my skills and my experience
EMA2	Given my skills and my experience, other organizations consider me as a value-added.
EMA3	I could easily obtain a comparable job with another employer.
Life Satisfaction	
LS1	In most ways my life is close to my ideal.

LS2	The conditions of my life are excellent.
LS3	I am satisfied with my life.
LS4	So far I have gotten the important things I want in life.
LS5	If I could live my life over, I would change almost nothing.
Demographic	
Age	Years of age
Gender	0 = male, 1 = female.
Spouse	0 = no, 1 = yes.
Education	1 = high school, 2 = college, 3 = university certificate, 4 = university undergraduate degree, 5 = university graduate degree, 6 = university Master's degree, 7= doctorate.
Wage	1 = Under 2,000,000VND; 2 = 2,000,000- under 5,000,000VND; 3 = 5,000,000- under 10,000,000VND; 4 = 10,000,000- under 20,000,000VND; 5 = 20,000,000VND and above.

Table 2. Descriptive statistics of demographic variables (Base=150)

Variable	Category	Frequency	Percent	Cumulative Percent
Gender	Female	73	48.7	48.7
	Male	77	51.3	100.0
	Total	150	100	
Occupation	Officer at a public organization	35	23.3	23.3
	Officer at a private company	59	39.3	62.7
	Professional (teacher, doctor, layer, etc.)	47	31.3	94.0
	Self employed	3	2.0	96.0
	Unemployed	1	.7	96.7
	Others	5	3.3	100.0
	Total	150	100.0	
Living with a spouse	No	73	48.7	48.7
	Yes	77	51.3	100.0
	Total	150	100.0	
Highest diploma	High school	1	.7	.7
	College	3	2.0	2.7
	Undergraduate degree	77	51.3	54.0
	University Master's degree	59	39.3	93.3
	Doctorate	10	6.7	100.0
	Total	150	100.0	
Average monthly salary	2,000,000- under 5,000,000VND	2	1.3	1.3
	5,000,000- under 10,000,000VND	35	23.3	24.7
	10,000,000- under 15,000,000VND	49	32.7	57.3
	15,000,000- under 20,000,000VND	28	18.7	76.0
	20,000,000VND and above	36	24.0	100.0
	Total	150	100.0	
Variable	Minimum	Maximum	Mean	Std. Deviation
Age	23	56	32.32	7.076
Number of working years	2	31	9.19	6.912

Table 3. Descriptive statistics of items (Base=150)

Variable code	Question Items	Min	Max	Mean	Std. Deviation
OSP1	Opportunities for professional development within the organization	1	7	4.9	1.4
OSP2	Constructive employer - employee collaboration	2	7	5.0	1.2
OSP3	Opportunities to use my skills and abilities.	2	7	5.3	1.3
OSP4	Interesting and challenging work.	1	7	5.3	1.3
OSP5	Recognition of my work.	1	7	5.1	1.3
OSP6	Recognition of my ideas and opinions.	1	7	4.8	1.3
OSP7	Appropriate resources to perform the work.	2	7	4.8	1.2
EMA1	There are many jobs available for me given my skills and my experience	2	7	5.0	1.3
EMA2	Given my skills and my experience, other organizations consider me as a value- added.	1	7	4.9	1.1
EMA3	I could easily obtain a comparable job with another employer	1	7	5.0	1.3
SCS1	The success achieved so far in your career.	1	7	4.9	1.1
SCS2	The progress made to meet your career goals.	2	7	4.7	1.1
SCS3	The progress made to meet your goals salary.	1	7	4.7	1.2
SCS4	The progress made to allow you to advance in your career.	1	7	4.5	1.1
SCS5	The progress made in the development of new skills.	1	7	4.7	1.1
POF1	My values, my goals and my personality fit my organization and its current staff.	1	7	5.2	1.2
POF2	My values and my personality prevent me from integrating my organization because they differ from those of most other employees.	1	7	5.2	1.5
POF3	The values and the "personality" of my organization correspond with mine.	2	7	4.9	1.1
LS1	In most ways my life is close to my ideal.	1	7	4.3	1.3
LS2	The conditions of my life are excellent.	2	7	4.3	1.3
LS3	I am satisfied with my life.	1	7	4.7	1.4
LS4	So far I have gotten the important things I want in life	1	7	4.7	1.3
LS5	. If I could live my life over, I would change almost nothing.	1	7	4.0	1.8

Table 4. Cronbach's alpha coefficients

Variable	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Cronbach's alpha [POF] = .792				
POF1	10.11	3.605	.655	.655
POF2	10.08	4.423	.672	.643
POF3	10.38	3.902	.564	.606
Cronbach's alpha [OSP] = .926				
OSP1	30.22	39.770	.755	.917
OSP2	30.19	41.727	.723	.919
OSP3	29.87	39.883	.828	.909

OSP4	29.87	41.472	.730	.918
OSP5	30.03	40.556	.797	.912
OSP6	30.33	40.371	.783	.913
OSP7	30.36	41.990	.758	.916
Cronbach's alpha [EMA] = .845				
EMA1	9.98	5.161	.669	.824
EMA2	10.03	5.328	.735	.766
EMA3	9.93	4.659	.737	.760
Cronbach's alpha [SCS] = .907				
SCS1	18.65	15.288	.738	.893
SCS2	18.81	14.815	.836	.873
SCS3	18.85	14.574	.769	.887
SCS4	19.01	14.584	.808	.878
SCS5	18.85	15.433	.688	.903
Cronbach's alpha [LS] = .918				
LS1	17.73	26.586	.827	.894
LS2	17.69	26.778	.822	.895
LS3	17.32	25.669	.817	.894
LS4	17.33	26.385	.819	.895
LS5	18.03	23.449	.727	.924

Table 5. Assessment of convergent validity

Variable	Construct reliability (CR)	Average variance extracted (AVE)
POF	0.504	0.661
OSP	0.892	0.804
EMA	0.785	0.807
SCS	0.868	0.815
LS	0.903	0.849

Table 6. Assessment of discriminant validity

Variable	1	2	3	4	5
POF	0.813				
OSP	0.808	0.896			
EMA	0.623	0.618	0.898		
SCS	0.707	0.791	0.612	0.903	
LS	0.722	0.648	0.549	0.731	0.921

Table 7. Correlation coefficients

			Estimate
EMA	<-->	SCS	0.612
OSP	<-->	EMA	0.618
POF	<-->	EMA	0.623
EMA	<-->	LS	0.549
POF	<-->	OSP	0.808
OSP	<-->	SCS	0.791
OSP	<-->	LS	0.648
POF	<-->	SCS	0.707
POF	<-->	LS	0.722
SCS	<-->	LS	0.731

Table 8. Overall fitness.

Criteria	Standard	Value	Result
GFI	GFI = 0.9	GFI = 0.805	Relatively Supported
TLI	TLI = 0.9	TLI = 0.908	Supported
CFI	CFI = 0.9	CFI = 0.92	Supported
CMIN/df	CMIN/df ≤ 2	CMIN/df = 1.962	Supported
RMSEA	RMSEA < 0.08	RMSEA = 0.08	Supported

Table 9. Regression weights.

Hypotheses		Estimate	S.E.	C.R	P
Person-Organization Fit →	Subjective career success	0.172	0.137	1.259	0.208
Organizational Sponsorship →	Subjective career success	0.463	0.114	4.083	***
External Marketability - →	Subjective career success	0.169	0.082	2.049	0.04
Subjective career success →	Life Satisfaction	1.116	0.137	8.163	***

(*** means the value is smaller than 0.001)

Table 10. Hypothesis testing results.

Hypothesis	P-value	Testing result
H1. Subjective person-organization fit is positively associated with subjective career success.	Over 0.05	Not supported
H2. Organizational sponsorship is positively associated with subjective career success.	Below 0.001	Strongly supported
H3. External marketability is positively associated with subjective career success.	Below 0.05	Supported
H4. Subjective career success is positively associated with life satisfaction.	Below 0.001	Strongly supported

Figure 1. Conceptual framework.

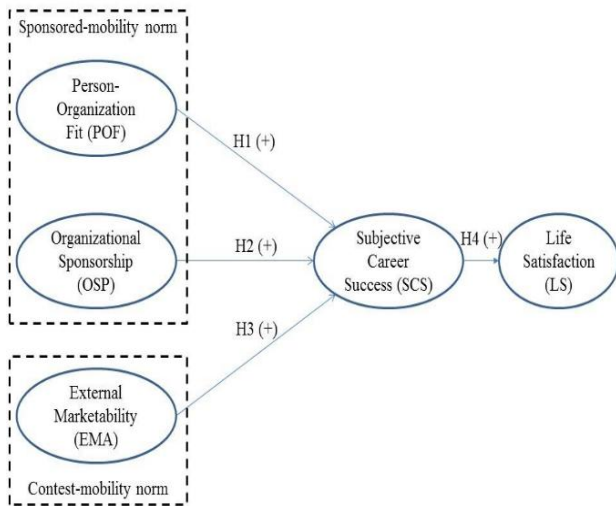


Figure 2. CFA for subjective career success.

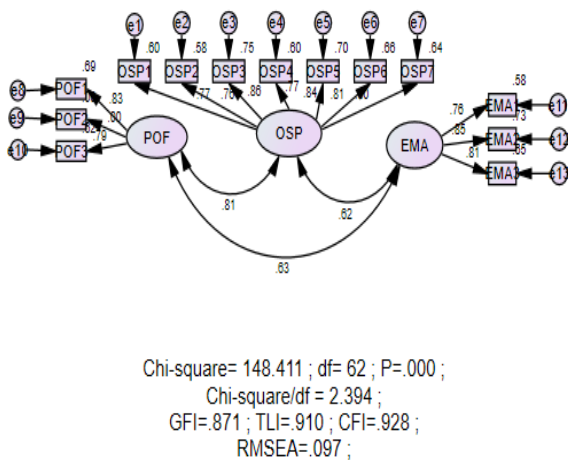


Figure 3. CFA for measurement model.

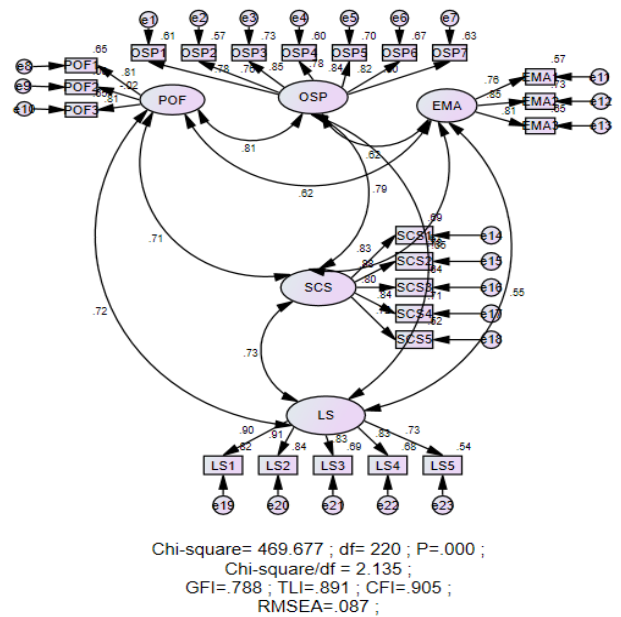
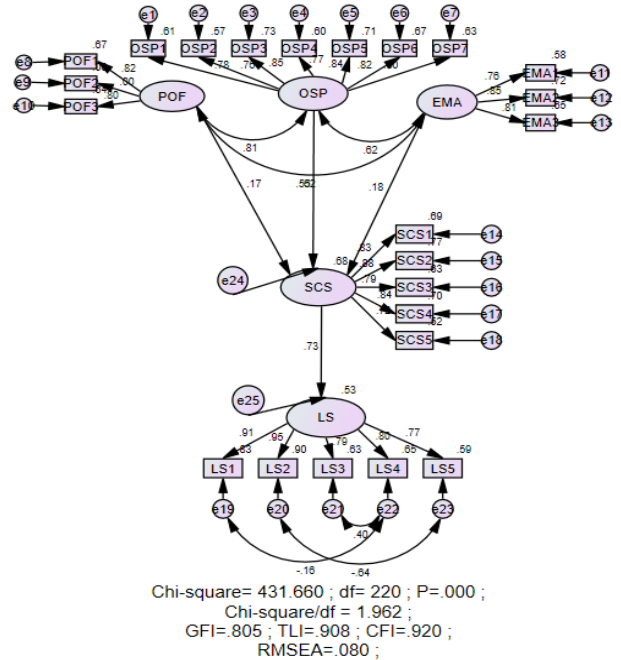


Figure 4. Structural results (standardized estimates).



IMPACT OF SENSORY MARKETING ON CONSUMERS' PURCHASE INTENTION IN RESTAURANTS

Govind Narayan* Abadh Narayan Singh**

Restaurant industry in India is growing at fast pace. This growth poses restaurant managers to rethink of marketing strategies as traditional marketing strategies have become irrelevant in today's competitive environment. Sensory marketing is a new marketing practice to enhance the emotions and dining experience of customers by using all the five senses. The purpose of the study is to know the impact of sensory marketing on consumers' purchase intention in restaurant in Agra. The study also finds the most important sensory element for restaurant. A sample of 184 consumers was selected who were present in multi-cuisine restaurant in Agra. The data was collected through a well-structured questionnaire and analysed through multiple regression analysis. The findings of research indicate that there is significant impact of sensory marketing on purchase intention of customer in restaurant. The research also concludes that taste is the most important sensory marketing element. The study has important implication for academicians and restaurant managers.

Keywords: Multiple regression, Purchase intention, restaurant, sensory elements, Sensory marketing.

The Indian Food and restaurant industry is growing at faster pace. According to the India Food Report released by Ministry of Statistics and Programme Implementation in 2016, the Indian food market is sixth largest globally. It was registered at INR25.1 trillion in 2014 and expected to reach at INR61 trillion by 2020 (KPMG, January 2016). This growth has made this industry highly competitive. Moreover, the traditional marketing strategies have become insufficient and irrelevant in competitive environment of Indian restaurant industry. The sustainability of restaurant business largely depends upon how creatively they understand the expectation of customers and develop marketing strategies accordingly because modern consumers are more dynamic and their expectations are rising day by day. They not only want quality of the product but also expect a great shopping experience. Each visit in restaurant is associated with specific emotions which influence their purchase intention. Furthermore, most of the restaurants are engaged in selling similar type of product which forces the restaurant managers to search for new methods and tools of customer value creation (Armstrong and Kotler, 2009) to enhance the dining experience of the customers at the time of consumption. That's why the restaurant managers and owners in India started to rethink the marketing strategies to create an atmosphere which has the ability to attract customers, produces specific dining experience and repeat purchase behavior of consumers (Kumar et. al.2013). Restaurant managers have understood that modern consumers are using their senses to select and finalize their purchase decision. Hence, restaurant managers and owners across the globe started

to use sensory marketing strategy to enhance the store image, customer value and the dining experience of customers which affect the purchase intention of customers. They started to entice the customers and influencing their emotional and sensorial behavior by implementing sensory marketing strategies. Sensory marketing technique has been emerged as an important tool to create the most binding form of engagement between brand and consumers (Lindstorm, 2005). Sensory marketing appeals customer's emotions and cognitions through the senses: visual, touch, taste, smell and sound and create long lasting memories in the mind of customers through positive association with the brand. Brand can be positioned and differentiated by using all the five senses (Khanna & Mishra, 2013). Particularly, in restaurant industry, sensory marketing plays a significant role to increase the purchase intention of customers. It gives the justification for a study to explore the relation between sensory marketing elements and purchase intention of consumers in restaurants.

This paper is an attempt to assess the impact of sensory marketing on purchase intention of consumers in restaurants. The study also attempts to know the most

* Assistant Professor, Faculty of Business Administration, R.B.S. Management Technical Campus, Khandari, Agra (UP)

** Associate Professor, Faculty of Business Administration, R.B.S. Management Technical Campus, Khandari, Agra (UP)

significant sensory marketing element that can be used by restaurant to improve the dining experience and purchase intention of consumers. The implications of this research can be beneficial to restaurant owners and managers to enhance the profitability of restaurants.

I. Review of Literature

Sensory Marketing

With the advancement of marketing technique, sensory marketing has become one of favourite topics for academicians, researchers and professionals. They have understood that human senses are connected with memory and their emotions and senses can be used in marketing to make long last relation with consumer. Krishna (2011) defines sensory marketing as, "*marketing that engages the consumer's senses and affects their behaviors*". She further stated that there is a need to understand the fact that products are sensual in nature and customers need to be affected throughs their senses. Philip Kotler in his research paper (1974) stated that consumers do not look at the tangible features of the product but consider the total product which includes the services, packaging advertisements and other features of the product. The sensory cues and store atmosphere produce specific emotional effects on the customers and considered as an important factor to attract the attention of customers as well as approach behavior of shoppers (Kotler, 1974, Hulton, 2013).

Researchers for many years focused on the effect of visual cones on customer's perception and attitude towards on environment or product. According to creusen and Schoormans (2005) the appearances of the product serves as the communication of an aesthetic product value. If there are many products with similar attribute are available in market, consumers will choose the one that is aesthetically most appealing to them. The visual elements of the products can inspire the customers and has power to make products identifiable, memorable and distinct from its competitors. Sensory element tactile (touch) is also one of important factors determining consumers purchase intention. Peck and Childers (2006) discovered the customers' inclination to purchase in the spontaneous and unexplained manner in store and observed that impulse purchase behavior of consumers is influenced by 'Need for touch' (NFT). They further said that individuals with higher NFT results purchased more impulsively than the respondents with low NFT results.

Restaurant can create a competitive advantage by producing high quality of taste of food. It is an important sensory element which can create a complete brand

experience. Positive experience of customer with taste of food may influence their preference for restaurant but if the taste of food has negative sensation like nausea and vomiting after consumption of food, can develop negative attitude of customer towards the restaurant (Roopchund, 2014). Therefore, managers cannot ignore the taste sense which play vital role in restaurant's footfall. Moreover, taste sense strategy may work better if it is integrated with other sensory elements. That's why these days some restaurants provide variety of choice to their customer in terms of taste and also give them an opportunity to create their own flavor (Soars, 2009). Past studies disclose that all 5 senses are important and effective in consumers' purchase decision in restaurants but olfactory is found as the most effective sensory element (Randiwela & Alahakoon ,2014, Hussain, 2014) because Smell is the only sense out of 5 senses that cannot be turned off, directly connected with brain (Khanna &Mishra, 2013) and it has very strong relation with consumer's memory and emotions (Roopchand, 2015). Therefore, brand can create an emotional relationship with customer by using smell sense. It has also been found in research that scent in a store affects the consumer's purchase decision in terms of intention to visit and revisit (Bone & Ellen, 1999). Consumers express their positive purchase intention in scented environment. They want to stay longer in restaurant which has pleasant scented environment whereas they do not want to stay longer in the unscented ambience of restaurants (Develliers, and Mhiophe,2015, Spangenberg et. al.1996). Their future visit and the type of merchandise they select are affected by the aroma present in the restaurants. Therefore, stores should create different ambient scents throughout their stores to attract and retain consumers. Furthermore, scents varying with regard to fluency have significant impact on consumer's attitude towards store, product and their purchase intention (Haberland 2010). Simple and more fluent scents led to more positive response from consumers whereas less fluent scents have no effect on retail patrons.

Soars (2009) in a study found that sound play an influential role in purchase intention. He stated that annoying music played in store can annoy consumers and can force them to leave the store whereas shoppers like melody and light music to stay more in store. It is found that when classical, Jazz and popular music are Played patrons in restaurants are more willing to spend more on their main meals. Right quality of sound has the power to draw the attention of consumers and motivate them to stay longer and shop more. Areni and Kim (1993) conducted a study on the influence of background music on shopping behaviour in a wine store and discovered that

classical music has higher level of impact on sales than 'top forty' music and motivate consumers to buy more expensive products. Milliman (1986) also revealed that slow background music in restaurants motivate consumers to stay longer and consumers are tending to spend more money on drinks that contributed to 15% higher gross margin of the restaurant than in the fast music condition.

Purchase Intention

It is really beneficial to understand the purchase intention of consumers because it measures the possibility of buying certain products by the consumers (Schiffman & Kanuk, 2007) and closely associated to consumer future purchase plan. Purchase intention is influenced by the timing and specific situations in which the consumer buys the item. It may be planned but it may be spontaneous also. It is defined as the intention or willingness of a consumer to buy a product or service (Krishna, 2012). Consumers decide their next purchasing from the same store after the evaluation of product and find out that the product worth buying. It means the next trip of customers to certain store is influenced by their purchase intention and if they have strong purchase intention for certain brand, they will perform their purchase behaviour in favour of that brand. Moreover, if they have positive intention to buy a product, they speak in favour of that brand. That's why Purchase intention has become a subject of great importance for restaurant managers.

Objectives of the study

The objectives of this study are:

1. To assess the impact of sensory marketing elements on the purchase intention of consumers in restaurants.
2. To identify the most important elements of sensory marketing used by restaurants to enhance the image of restaurant.

Hypothesis of the study

Based on the review of past studies and literatures, researchers have developed following hypotheses to identify the relationship between sensory marketing elements and purchase intention:

H₁: There is significant relationship between visual elements and purchase intention

H₂: There is significant relationship between sound elements and purchase intention

H₃: There is significant relationship between smell elements and purchase intention

H₄: There is significant relationship between touch elements and purchase intention

H₅: There is significant relationship between taste elements and purchase intention

II. Research Design & Methods

Data Collection, Sampling and Statistical tool

The study was conducted on consumers of restaurant in Agra to know the impact of sensory marketing on their purchase intention. Primary data was collected through a well-structured questionnaire consisting close ended questions. All the close ended questions used in this study were measured using 5 points Likert scale ranging from strongly disagree to strongly agree. A convenient sampling technique was used to select the respondents from the target population who dine out in multicuisine restaurants of 150 customers per day during week days and 300 customers per day during weekends. The study was conducted over a period of 2 months (October-November 2018). Total 200 questionnaires were distributed to customers of total 10 restaurants in Agra and finally 184 responses considered for this study. In order to understand the problem and frame the statements of questionnaire, researchers collected the secondary data from different sources. Reliability and validity tests were conducted on the constructs to minimize the error. Here researchers used Cronbach's Alfa to test the reliability. Descriptive statistics was performed to describe the variables. Pearson's correlation coefficient was used to measure the strength of the association between the dependent and independent variables and multiple regression analysis was used to meet the objective of this study.

III. Analysis, Discussion & Findings

Demographic profile of consumers

Table – I present a brief demographic profile of the respondents. The total sample size for the study was 184 individuals, out of which 57.06% were male and 42.94 were female. A majority of the respondents belonged to the age group 26 to 45, which forms 69% of the total sample. As observed, a majority of the respondents are graduates with 45.65% of sample whereas 39.68% of respondents have completed their PG. 44% of total respondents having monthly income more the Rs. 50,000 followed by 22.82% of sample in the income slab of 35001-50000. It is observed that professional and service share a major part of this survey.

Validity and Reliability

In order to test the reliability of the purchase intention and each sensory element, Cronbach's Alpha is calculated. It is observed that the alpha meets the recommended levels of 0.70 for all the measures (Nunnally, 1978) (Table -2). The Cronbach's alpha for each variable exceeded the recommended value indicated

good internal consistency and reliability among the variables used in the questions.

Descriptive statistics of sensory elements:

Researchers used mean value and standard deviations to analyze the descriptive statistics of sensory elements. Mean value elaborates the attitude of elements and standard deviations describe the distribution of variables. The descriptive statistics results are shown in table – 3.

The lowest mean was recorded in sound elements which in 3.827 and highest mean was recorded for taste elements. It shows that respondents of the study tell all the five sensory elements are effective elements in sensory marketing.

Relationship between sensory elements and purchases intention

Pearson correlation was calculated to identify the relationship, direction and strength of the relationship between sensory elements and purchase intention of customers in restaurant (Table 4).

According to the table- 4 probability of the relationship between all the five sensory elements and customers' purchase intention is 0.000. This is highly significant. As the p value is less than 0.001, this indicates there is high, significant and positive relationship between all the five sensory elements and customers' purchase intention. Further the coefficient of correlation of visual elements, touch elements, taste elements, smell elements and sound elements have found 0.442, 0.445, 0.521, 0.512 and 0.272 respectively. The results indicated that there is a positive and significant association between each of the sensory factors and impact on purchase intention of consumers in restaurant in Agra. The correlation ranked highest for taste second for smell; touch ranked third, fourth for visual and sound ranked fifth. The results supported all the five hypothesis developed by researchers. Hence all the hypotheses established can be accepted. Further the results also reveal that all independent variables have positive coefficient of correlation with dependent variable. It means there are positive significant correlations between the sensory marketing elements and purchase intention. Therefore, both objectives of this study are fulfilled.

Multiple regression analysis

Multiple regression analysis (Malhotra & Das, 2011) was used to address the objectives of this study. As shown in table 5, multiple correlations are 0.659 which indicates that sensory marketing elements have positive association with purchase intention of consumers.

The R square value is 0.437 which indicated that the dependent variable, "Purchase intention", can be explained by the independent variables, i.e, visual touch, taste, smell and sound elements by 43.7% indicating a good model fit.

The F-test (ANOVA) from the Table 6, indicates that the regression model predicts the outcome variable significantly well. The significance of F-Statistics is 0.000 ($P < 0.05$) which indicates that sensory marketing elements influence the purchase intention of consumers.

Further, the standardized regression coefficients indicate significant relationships between purchase intention and all the five sensory marketing elements. Taste elements with largest standardized beta i.e., 0.326 (Table 7) emerged as the variable which has the most statistically significant impact on purchase intentions of consumers. This was followed by smell elements of sensory marketing elements at 0.309 which has also significant impact on purchase intention. This is then followed by touch elements of sensory marketing elements at 0.189. The results indicate that Taste, smell and Touch elements, together have strong impact on purchase intention of customers of restaurants in Agra.

IV. Conclusion

The present study has important implications for the restaurant managers and owners to formulate the sensory marketing strategy in better way to nurture the market. The study was conducted to know the impact of sensory marketing elements on purchased intention of consumers in restaurants in Agra and the analysis of the study clearly depicts that sensory marketing elements are very important in modern marketing environment and play vital role in increasing customer base of restaurants in Agra. The results show that Taste, Smell and Touch senses have strong impact on consumers' purchase intention whereas the impact of visual and sound senses on consumer's purchase intention is lesser. Restaurant manager must work hard to repeat customer patronage by enhancing the quality of each sensory element. They must convince their customer that they are getting better as compared to what is provided by competitors.

The result shows that consumers' purchase intention has strong relationship with taste sense. Hence taste sense becomes the most important sensory element in restaurant in Agra. Restaurant managers and owners must take into account taste element to attract customers and motivate them for repurchase intention. Tasty food is related to emotions of customer and can create a complete brand

experience with customer. Furthermore, tasty food can be a strong marketing strategy to disseminate favorable word of mouth about the restaurant.

There is significant relationship between smell sense and purchase intention was found in this study, which clearly depicts the visit of consumers in restaurant is affected by scent of food and aroma of restaurant. Pleasant scent in restaurant may motivate the consumers to spend more time whereas bad smell may create an adverse impact on consumer's visit and may shorten the time spent of consumers in restaurant. Therefore, it is recommended to restaurant managers to practice scent marketing strategy to create a great ambience in restaurant so that consumers feel comfortable, happy and stay longer. They should create a specific and signature smell for restaurant to differentiate their brands amongst competitors.

The results of the study revealed a positive association between touch sense and purchase intention. Tactile sense is the largest sensory cue in human body. Restaurant manager should take care of all the materials involving physical interaction with skin, with the hands of consumers used at the table because these materials like glass, menu, and texture of fabric impact the tactile experience of customers. More cleanliness of floor and table also affect the touch experience of customer. Managers should create a positive touch experience of restaurant amongst customers to increase the purchase intention of customers.

The study shows a positive impact of visual sense on purchase intention of consumers. Visual cues include interior colour, logo, menu, dress code of staff, signage, furniture's and linens etc. Restaurant manager should create an attracting and appealing visuals to influence the revisit of customers. Moreover, the display of furniture, food, tableware and linens should be attractive and impressive to entice the customers.

There was positive association found between sound sense and purchase intention. Background music may increase the time spent of customer their revisit intention. Restaurant managers are suggested to understand the mood of customers and take care of the type and volume of music accordingly because consumers may spend more time in restaurant if their favorite music is played. Managers must know the type of music liked and disliked by customers and they should play the music according to choice of customers.

In conclusion, it is evident from the study that all the five senses have positive and strong impact on the purchase

intention of consumers in restaurants in Agra. This can lead restaurant managers to figure out and implement successful sensory marketing strategies to maximize the profitability.

Limitation and scope for future study

The present study was limited to Agra only. The result may be different if longer area will be considered for research. Moreover, the study focused on a limited number of respondents and hence the result cannot be generalized. The present study focused on impact of all the five sensory elements on consumers purchase intention. A separate detailed study can be conducted on the above area considering one sensory element.

References

- Areni, C. and Kim, D. (1993). The Influence of Background Music on Shopping Behavior: Classical Versus Top-Forty Music in a wine Store. *Advances in Consumer Research*, 20, 336-340, retrieved from <http://www.acrwebsite.org/volumes/7467/volumes/v20/NA-20>.
- Armstrong, G. and Kotler, P. (2009). *Marketing. An Introduction*, (9th ed.), Pearson Prentice Hall, New Jersey, P-37.
- Bone, P.F., and Ellen, P.S., (1999). Scents in the marketplace: Explaining a fraction of olfaction. *Journal of retailing*, 75(2), 243-262.
- Creusen, M. E. H. and Schoormans, J.P.Z (2005). The different role of product appearance in consumer choice, *Journal of product innovation management*, 22(1),63-81
- Develliers, M.V. and Mhiophe, B. (2015). Sensory branding and buying behavior in coffee shops: A study on Generation Y, *The Retail and Marketing Review*, 11(2), 93-110.
- Haberland, F. (2010). The power of scents: empirical field studies of olfactory cues on purchase behavior, Retrieved from [https://www1.unisg.ch/www/edis.nsf/SysLkpByIdentifier/3735/\\$FILE/dis3735.pdf](https://www1.unisg.ch/www/edis.nsf/SysLkpByIdentifier/3735/$FILE/dis3735.pdf)
- Hultén, B. (2012). Sensory cues and shoppers' touching behaviour: the case of *IKEA*, *International Journal of Retail & Distribution Management*, 40(4), 273-289.
- Hussain, S. (2014). The Impact of Sensory Branding (Five Senses) on Consumer: A Case Study On Kfc (Kentucky Fried Chicken), *International Journal of Research in Business Management* 2(5),47-56

- Khanna, P. and Mishra, S. (2013). The impact of sensory branding on consumer: a case study on Coca-Cola, *VSRD International Journal of Business and Management Research*, 3(7), 113-120.
- Kotler, P. (1974). Atmospheric as a marketing tool. *Journal of Retailing*, 49(4),48-64, retrieved from https://www.researchgate.net/publication/239435728_Atmospherics_as_a_Marketing_Tool
- KPMG (2016), India's food service industry: growth recipe, Retrieved from <https://assets.kpmg/content/dam/kpmg/in/pdf/2016/11/Indias-food-service.pdf>
- Krishna, A. (2011). *As I See it: Sensory marketing in consumer Behavior: Buying, Having and Being*, (9th ed.) Pearson Education.
- Kumar, V., Pozza, I., and Ganesh, J. (2013). Revisiting the satisfaction-loyalty relationship: Empirical generalizations and emotions for future research, *Journal of retailing*, 89(3), 246-262, retrieved from http://www.academia.edu/13841705/Revisiting_the_Satisfaction_Loyalty_Relationship_Empirical_Generalizations_and_Directions_for_Future_Research
- Lindstrom, M. (2005). Brand Sense: How to Build Powerful Brands through Touch, Taste, Smell, Sight and Sound. *Journal of Product & Brand Management*, 14(4), 278-279. Retrieved from <http://media.imaxws.net/912/brandsense.pdf>
- Malhotra, N.K. and Dash, S. (2011). *Marketing research: An applied orientation*", (6th ed.) Pearson education, 529-535.
- Milliman, R.E. (1986), The Influence of Background Music on the Behavior of Restaurant Patrons *Journal of Consumer Research* ,13(2), 286-289
- Nunnally, J. C. (1978). *Psychometric theory*, (2nd ed.). McGraw-Hill. Retrieved from <http://www.analytictech.com/ba762/handouts/alpha.html>
- Peck, J. and Childers, T. (2006). If I touch it, I have to have it: Individual and environmental influences on impulse purchasing. *Journal of Business Research*,59(6),765-769. Retrieved from https://www.researchgate.net/publication/222418070_If_I_touch_it_I_have_to_have_it_Individual_and_environmental_influences_on_impulse_purchasing
- Randiwela, P. and Alahakoon, S. (2016). Sensory Marketing is to Flourish or Perish: Restaurant in Sri Lanka Sensory. Retrieved from https://www.researchgate.net/publication/312133659_Sensory_Marketing_is_to_Flourish_or_Perish_Restaurant_in_Sri_Lanka_Sensory
- Roopchund, R. (2016). Analyzing the Impact of Sensory Marketing on Consumers: A Case Study of KFC. *Journal of Us-China public administration*. 13(4), 278-292.
- Schiffman, L. G. and Kanuk, L. L (2007). *Consumer behavior*, (9th ed.) Pearson Education, 263-264.
- Soars, B., (2009). Driving sales through shoppers' sense of sound, sight, smell and touch. *Journal of Retail and Distribution Management*, 37(3), 286-289.
- Spangenberg, E., Crowley, A. and Henderson, P. (1996), Improving the Store Environment: Do Olfactory Cues Affect Evaluations and Behaviors? *The Journal of Marketing*, 60(2), 67-80, Retrieved from http://67-20-110-78.unifiedlayer.com/wp-content/uploads/2014/04/Improving_the_Store_Environment.pdf

Table 1: Demographic Profile of consumers (N=184).

S.No.	Particular	Demography	Frequency	Percent
1.	Gender	Male	105	57.06
		Female	79	42.94
2.	Age (in years)	18 – 25	40	21.73
		26 – 35	56	30.43
		36 – 45	72	39.13
		46 – 60	12	6.52
		Above 60	4	2.18
3.	Educational Qualification	Upto 10th	10	5.43
		Higher Secondary	17	9.24
		Graduate	84	45.65
		PG & Others	73	39.68
4.	Monthly Income (in Rs.)	Below 15,000	5	2.72
		15001 – 25000	21	11.42
		25001 – 35000	35	19.02
		35001 – 50000	42	22.82
		Above 50000	81	44.02
5.	Occupation	Student	8	4.34
		Service	52	28.26
		Professional	68	36.95
		Business	45	24.45
		Others	11	5.98

Source: Survey Results.

Table 2: Reliability of sensory elements.

Variables	Cronbach's Alpha
Visual factors	.759
Touch factors	.709
Taste factors	.701
Smell factors	.849
Sound factors	.792

Source: Survey results

Table 3: Descriptive statistics of sensory elements.

Variables	N	Minimum Statistics	Std. Deviation Statistics
Visual Elements	184	3.926	0.73286
Touch Elements	184	4.078	0.75418
Taste Elements	184	4.569	0.86211
Smell Elements	184	4.150	0.66603
Sound Elements	184	3.872	0.63289
Purchase Intention Elements	184	4.251	0.86110

Source: Survey results.

Table 4: Pearson correlation between dependent and Independent variables.

Independent variables		Dependent variables
Visual elements	Pearson correlation	.442**
	Sig. (2 tailed)	0.000
	N	
Touch Elements	Pearson correlation	.445**
	Sig. (2 tailed)	0.000
	N	
Taste Elements	Pearson correlation	.521**
	Sig. (2 tailed)	0.00
	N	
Smell Elements	Pearson correlation	.512**
	Sig. (2 tailed)	0.000
	N	
Sound	Pearson correlation	.272**

Elements	Sig. (2 tailed)	0.000
	N	

Source: Survey Results.

Table 5: Model Summary

Model	R	R square	Adjusted R square	Std. error of estimate
1	0.659 ^a	0.437	0.425	0.556593295

Note: ^a dependent variable: Purchase intention

^b Predicators (constant), visual, touch, taste, smell, sound.

Source: Survey results.

Table 6: ANOVA analysis of sensory marketing elements.

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	113.853	5	22.563	54.951	0.000 ^a
Residual	124.169	178	0.421		
Total	238.023	183			

Source: Survey Results.

Table 7: Regression coefficient: Sensory marketing elements.

Model	Unstandardize d Coefficient		Standardized Coefficient	T	Sig
	B	Std. Error	Beta		
Constant	0.093	0.411		0.217	0.801
Visual elements	0.121	0.143	0.069	0.798	0.403
Touch elements	0.189	0.095	0.173	2.135	0.031
Taste elements	0.326	0.058	0.291	3.521	0
Smell elements	0.309	0.049	0.180	2.317	0
Sound elements	0.019	0.59	0.033	0.512	0.581

a. Dependent variable: Purchase intention

DOES MINIMUM SUPPORT PRICE SUPPORTING THE FARMERS: A COMPARATIVE STUDY IN ANDHRA PRADESH AND TELANGANA STATES

Kishore Kumar Yathamsetty*

When the agricultural production is more, the price of the crops may fall drastically. To avoid such situation and to provide remunerative prices to the farmers for their crops which cover the expenses as well as some profit to the farmers, MSP was introduced by the government. The minimum support price is a guaranteed price provided by the government for the crops produced by farmers. Even after MSP farmer's economic conditions have not improved and deteriorating year by year as the number of farmers suicides are increasing. Many people are distancing themselves from farming activity as they feel it is nonprofitable and nonremunerative, which is likely to have drastic consequences on volume/Quantum of food production raising doubts on whether the MSP supporting or suffering the farmers. In this scenario, this paper attempts to know the opinions of farmers in Telangana and Andhra Pradesh regions regarding various aspects of Minimum Support Price. Three regions of erstwhile Andhra Pradesh; (Andhra, Telangana and Rayalaseema) were selected for the study purpose.

Keywords: Minimum Support Price (MSP), Remunerative Price, Cropping Area, Farmers, Cultivation cost.

Liquor Manufacturers are rich, Cigarette Manufacturers are rich, Soft drink Manufacturers are rich, consumption of these products is just a matter of choice, without these products biological life will be sustained, where as food is a necessary item for biological survival, but the producer of food items i.e. farmers always remain poor. What a ridiculous situation in India.

When the agricultural production is more, the price of the crops may fall drastically. To avoid such situation and to provide remunerative price to the crops produced by the farmers, which cover the expenses as well as some profit to the farmers, MSP was introduced by the government. The minimum support price is a guaranteed price provided by the government for the crops produced by farmers. If the price for a commodity comes down the announced MSP due to excess the government agencies will purchase the entire quantity from the farmers at the announced MSP. The major objective of MSP is to stop the farmers from distress sales and ensure the farmers get remunerative price for their crops. Every year the Government of India announces MSPs for various agricultural products at the beginning of the sowing season based on the recommendations of the Commission for Agricultural Costs and Prices (CACP). Even after MSP farmer's economic conditions have not improved and deteriorating year by year as the number of farmers suicides are increasing. Many people are distancing themselves from farming activity as they feel it is nonprofitable and nonremunerative, which is likely to

have drastic consequences on volume/Quantum of food production raising doubts on whether the MSP supporting or suffering the farmers. In this scenario, this paper attempts to know the opinions of farmers in Telangana and Andhra Pradesh regions regarding various aspects of Minimum Support Price.

Determination of MSP

MSP is decided considering the various price and non-price factors, the Commission for Agricultural Costs and Prices (CACP) considers the following factors:

Production cost per Quintal and per hectare in various parts of the country, Demand and Supply, Prices in the international market, cost of processing, Prices of various Agricultural inputs, cost of marketing like transportation and storage cost, processing charges, market services like taxes/fees and margins to market functionaries and consumer price indices and many other factors are considered while fixing the MSP for a Commodity.

Minimum Support Price for 2017-18

In India crop sowing season changes from state to state and the harvesting time of the crop also varies. The

* Assistant Professor, Symbiosis Law School, (Constituent of Symbiosis International (Deemed University), Survey Number 292, Hyderabad 509217 (Telangana), India

Kharif crop sown in 2018-19 may reach the market before October. MSP for 2018-19 Kharif Crops season will be enforced from 1 September 2018 onwards.

I. Review of Literature

1. Iqbal and Merwe (2010) observed that, production of rice and wheat increased due to rise in MSP by the Government.
2. Reddy (2004) and Kumbhar (2010) observed that poor performance of pulses than food grains in India due to lack of an assured market price and the market price for pulses is always higher than the MSP announced by the government.
3. Deshpande and Naika (2002), examine the impact of MSP on agricultural growth by analyzing its relevance and effectiveness in certain crops. This study indicates that wheat and rice got the best out of price policy through MSP but unintentionally this discouraged coarse cereal and pulses. There are a number of institutions involved in procurement process and there is inadequate coordination between them.
4. Mahendra Dev (1997) found in his study that government is forced to buy whatever produce comes in the market irrespective of its requirements. Thus government has to carry excessive stock which is again sold back after some time for free sale in the market. In this process government has to bear the losses due to quantity and quality deterioration, and inefficient handling and transportation of the produce by the official agencies. Government should announce MSP which will provide for only variable cost plus some margin and protect farmer against seasonal price slumps due to gluts. The procurement of quantity required by government should be done at open market price determined by supply and demand in a distortion free market environment. This would have the advantage of buying only the needed quantity.
5. Bhatia (1984) opined that state intervention through sector agencies like Cotton Corporation of India, had helped the producers through reasonable prices which were generally higher than the minimum support prices.
6. Harris (1984) opined that record of Cotton Corporation of India has been disappointing. Not only has it confined its purchases mostly to regulated markets but it also allowed itself to be dominated by organized members.
7. Brahmaiah et al. (1989) observed that 83.34 per cent of the sample farmers were following the traditional method of marketing of cotton. This is due to forced

sales, lack of proper transport facilities, insufficient amount of marketable surplus, and uncertainty of fetching remunerative prices in the market, lack of proper storage facilities and collusion of CCI with private traders.

Objectives of the study

The main objective of the study is to examine the Minimum Support Prices (MSPs) for various agricultural crops in erstwhile Andhra Pradesh. Further the sub-objectives of the study are:

- 1) To study the concept of Minimum Support Prices
- 2) To ascertain the awareness and perception of Farmers about the Minimum Support Prices
- 3) To identify the problems and operational irregularities prevailing in obtaining the Minimum Support Prices by farmers in Regulated Agricultural Markets
- 4) To examine and evaluate the impact of MSP on the cropping
- 5) To offer suggestions

Hypothesis

1. There is no significant difference between the awareness of the farmers regarding the Minimum support price in the selected agricultural markets.
2. There is no significant difference between the opinions of the farmers in the agricultural markets regarding the influence of price on the area of cultivation.

II. Research Design & Methods

Sampling Design

This study uses an exploratory research design and uses a multi stage sampling design. At the first stage three regions of erstwhile Andhra Pradesh; (Andhra, Telangana and Rayalaseema) are selected. Next stage, one district was selected from each region, forming three districts in total in Andhra Pradesh. These districts are Guntur from Andhra, Warangal from Telangana and Kurnool from Rayalaseema region. At third stage, markets have been selected. Every district headquarters has one or more agricultural markets; each market varies in crop arrivals in terms of volume. One market was selected from the selected district. Each districts headquarter generally has the same name as the district, the district headquarter markets selected for study, based on the expectation that maximum arrivals into the district headquarter markets due to the connectivity and other infrastructural facilities. On this ground, Warangal, Guntur and Kurnool regulated markets have been selected from Warangal, Guntur and Kurnool districts respectively. From each market 80

farmers were selected as sample respondents consisting a total of 240.

Sources and Collection of Data:

The present study is based both on primary and secondary data. For collecting primary data, schedules are designed and administered to farmers on the basis of random sampling technique. In order to validate the responses of the respondent's personal interview and personal observation methods are used. The secondary data has been mainly collected from published sources and websites.

Data Scoring and Tools of Analysis

The data collected from the field investigation were tabulated and presented in appropriate tables. Further, simple percentage is used for better understanding of the same. In order to substantiate the data statistically, requisite statistical tools and techniques such as Mean, Percentages, Chi Square Test methods are used.

Scope and Limitations of the study

The present study is restricted to the three districts Warangal, Guntur and Kurnool. These three districts by and large, reflect marketing conditions existing in the two states. However, some minor variations may exist regarding market practices in other districts of two states. Therefore, the conclusions of the study can be generalized to the extent of this limitation. The primary data for the study collected through Schedule has its own limitations. The majority of farmers being illiterates and less educated failed to express their feelings and opinions clearly. Opinions expressed by the farmers may not be precise as there is bound to be some bias in their opinions. However, all possible care has been taken to cross check their responses and obtain correct information. The secondary data is used as reported by various sources, therefore, the authenticity and reliability of the data is based on the reports of the concerned authorities. While calculating the percentages and averages, the numbers are approximated. An attempt is made to analyse the farmer's opinion on Minimum support price.

Farmers' Awareness about the Support Price

To know the awareness of farmers regarding the support prices fixed by the Government for important commodities from time to time, they were asked about the awareness of support prices and responses are tabulated and presented in the table-1.

From the above table it is observed that most of the farmers are aware that support prices which are fixed by the Government for important commodities. Awareness is

more in case of Warangal (90%), followed by Kurnool and Guntur with 86.25% and 83.75% respectively. Over all, the awareness in all the markets is 86.67%. Very less percentage of farmers are unaware of the supporting prices. The MSP fixed by the government are widely disseminated through various media like T.V, newspapers and radio. In the study region good communication infrastructural facilities are available which will make the farmers aware about the MSPs of various crops. The farmers confirmed it with nearly 87 percent reported that they have awareness regarding the MSP of various crops.

The analysis thus revealed that though there is a good awareness among farming community still there is a need to give wide publicity about the support prices to buildup awareness among the farmers. A null hypothesis stating that there is no significant difference between the awareness of the farmers regarding the support price in the agricultural markets has been tested using Chi-square test. As the calculated value (1.3702) is less than the table value (5.99) at 2 degrees of freedom and 95 percent significance level, the null hypothesis is accepted.

Farmers' response towards the support price Covering the Cultivation Cost

In order to know the perception of farmers regarding the adequacy of the support prices, they were asked to reveal whether support prices cover cost of cultivation that ensure minimum incentives, and responses are tabulated and presented in the table-2. From the above table it is found that a majority of farmers (53.33%) consider that support prices will cover the entire cost of production, followed by (46.67%) who felt that support prices will not cover the cost of production.

The farmers were also asked to reveal whether procurement agencies enter the market at the right time and purchase the produce of the farmers at support prices. About 50 percent of the farmers revealed that, the procurement agencies are purchasing their produce at support prices. However, the remaining 50 percent complained that procurement agencies do not enter the market at the right time. It is also felt that these agencies purchase in a limited quantity. There are many instances where farmers are compelled to sell the produce to traders at low prices, because traders influence the procurement agencies.

Influence of Prices on Area and type of Crop Cultivation in the Next Season

In order to give the views of agricultural farmers whether the prices offered in the market influence farmers decisions regarding area and type of crop cultivation in

the next season, the sample farmers were asked to indicate whether agricultural prices offered in the market influence the area of cultivation in the next season/year or not. Their responses are tabulated and presented in the Table – 3

It is observed from the above table that, about 43 percent of respondents felt that the prices offered in the market some time influence the farmer's decision regarding area and type of crop cultivation in the next season/year. There are about 30 percent of respondents who felt that the prices offered in the market influence farmers decisions regarding area of cultivation in the next season/year. Only 27.50 percent of respondents felt that the prices offered in the market do not influence farmers' decision regarding area and type of crop cultivation in the next season/year in the select markets.

Market wise analysis revealed that in Warangal market most of the respondents (46.25%) revealed that the prices offered in the market some time influence their decision regarding area and type of crop cultivation in the next season/year, followed by do not influence with (27.50%) and influence with (26.25%). In Guntur market most of the respondents (51.25%) revealed that the prices offered in the market sometimes influence their decision regarding area and type of crop cultivation in the next season/year, followed by influence with (27.50%) and do not-influence with (21.25%). In Kurnool market, most of the respondents (35%) revealed that the prices offered in the market influence their decision regarding area and type of crop cultivation in the next season/year, followed by do not influence with (33.75%) and sometimes influence with (31.25%).

Majority of farmers opined that the type of crop cultivation decision is mainly taken based on the availability of input and MSP has little role to play with the area and type of crop cultivation decision. The analysis reveals that, farmers' cultivation pattern is not always influenced by the prices offered in the market. This is mainly due to lack of commercial outlook among the farmers. However, it is generally observed that the farmers are slowly shifting their cultivation pattern towards the crops which will fetch them good returns.

A null hypothesis stating that there is no significant difference between the opinions of the farmers in the agricultural markets regarding the influence of price on the area of cultivation has been tested using Chi-square test. As the calculated value (7.5228) is less than the table value (9.49) at 4 degrees of freedom and 95 percent significance level, the null hypothesis is accepted.

It is observed from the above table that, in the select markets about 48 percent of respondents felt that the Policy of announcing MSP is useful, followed by 52 percent of respondents who felt that the Policy of announcing MSP is not useful.

Market wise analysis revealed that in Warangal market most of the respondents (53.75%) revealed that Policy of announcing MSP is useful, followed by not useful with (46.25%). In Guntur market most of the respondents (51.25%) revealed that the Policy of announcing MSP is not useful followed by useful with (48.75%). In Kurnool market, most of the respondents (57.5%) revealed that the Policy of announcing MSP is useful, followed by not useful with (42.5%).

On the whole, the analysis reveals that, most of the farmers' felt that Policy of announcing MSP is not useful, this is mainly due to low amount fixed by the government for MSP which covering only the cost and no profit or good returns for their hardship.

It is observed from the above table that, in the select markets about 60 percent of respondents felt that the Announcement of MSP made at right time, followed by 40 percent of respondents who felt that the Announcement of MSP not made at right time.

Market wise analysis revealed that in Warangal market most of the respondents (52.5%) revealed that Announcement of MSP made at right time, followed by not made at right time with (47.5%). In Guntur market most of the respondents (58.75%) revealed that the Announcement of MSP is made at right time, followed by not made at right time with (41.25%). In Kurnool market, most of the respondents (67.5%) revealed that the Announcement of MSP made at right time, followed by not made at right time with (32.5%). On the whole, the analysis reveals that, most of the farmers' felt that announcement of MSP made at right time, this is mainly the government is announcing MSP at starting of the crop sowing season which will help the farmers to chose the type of crop to be taken up for the cultivation.

It is observed from the above table that, in the select markets about 74 percent of respondents felt that the Policy of MSP should continue, followed by 26 percent of respondents who felt that the Policy of MSP should not be continued or stopped.

Market wise analysis revealed that in Warangal market most of the respondents (78.75%) revealed that the Policy of MSP should continue, followed by not to continue with

(21.25%). In Guntur market most of the respondents (73.75%) revealed that the Policy of MSP should continue, followed by not to continue with (26.25%). In Kurnool market, most of the respondents (68.75%) revealed that the Policy of MSP should continue, followed by not to continue with (31.25%). On the whole, the analysis reveals that, most of the farmers' wish to continue the Policy of MSP, because they do not have cooperation from traders at least MSP can come to their rescue in case if prices fall drastically, where government can procure by its agencies/ corporations.

III. Analysis, Discussion & Findings

Awareness regarding the support prices revealed that majority of the farmers in the selected markets are aware of the support prices fixed by the government for important agricultural produce. It is observed that the support prices in most of the years under study are lower than the market price. When support prices are higher than the market price, and traders in the markets are reluctant to purchase at the support price, at that time Institutional purchasers enter the market and purchase the produce for the support price.

1. Majority (87%) of the farmers are aware about the support prices fixed by the Government for important commodities.
2. Even though majority 53% felt that MSP covering the cost of cultivation, still (46.67%) who felt that support prices are not covering the cost of production.
3. Farmers are slowly shifting their cultivation pattern towards the crops which will fetch them good returns.
4. Most of the farmers' felt that Policy of announcing MSP is not useful, this is mainly due to low amount fixed by the government for MSP which covering only the cost and no profit or good returns for their hardship.
5. Majority of the farmers' felt that Announcement of MSP made at right time, this is mainly the government is announcing MSP at starting of the crop sowing season which will help the farmers to chose the type of crop to be taken up for the cultivation.
6. Majority of the respondents wish to continue the Policy of MSP, because they do not have cooperation from traders at least MSP can come to their rescue in case if prices fall drastically, where government can procure by its agencies/ corporations.
7. To ensure remunerative prices to the farmers and to enhance the production of agricultural crops, Government is raising the Minimum Support Prices

(MSPs) for major agricultural crops every year. From 2004-05 to 2017-18 fourteen years of study period, there were substantial hikes in MSPs in 2008-09 the hike ranged from 1 to 94%, in 2012-13 the hike varied between 3 to 62% and in 2011-12 hike was 1 to 39% for different crops as compared to other years of study period. However, in other years of study period MSPs were increased moderately ranging from 1 to 15%, as shown in the table 7, 8 and 9 at the end.

8. In 2018 Budget Government declared Minimum support price for most of the Rabi and Kharif crops by 1.5 times of their production cost which is beneficial to the farmers.

Recommendations

1. There is a good awareness (87%) among farming community regarding MSP still there is a need to give wide publicity about the support prices and should be timely disseminated to increase the awareness among the farmers.
2. Even though 53% felt that MSP covering cost of cultivation, still 47% felt that MSP not covering the cost of cultivation, the method of calculating MSP should be changed to cover over and above the cost of production.
- 1) 3.As MSP offered in the market some time influencing the farmer's decision regarding area and type of crop cultivation in the next season/year, the crops whose production need to be increased should be given high MSP.
3. Majority of the respondents felt that Policy of announcing MSP is not useful, increase the MSP to cover the cost and to earn profit or good returns for their hardship.
4. There should not be any delay in the MSP payments to the farmers, timely payment should be ensured by the government.
5. Farmers can plan their cropping if MSP is announced well in advance of the sowing season.
6. Facilities, like god owns for better storage and reduction in wastage, weigh bridges, drying yards, toilets, etc. should be provided at procurement centers
7. Transportation costs can be saved by farmers if the Procurement Centers are located in the villages.

IV. Conclusion

In Andhra Pradesh and Telangana majority of the farmers are aware of MSP and most of them sold their crops at MSP. Farmers feeling discontentment regarding the MSP not covering production costs; however, MSP should be

continued, to curb the exploitation by the traders in the market.

The support price policy will be successful only when the farmers become aware of the support prices declared by the Government. It is also necessary that procurement agencies should enter and purchase in adequate quantities to protect the farmers from the price decline which will help the farmers to increase their income and leads to continue the farming and maintain food security.

Future Scope for Research:

Only 3 district farmers’ opinions were considered for the study and last 14 years MSP data taken for analysis, still further research can be done in this area by taking entire India as well as MSP data from the beginning period on a wide scale.

References

Acharya, S.S. (1997) Agricultural price policy and development: Some facts and emerging issues, *Indian Journal of Agricultural Economics*, 52(1): 1-47.

Acharya S S (1988), *Agricultural Production, Marketing and Price Policy in India*, Mittal, New Delhi.

Bhatia, M.S. (1984). “Impact of State Agencies on the marketing of cotton in India”, *Indian Journal of Agricultural Economics*, Vol. 39(3), pp. 201-207.

Brahmaiah, P., Eswaraprasad, Y., Naidu, M. R., and Pandu Rangadu, K.(1989). “Alternative marketing channels for cotton in Guntur district of Andhra Pradesh – An Economic Analysis”, *Journal of Agricultural Marketing*, Vol. 32(2), pp. 29-32.

Chand, Ramesh (2003) Minimum support price in agriculture – Changing requirements, *Economic and Political Weekly*, 38(29): 3027-28.

Deshpande, R S (2003, b), *Impact of Minimum Support Prices on Agricultural Economy* (Consolidated Report), Research Report No 89, ADRT Unit, Institute for Social and Economic Change, Bangalore.

Harris and Barbara (1984). “State and Market State intervention in Agricultural Exchange in a dry region of Tamilnadu, South India”, *Indian Journal of Agricultural Economics*, Vol. 34(4), pp. 680-683.

Murthy, R V Ramana and Misra, Rekha (2012), „Pricing of Paddy: A Case Study of Andhra Pradesh” Department of Economic and Policy Research, Reserve Bank of India, Mumbai

Reddy A Amarender, (2004), Consumption Pattern, Trade and Production Potential of Pulses, *Economic and Political Weekly* October 30, 2004

Shroff, Sangeeta (2003), *Impact of Minimum Support Prices on Agricultural Economy in Maharashtra*, AERC, Gokhale Institute of Politics and Economics, Pune.

Sidhu, R S and Vatta, Kamal (2012), “Effectiveness of Minimum Support Price Policy for Paddy in India with a Case Study of Punjab”, *Agricultural Economics Research Review*, Vol. 25(No.2) July-December 2012 pp 231-242

Singh, Karam Kamal Vatta and Sanjay Kumar (2002), *Impact of Minimum Support Prices on Agricultural Economy in Punjab*, AERC, Punjab Agricultural University, Ludhiana.

Union Budget 2018-19

Planning Commission, Economic Survey 2012-13, p. 180

Evaluation Report on Efficacy of Minimum Support Prices (MSPs), NITI Aayog, January 2016, http://www.niti.gov.in/writereaddata/files/document_publication/MSP-report.pdf.

Table 1: Farmers’ Awareness of the Support Price.

Awareness of Support Price among Farmers	Warangal	Guntur	Kurnool	Total	Chi-Square Value
	No. of Respondents	No. of Respondents	No. of Respondents	No. of Respondents	
Aware	72 (90.00)	67 (83.75)	69 (86.25)	208 (86.67)	1.3702
Un Aware	8 (10.00)	13 (16.25)	11 (13.75)	32 (13.33)	
Total	80 (100)	80 (100)	80 (100)	240 (100)	

Source: Questionnaire Data.

Note: Figures in brackets indicate percentages.

Table 2: Farmer’s response towards the support price covering Cultivation Cost.

Support Price Covers Cost of Cultivation	Warangal	Guntur	Kurnool	Total
	No. of Respondents	No. of Respondents	No. of Respondents	No. of Respondents
Yes	49 (61.25)	42 (52.50)	37 (46.25)	128 (53.33)
No	31 (38.75)	38 (47.50)	43 (53.75)	112 (46.67)
Total	80 (100)	80 (100)	80 (100)	240 (100)

Source: Questionnaire Data.

Note: Figures in brackets indicate percentages.

Table 3: Influence of Price on the Area and type of Crop Cultivation in the next season.

Influence of price on area of cultivation in next season	No. of Respondents				Chi-Square Value
	Warangal Market	Guntur Market	Kurnool Market	Total	
Influence	21 (26.25)	22 (27.50)	28 (35.00)	71 (29.58)	7.5228
Sometimes influence	37 (46.25)	41 (51.25)	25 (31.25)	103 (42.92)	
Do not influence	22 (27.50)	17 (21.25)	27 (33.75)	66 (27.50)	
Total	80 (100)	80 (100)	80 (100)	240 (100)	

Source: Questionnaire Data.

Note: Figures in brackets indicate percentage

Table 4: Farmer's response towards the Policy of announcing MSP useful.

Policy of announcing MSP useful	Warangal	Guntur	Kurnool	Total
	No. of Respondents	No. of Respondents	No. of Respondents	No. of Respondents
Yes	43 (53.75)	39 (48.75)	34 (42.5)	116 (48.33)
No	37 (46.25)	41 (51.25)	46 (57.5)	124 (51.66)
Total	80 (100)	80 (100)	80 (100)	240 (100)

Source: Questionnaire Data.

Note: Figures in brackets indicate percentages.

Table 5: Farmer's response towards the Announcement of MSP made at right time.

Announcement of MSP made at right time	Warangal	Guntur	Kurnool	Total
	No. of Respondents	No. of Respondents	No. of Respondents	No. of Respondents
Yes	42 (52.50)	47 (58.75)	54 (67.5)	143 (59.58)
No	38 (47.50)	33 (41.25)	26 (32.5)	97 (40.42)
Total	80 (100)	80 (100)	80 (100)	240 (100)

Source: Questionnaire Data.

Note: Figures in brackets indicate percentages.

Table 6: Farmer's response towards the Policy of MSP should continue.

Policy of MSP should continue	Warangal	Guntur	Kurnool	Total
	No. of Respondents	No. of Respondents	No. of Respondents	No. of Respondents
Yes	63 (78.75)	59 (73.75)	55 (68.75)	177 (73.75)
No	17 (21.25)	21 (26.25)	25 (31.25)	63 (26.25)
Total	80 (100)	80 (100)	80 (100)	240 (100)

Source: Questionnaire Data.

Note: Figures in brackets indicate percentages.

Table 7: Minimum Support Prices.

(According to Crop Year Rs. per Quintal)

S.No.	Commodity	Variety	2004-05	2005-06	Change in MSP 2005-06 over 2004-05	2006-07	Change in MSP 06-07 over 2005-06	2007-08	Change in MSP 2007-08 over 06-07	2008-09	Change in MSP 2008-09 over 07-08
					(% of change)			(% of change)			
Kharif Crops											
1	Paddy	Common	560	570	10(1.78)	580	10(1.8)	645	65(11.2)	850	205(31.8)
		Grade 'A'	590	600	10(1.7)	610	10(1.7)	675	65(10.7)	880	205(30.4)
2	Jowar	Hybrid	515	525	10(1.9)	540	15(2.9)	600	60(11.1)	840	240(40.0)
		Maldandi	-	-	-	555	-	620	65(11.7)	860	240(38.7)
3	Bajra		515	525	10(1.9)	540	15(2.9)	600	60(11.1)	840	240(40.0)
4	Maize		525	540	15(2.8)	540	0(0.0)	620	80(14.8)	840	220(35.5)
5	Ragi		515	525	10(1.7)	540	15(2.9)	600	60(11.1)	915	315(52.5)
6	Arhar (Tur)		1390	1400	10(0.7)	1410	10(0.7)	1550	140(9.9)	2000	450(29.3)
7	Moong		1410	1520	110(7.8)	1520	0(0.0)	1700	180(11.8)	2520	820(48.2)
8	Urad		1410	1520	110(7.8)	1520	0(0.0)	1700	180(11.8)	2520	820(48.2)
9	Cotton	F-414/H-777/J34	1760	1760	0(0.0)	1770	10(0.6)	1800	30(1.7)	2500	700(38.9)
		H-4	1960	1980	20(1.0)	1990	10(0.5)	2030	40(2.0)	3000	970(47.8)
10	Groundnut in shell		1500	1520	20(1.3)	1520	0(0.0)	1550	30(2.0)	2100	550(3.5)
11	Sunflower seed		1340	1500	160(1.9)	1500	0(0.0)	1510	10(0.7)	2215	705(46.7)
12	Soybean	Black	900	900	0(0.0)	900	0(0.0)	910	10(1.1)	1350	440(48.4)
		Yellow	1000	1010	10(1.0)	1020	10(1.0)	1050	30(2.9)	1390	340(32.4)
13	Sesamum		1500	1550	50(3.3)	1560	10(0.6)	1580	20(1.3)	2750	1170(74.1)
14	Niger Seed		1180	1200	20(1.7)	1220	20(1.7)	1240	20(1.6)	2405	1165(94.0)
Rabi Crops (2010-11 Crop To Be Sold In 2011 - 12)											
15	Wheat		640	650	10(1.6)	750	100(15.38)	1000	250(33.3)	1080	80(8.0)

16	Barley		540	550	10(1.8)	565	15(2.73)	650	85(15.0)	680	30(4.6)
17	Gram		1425	1435	10(0.7)	1445	10(0.70)	1600	155(10.7)	1730	130(8.0)
18	Masur (Lentil)		1525	1535	10(0.6)	1545	10(0.65)	1700	155(10.0)	1870	170(10)
19	Rapeseed (mustard)		1700	1715	15(0.9)	1715	10(1.8)	1800	85(5.0)	1830	30(1.6)
20	Safflower		1550	1565	15(1.0)	1565	0(0.0)	1650	85(5.4)	1650	0(0.0)
21	Toria		1665	1680	15(0.9)	1680	0(0.0)	1735	55(3.3)	1735	0(0.0)
Other Crops											
22	Copra	Milling	3570	3570	0(0.0)	3590	20(0.6)	3620	30(0.8)	3660	40(1.1)
		Ball	3820	3820	0(0.0)	3840	20(0.5)	3870	30(0.8)	3910	40(1.0)
23	De husked coconut						90(9.9)		-	988	
24	Jute		890	910	20(2.2)	1000		1055	55(5.5)	1250	195(18.5)
25	Sugarcane		74.5 0	79.50	5(6.7)	80.2 5	0.75(0.9)	81.1 8	0.93(1.2)	81.1 8	0(0.0)

*Due to space constraint special symbols for bonus are not included in the table

Table 8: MINIMUM SUPPORT PRICES
(According to Crop Year Rs. per Quintal)

S.No.	Commodity	Variety	2009-10	Change in MSP 2009-10 over 2008-09	2010-11	Change in MSP 10-11 over 2009-10	2011-12	Change in MSP 11-12 over 2010-11	2012-13	Change in MSP 12-13 over 2011-12
				(% of change)			(% of change)			(% of change)
Kharif Crops										
1	Paddy	Common	950	100(11.8)	1000	50(5.2)	1080	80(8.0)	1250	170(15.7)
		Grade 'A'	980	100(11.4)	1030	50(5.1)	1110	80(7.80)	1280	170(15.3)
2	Jowar	Hybrid	840	0(0.0)	880	40(4.7)	980	100(11.4)	1500	520(53.1)
		Maldandi	860	0(0.0)	900	40(4.6)	1000	100(11.1)	1520	520(62.0)
3	Bajra		840	0(0.0)	880	40(4.7)	980	100(11.4)	1175	195(19.9)
4	Maize		840	0(0.0)	880	40(4.7)	980	100(11.4)	1175	195(19.9)
5	Ragi		915	0(0.0)	965	50(5.4)	1050	85(8.8)	1500	450(42.8)
6	Arhar (Tur)		2300	300(15.0)	3000	700(30.0)	3200	200(6.7)	3850	650(20.3)
7	Moong		2760	240(9.5)	3170	410(15.0)	3500	300(10.4)	4400	900(25.7)
8	Urad		2520	0(0.0)	2900	380(15.0)	3300	400(13.8)	4300	1000(30.3)
9	Cotton	F-414/H-777/J34	2500	0(0.0)	2500	0(0.0)	2800	300(12.0)	3600	800(28.6)
		H-4	3000	0(0.0)	3000	0(0.0)	3300	300(10.0)	3900	600(18.2)
10	Groundnut in shell		2100	0(0.0)	2300	200(9.5)	2700	400(17.4)	3700	1000(37.0)
11	Sunflower seed		2215	0(0.0)	2350	135(6.0)	2800	450(19.1)	3700	900(32.1)
12	Soybean	Black	1350	0(0.0)	1400	50(3.7)	1650	250(17.8)	2200	550(33.3)
		Yellow	1390	0(0.0)	1440	50(3.6)	1690	250(17.4)	2240	550(32.5)
13	Sesamum		2850	100(3.6)	2900	50(1.7)	3400	500(17.2)	4200	800(23.5)
14	Niger Seed		2405	0(0.0)	2450	0(0.0)	2900	450(18.4)	3500	600(20.7)
Rabi Crops										
15	Wheat		1100	20(1.8)	1120	10(1.8)	1285	165(14.7)	1350	65(5.05)
16	Barley		750	70(10.2)	780	30(4.0)	980	200(25.6)	980	0(0.0)
17	Gram		1760	30(1.7)	2100	340(19.3)	2800	700(33.3)	3000	200(7.14)
18	Masur (Lentil)		1870	0(0.0)	2250	380(20.3)	2800	550(24.4)	2900	100(3.57)
19	Rapeseed (mustard)		1830	0(0.0)	1850	20(1.0)	2500	650(35.1)	3000	500(20.0)
20	Safflower		1680	30(1.8)	1800	120(7.1)	2500	700(38.9)	2800	300(12.0)
21	Toria		1735	0(0.0)	-		2425	645(36.2)	2970	545(20.25)
Other Crops										
22	Copra	Milling	4450	790(21.6)	4450	0(0.0)	4525	75(1.7)	5100	575(12.7)
		Ball	4700	790(20.2)	4700	0(0.0)	4775	75(1.6)	5350	575(12.0)
23	De husked coconut		1200	212(21.5)	1200	0(0.0)	1200	0(0.0)	1400	200(16.17)
24	Jute		1375	125(10.0)	1575	200(14.5)	1675	100(6.3)	2200	525(31.3)
25	Sugarcane		107.76	26.58(32.7)	107.76	0(0.0)	145	5.88(4.2)	170	25(17.2)

*Due to space constraint special symbols for bonus are not included in the table

Table 9: Minimum Support Prices.
(According to Crop Year Rs. per Quintal)

S.No.	Commodity	Variety	2013-14	Change in MSP 13-14 over 12-13	2014-15	Changes in MSP 14-15 over 13-14	2015-16	Changes in MSP 15-16 over 14-15	2016-17	Changes in MSP 16-17 over 15-16	2017-18	Changes in MSP 17-18 over 16-17
Kharif Crops				(% of change)		(% of change)		(% of change)		(% of change)		(% of change)
1	Paddy	Common	1310	60(4.8)	1360	50 (3.8)	1410	50 (3.6)	1470	60 (4.2)	1550	80 (5.4)
		Grade 'A'	1345	65(5.1)	1400	55 (4)	1450	50 (3.5)	1510	60 (4.1)	1590	80 (5.3)
2	Jowar	Hybrid	1500	0(0.0)	1530	30 (2)	1570	40 (2.6)	1625	55 (3.5)	1700	75 (4.6)
		Maldandi	1520	0(0.0)	1550	30 (1.97)	1590	40 (2.5)	1650	60 (3.7)	1725	75 (4.5)
3	Bajra		1250	75(6.4)	1250	0 (0)	1275	25 (2)	1330	55 (4.3)	1425	95 (7.1)
4	Maize		1310	135(11.5)	1310	0 (0)	1325	15 (1.1)	1365	40 (3)	1425	60 (4.3)
5	Ragi		1500	0(0.0)	1550	50 (3.3)	1650	100 (6.4)	1725	75 (4.5)	1900	175 (10.1)
6	Arhar (Tur)		4300	450(11.7)	4350	50 (1.1)	4426	75 (1.7)	4625	200 (4.5)	5450	400 (7.9)
7	Moong		4500	100(2.3)	4600	50 (2.2)	4650	50 (1)	4800	150 (3.2)	5575	350 (6.7)
8	Urad		4300	0(0.0)	4350	50 (1.1)	4425	75 (1.7)	4575	150 (3.3)	5400	400 (8.0)
9	Cotton	F-414/H-777/J34	3700	100(2.8)	3750	50 (1.3)	3800	50 (1.3)	3860	60 (1.5)	4020	160 (4.1)
		H-4	4000	100(2.6)	4050	50 (1.2)	4100	50 (1.2)	4160	60 (1.4)	4320	160 (3.8)
10	Groundnut in shell		4000	300(8.1)	4000	0 (0)	4035	30 (0.75)	4120	90 (2.2)	4450	230 (5.5)
11	Sunflower seed		3700	0(0.0)	3750	50 (1.3)	3800	50 (1.3)	3850	50 (1.3)	4100	150 (3.8)
12	Soybean	Black	2500	300(13.6)	2500	0 (0)		0 (0)		0(0)		0(0)
		Yellow	2560	320(14.3)	2560	0 (0)	2600	40 (1.5)	2675	75 (2.8)	3050	275 (9.9)
13	Sesamum		4500	300(7.1)	4600	100 (2.2)	4700	100 (2.1)	4800	100 (2.1)	5300	300 (6.0)
14	Niger Seed		3500	0(0.0)	3600	100 (2.8)	3650	50 (1.3)	3725	75 (2)	4050	225 (5.9)
Rabi crops												
15	Wheat		1400	50(3.7)	1450	50 (3.5)	1525	75 (5.1)	1625	100 (6.5)	1735	110 (6.7)
16	Barley		1100	120(12.2)	1150	50 (4.5)	1225	75 (6.5)	1325	100 (17.5)	1410	85 (6.4)
17	Gram		3100	100(3.3)	3175	75 (2.4)	3425	250 (7.8)	4000	575 (16.8)	4400	400 (10.0)
18	Masur (Lentil)		2950	50(1.7)	3075	85 (4.2)	3325	250 (8.1)	3950	625 (18.8)	4250	300 (7.5)
19	Rapeseed (mustard)		3050	50(1.7)	3100	50 (1.6)	3350	250 (8)	3700	350 (10)	4000	300 (8.1)
20	Safflower		3000	200(7.1)	3050	50 (1.6)	3300	250 (8.1)	3700	400 (12.12)	4100	400 (10.8)
21	Toria		3020	50(1.7)	3020	0 (0)	3290	70 (8.9)	3560	270 (8.2)	-	0(0)
OTHER CROPS												
22	Copra	Milling	5250	150(2.94)	5250	0 (0)	5550	250 (5.7)	5950	400 (7.2)	6500	550 (9.2)
		Ball	5500	150(2.8)	5500	0 (0)	5830	330 (6)	6240	410 (7)	6785	545 (8.7)
23	De husked coconut		1425	25(1.79)	1425	0 (0)	1500	75 (5.2)	1600	100 (6.6)	1760	160 (10.0)
24	Jute		2300	100(4.55)	2400	100 (4.3)	2700	300 (12.5)	3200	500 (18.5)	3500	300 (9.3)
25	Sugarcane		210	40(23.5)	220	10 (4.7)	230	10 (4.5)	230	0 (0)	255	25 (10.9)

Source: Directorate of Economics and Statistics, Department of Agriculture, cooperation and farmer's welfare, Ministry of Agriculture and Farmers Welfare, GOI

*Due to space constraint special symbols for bonus are not included in the table.

KNOWLEDGE MANAGEMENT FOR SUSTAINABLE DEVELOPMENT – A CRITICAL ANALYSIS

Parveen K. Bangotra* Bhupinder P S Chahal**

Be it the air we breathe, water we drink, food we eat, clothes we wear, car we drive or the mobile phone in our hand, each and every thing on this earth has come from this earth. Our earth is the only single source of everything on this earth till at least the mankind has technology to borrow from other planets. For the ever expanding population and consumerism, how long this single source, the earth can supply is not infinite. If the mankind is not careful in replenishing or paying back to earth, the whole eco-system is bound to collapse, sooner or later. Already, mindless land mining, cutting of trees, usage of plastic, uncontrolled traffic, polluting industries and mindless urbanization has often resulted in flooding of cities, global warming, acid rains, pollution, diseases and many other environmental hazards. Major cause for this scant regard for environment has been ever expanding population, urbanization and above all greed for more profit by the industrial economy. The question is – by managing the knowledge base and technology that the mankind has accumulated, is it possible to optimize economic growth and profit so that the earth and environment can sustain this for all times to come? This paper examines critical factors of knowledge management relating to economic development that can be sustained and lead to viable business model. Therefore, in a way, this paper examines the role of knowledge management in meeting the organizational and human needs more effectively such that the balance resources can be used for sustainable development of business entity and its stake holders for future generations to come.

Keywords: Knowledge Management, Global Management, Secondary Data, Competitive Advantage, Critical Success Factors, Knowledge Economy, Sustainable Development, Corporate Behavior, Economy, Society.

Since the industrial revolution, our earth's eco-system has been treated largely for the benefit of people with economic growth and profit being the key area of consideration. This business model has severely affected the Earth's Eco-System. Various studies by United Nations have shown that in order to meet the basic needs of a growing population within the limits of the Earth's finite resources, there is a need to devise a more sustainable model for production, consumption and the economy as a whole.

In 2015, all United Nation Member States adopted an agenda known as "The 2030 Agenda for Sustainable Development (United Nations, 2015)". At the heart of this agenda are 17 SDGs (Sustainable Development Goals) with an aim to end poverty, improve health and education, reduce inequality, and spur economic growth. It further determines to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.

This sustainable business model is directly driven by the organizational corporate behaviour towards the environmental protection. Environmental protection for

any business organization comes after organizational and human needs have been satisfied. That is to say that incorporating sustainable development as a part of the business entity amounts to re-engineering almost all business processes especially the role of top management towards business, society and environment as a whole. It means re-thinking as to how the business is conducted. According to Rodriguez (Rodrigues, M.A., Ricart, J.E., Sanchez, P., 2002), incorporating sustainable development in the business processes will significantly,

- Change the business organization's competitive landscape,
- Influence the way in which the organization develop their resources, capabilities, and activities,
- Influence the strategic nature of the organization, and
- Promote the organization's reputation and innovation as persistent source of competitive advantage.

Modern day business entities are knowledge driven where knowledge management plays a key role. Knowledge

* **Ph.D. Scholar, Chandigarh University, Mohali, Punjab.**

** **Professor & Head, University School of Business Chandigarh University, Mohali, Punjab.**

management essentially relates to importance of external information and knowledge to the organization. As quoted by (McInerney, R.C., Koeing, E.D.M., 2011), knowledge management is organization's understanding of the importance of content, the importance of the retrievable, importance of the arrangement, description and structure of that content. Since knowledge management tools are the tools for re-engineering the processes of an organization and sustainable developments also relates to process re-engineering such that there is bare minimum impact on the environment, knowledge management can play a key role in sustainable development. This paper is an attempt to study the relationship and bearing of knowledge management factors on the sustainable development of business entity.

I. Review of Literature

With the internet based high speed data transfer, it is now possible to transfer data from one corner of the world to another in a flash. This makes knowledge management even more important. Studies have shown that knowledge management depends on several factors like Technology, Work Culture, Organization Structure, Knowledge Acquisition Process, Knowledge Sharing Process and Knowledge Protection Process.

Since the industrial revolution, natural resources have been utilised for the benefit of people and profit for the business entity. Loss of biodiversity, desertification, climate change and the disruption of a number of natural cycles are among the costs of our disregard for natural resources and the integrity of its ecosystems and life-supporting processes. Extant and extensive literature in the area of knowledge management and sustainable development has been reviewed as explained below.

Knowledge Management and its Factors

Knowledge management (KM) has been described by Bound four (Bounfour, A., 2003) as "a set of procedures, infrastructures, technical and managerial tools, designed towards creating, sharing and leveraging information and knowledge within and around organisation."

Globally recognised researchers like Gold, Malhotra, Segar (Gold, Malhotra & Segars, 2001); Lee and Choi (Lee H & Choi B, 2003); Alavi & Tiwana (Alavi M & Tiwana A, 2005) have demonstrated the impact of technical infrastructure, organization culture, and organization structure and staff skills on the knowledge management capabilities of an organization. Amongst these, organization culture which is partially because of human values of the people associated with the

organization plays a significant role in the knowledge sharing behaviour of the workforce.

From Peter Heisig's (Heisig, P., 2009) works on knowledge management regarding knowledge management success, it is clear that knowledge management factors can be classified into human oriented factors; organization oriented factors and technology oriented factors. Although there are a large number of knowledge management processes but not all of them are relevant to sustainability and therefore only following four important factors are considered.

Knowledge Acquisition: In knowledge acquisition /creation, the bottom line is having the knowledge either by creating it in-house through research, or acquires it from external sources like research intelligence services or by going to conferences. The practice of knowledge creation implies "making available and amplifying knowledge created by individuals, as well as crystallising and connecting it with the organisation's knowledge system. For sustainability development of an organization, this seems an important criterion because in choice editing some products or services, it is important to either acquire or create knowledge about the impact of these products on the environment, organization health and brand evaluation.

Knowledge Sharing: Knowledge Sharing is a very intricate and complex phenomenon because Knowledge not only exists in documents and repositories, but in human minds also. There is a natural tendency in every individual to hoard knowledge and consequently there is no motivation to share it with others unless the individual is convinced, rewarded or recognised properly (Chua, A, 2005). According to (Lee, H. & Choi, B., 2003), people of an organization are the key enablers in the success of Knowledge Management. For sustainability development of an organization, knowledge sharing is an important criteria and it has bearing on the culture of the people working in the organisation. Organisation management has a key role to play in making people share knowledge.

Technology: Many a researchers are of the opinion that effective and efficient knowledge management cannot take place without efficient Information Technology infrastructure. In fact, the widespread adoption of Internet gave an impetus to Knowledge Management as it was possible now to transfer data at the speed of light. It is therefore that the Knowledge Protection and Adoption became important. According to a survey US Fortune 500 companies consider Information Technology as one of the most critical factors of Knowledge Management success.

Work Culture: Introduction of concepts of Knowledge Management in an organization amounts to making changes in the operations of the organization. Since organization change is directly related to the organization culture, Knowledge Management is considered as an intervention in the organization's culture. Some researchers find intervention in the organization culture as bigger challenge than any other technical interventions. It is important that the cultural environment of an organization is thoroughly studied and analysed and before knowledge management is even attempted, an environment of mutual trust and confidence is created.

Sustainable Development and its Processes

Gravity of the deteriorating Earth's Eco-System has been well recognised the world over and many an organization, governments, NGOs are leading path for sustainable development. WBCSD (World Business Council for Sustainable Development) is a global organization working to accelerate the transition to a sustainable world. According to WBCSD, (www.wbcsd.org) imperatives of creating a sustainable and profitable business are compatible to the best interest of human society and the natural environment. The sustainable view of a business is that the business world is part of the natural and social system. It is intertwined and has dramatic implications in the absence of one or the other. However, in practice this is not so. According to Rodrigues (Rodrigues, M.A., Ricart, J.E., Sanchez, P., 2002), business entities operate independently from natural and social systems. They operate to make profit as much as they can. However, for a sustainable development business model, day-to-day business operations must integrate necessary parts of business development with natural and social systems.

According to WBCSD, for a business entity, sustainable development is achievable by adopting business approach to address three areas. These three areas are

- Innovative business approach
- Organizational choice of influence and
- Organizational choice editing

Innovative business approach involves exploitation of new ideas and creativity that minimizes resource utilization while minimizing the impact on environment and at the same time improving productivity and profitability (DiPiazza, S. A., Nov 2008). This is achievable by way of Research & Development and close interaction with universities.

Organizational choice of influence refers to all those mechanisms that an organization adopts to influence the

consumer behaviour. According to (Diana, G., Oblinger, D. G. and Walda J., 2009) there are three main categories of influence i.e. internal, external and marketing. Internal factors include attitude, knowledge, lifestyle, personality etc. while external factors include society, culture and situations. Marketing influences by way of advertisements, sales talk, sponsorship etc.

Organizational choice editing refers to organizations volunteer removal of all those products and services which are harmful to the environment. As such a move can destabilize the profit margins and work force, such a move has to be considered very carefully with all the stakeholders taken in confidence.

From literature study, various causal parameters of sustainable development are:

Sustainable Development Vision

Vision of an organization defines the goals, thought process and intent of an organisation for its futuristic endeavours. For an organisation to become sustainable, it is important that the sustainable development component becomes a part of the organisation vision. Vision will dictate as to how the other components of the organisation will work. Daniel F. Botha (Botha, Daniel F., 2000) states that the most crucial component of a corporate strategy is to create a vision of the type of knowledge that an organisation needs. Knowledge Management will help organisation to ensure that they will have the necessary knowledge to reach their organisational vision by providing them with guidance and clarity in knowledge matters.

Sustainable Development Strategy

Strategy planning for sustainability is very crucial as the strategy should always be within the business objectives of the organisation. Also, the strategy for sustainability has to work well within parameters define by the organisational vision statement. According to Botha, (Botha, Daniel F., 2000), similarly to strategic planning for sustainability approach, it is also important to have a vision for knowledge in order for the organisation to know what is the desired level of knowledge they need to achieve their strategic sustainability and business objectives.

According to Thomas (Thomas, James,B., Stephanie Watta Sussman, John, C.,, 2001)for sustainable development strategies, it is important that only essential information and knowledge is acquired that which helps them to achieve their objectives as there is a rapidly growing and diverse body of sustainability information available. It is strategic to set learning objectives to

effectively deal with the huge amounts of information available and only develop knowledge that is useful for achieving the organisational learning goals.

Sustainable Development Action Plan

The action plan is like a roadmap for the organisation to progress according to their vision and strategy. The specifics will depend on the individual situations of the organisations, yet there are some aspects that provide guidance and structure on how to formulate the plan. The plan should include the knowledge vision, strategic goals divided to short-term, mid-term, and long-term, as well as the actions that the organisation has prioritised to be the most important for reaching the vision. An action plan without backing of the correct knowledge and information and without correct processing of this knowledge can lead to major crisis. Literature study of both knowledge management and sustainable development reveals that relationship of knowledge management to sustainable development, although both of them are modern area, has not been critically analysed.

Framework of Study for Sustainable Development Business Model

Conceptual framework is all those factors and interplay between them that creates a highly congenial environment for sustainable development model of a business entity. From the background knowledge and literature study, the conceptual framework as given in Figure 1 is conceived. Interacting factors of business entity, knowledge management and sustainable development are clubbed together. These are:

- Parameters of modern day business entity that is influenceable by knowledge management factors and sustainable development processes.
- Processes of sustainable development those are influenceable by knowledge management factors and are adoptable by modern day business entity.
- Factors of knowledge management that have a crucial role to play in influencing modern day business entity and sustainable development requirements.

II. Research Design & Methods

Conceptual Model of Knowledge Management for Sustainable Development

The model that has been conceived for application of knowledge management factors to achieve sustainable development goals has been pictorially given in Figure 2. Various causal parameters of sustainable development and knowledge management are explored.

Development of Hypothesis

From the conceptualised model of Figure 2, various factor like knowledge acquisition, knowledge sharing, technology and work culture of an organization are studied from the point of their impact on sustainable development of the organization. This is hypothesised as given below:

- Hypothesis 1 (H1): Knowledge Acquisition leads to Knowledge Management.
- Hypothesis 2 (H2): Knowledge Sharing leads to Knowledge Management.
- Hypothesis 3 (H3): Technical Capability contributes towards Knowledge Management.
- Hypothesis 4 (H4): Organization Work Culture contributes towards Knowledge Management.
- Hypothesis 5 (H5): Knowledge Management and Sustainable Development are positively correlated.

Research Questionnaire was used to collect data from the software development, electronic and IT companies. Measurement items of the questionnaire as given in Table 1 were adapted from previous research studies of similar nature (Wasko, M. M. L. & Faraj S., 2005); (Bock, G. W.; Zmud, R. W.; Kim, Y.G. & Lee, J. N., 2005) and (Lin, H. H., 2007). Five Point Likert-type scales ranging from 'Strongly Disagree to Strongly Agree' is used for measurement purpose. Strongly disagree corresponds to 1 while strongly agree corresponds to 5 of the Likert scale. Questionnaire data collection was done in and around Chandigarh (India) area using personal goodwill and mostly online. As the data sample is techno savvy, there was not much difficulty in data collection over email and online. Out of total of more than 120 questionnaires that were distributed, only 92 clean and clear respondents were selected.

Testing data for Data Reliability and Data Validity

For data reliability, the most common indicator used is Cronback Alpha. A value of 0.70 is considered reliable. Using SPSS (Version 21.0) for data analysis, cronback alpha was calculated. It is seen that Cronback alpha for knowledge acquisition is 0.875; for knowledge sharing is 0.828; for technology is 0.868; for work culture is 0.854 and Sustainable development, it is 0.877. Therefore, they are all acceptable.

Data was tested for convergent and discriminant validity issues using CFA (Confirmatory Factor Analysis). Construct validity is a measure of goodness of constructs to measure what they are purport to measure. If all the constructs, converge towards same measure it has convergent validity. It measures as to what extent each

item in a construct correlates with other items of the construct. In other words, variances among various items of a construct are an indication of construct validity.

Table 2 shows the results of CFA. There were no convergent and discriminant validity issues. Reliability was measured by composite reliability (CR), and these were all above the recommended threshold of 0.70.

III. Analysis, Discussion & Findings

Structural equation modelling (SEM) was used to analyse the relationships within the research model shown in Figure 3. SEM uses a series of regression equations but the advantage over other methods of regression is that relationships between variables can be modelled graphically and measured using the AMOS software. SPSS-AMOS has been used in data analysis in this research paper.

SEM is essentially a two stage approach (Hair, J.F.; Anderson, R.E.; Tatham, R.L. & Black, W.C., 2006). In the first stage, measurement model is initially developed using the SPSS questionnaire data. Confirmatory factor analysis (CFA) is used to find out how reliable the observed variables are, and then the relationships between the variables are assessed (Schreiber, J.B.; Stage, F. K.; King, J.; Amarury, N.E.A., 2006). Measurement model fit is established. In the second stage, structural model is constructed to test the relationships mapped in the research model. Validity inspection of the measurement model was performed using CFA with the help of SPSS-AMOS. AMOS output results gave a value of Chi-square, $\chi^2 = 295.233$; Degree of Freedom, $df = 247$ and a significant p value (Probability Level), $p = 0.019$. Model Fit was assessed by evaluating other incremental fit indices like CFI (Comparative Fit Index), TLI (Tucker-Lewis Index) and RMSEA (Root Mean Square Error of Approximation). These are given in Table 3.

Research results indicate a reasonably good fit. However, it was decided to test the model for any modification using AMOS feature 'Modification Indices.' This generates Modification Indices for Covariances, Variances and Regression Weights. For model fit analysis, large values associated with error Covariances are analysed. Associated variables with large values can be considered for dropping, provided it results in a better model fit. AMOS output of 'Modification Indices' did not suggest any major modifications.

Fit indices for the structural model are derived. These are $CMIN/DF = 1.195$; $CFI = 0.957$; $TLI = 0.952$ and most

important $RMSEA = 0.046$. All these results indicate a moderately good fit (Hair, J.F.; Anderson, R.E.; Babin, B. J. & Black, W.C., 2010); (Hu, L.T. and Bentler, P.M., 1999).

Final Structural Model & Hypothesis Testing

Figure 4 has been generated from SPSS AMOS output results. The entire 5 hypotheses are presented along with their statistical significance. All hypothesised relationships were supported but variations in standardised loadings highlighted significant differences in the strength of the relationships. This are summarised below:

	Hypothesis	Result
Hypothesis 01	Knowledge Acquisition leads to Knowledge Management.	Supported
Hypothesis 02	Knowledge Sharing leads to Knowledge Management.	Supported
Hypothesis 03	Technical Capability contributes towards Knowledge Management.	Supported
Hypothesis 04	Organization Work Culture contributes towards Knowledge Management.	Supported
Hypothesis 05	Knowledge Management and Sustainable Development are positively correlated.	Supported

Limitations & Future Research

There are recognizable limitations of this research study. The first limitation is that research has been conducted in and around Chandigarh only and therefore does not reflect multi-cultural traits. Secondly, the study has been conducted among Knowledge Workers in the area of electronic units, software design and IT companies and therefore cannot be generalised. Thirdly, the study has considered only four factors i.e. knowledge acquisition, knowledge sharing, technology and work culture. There are many other factors which have not been considered.

This research study opens up many a direction for future research especially in relation to human values. Future research can consider all those factors which have been left out in this study and can also consider knowledge workers from many other research and development areas.

IV. Conclusions

For a modern day business organization, challenges are multi-fold and multifaceted when it comes to implementation of parameters of sustainable

development. At one hand are the perks of sustainable development while at the same time business viability has to be maintained. Perks are, sustainable development enhances the reputation of organizations and consumers are more willing to pay an appropriate price for their products and services; consumers largely support organizations that built their business model on sustainability; positive image of organizations provides a greater ability to attract capital, business partners and customers; sustainability is an important factor in obtaining, retaining and motivating employees and the management of human capital.

It is a challenge to implement sustainability and perhaps the way to address these challenges is implementation of Knowledge Management Concepts. Integrated with information and technology, knowledge management has come to play a key role for more efficient and effective operation, competitive advantage and innovation. All these parameters are also the essential ingredients of Sustainable Development.

This paper has identified and proposed a knowledge management based model that can help in transition of modern day business entities to become social responsible, conscious and human faced organisation that has a brand value for long term existence. That is an organisation compliant to “Sustainable Development.”

References

Alavi M & Tiwana A. (2005). Knowledge Management- The Information Technology Dimension: The Hand Book of Organizational Learning and Knowledge Management. Oxford: Blackwell, Oxford.

Bock, G. W.; Zmud, R. W.; Kim, Y.G. & Lee, J. N. (2005). Behavioral Intention Formation in Knowledge Sharing: Examining the role of extrinsic motivators, social psychological forces and organizational climate. *MIS Quarterly*, Vol 29(1), PP 87-111.

Botha, Daniel F. (2000). Conceptual Framework for the Management of Knowledge in a Knowledge Based Enterprise. *South African Journal of Business Management*, Vol. 31, No. 4, PP 141-148.

Bounfour, A. (2003). *The Management of Intangibles: Organizations Most Valuable assets*. London: Routledge.

Byrne, B. M. (2001). *Structural Equation Modelling with AMOS*. New Jersey: Lawrence Erlbaum Associates.

Chua, A. (2005). Knowledge Sharing: a game people play. India: ASLIB Proceedings -Association of Special Libraries and Information Bureaux. Vol 55, No. 03: Business World Survey.

Diana, G., Oblinger, D. G. and Walda J. (2009). Making the case for ROI in Sustainable IT Projects. *Educause Review*, Vol. 44, No. 6, PP 6-7.

DiPiazza, S. A. (Nov 2008). Sustainable Consumption Factss & Trends- from business perspective . World Business Council for Sustainable Development.

Gold, Malhotra & Segars. (2001). Knowledge Management-an Organizational Capabilities Perspective. *Journal of Management Information System*, Vol. 18(1).

Hair, J.F.; Anderson, R.E.; Babin, B. J. & Black, W.C. (2010). *Multivariate Data Analysis 7th Edition*. Upper Saddle River, New Jersey: Prentice-Hall, Inc.,.

Hair, J.F.; Anderson, R.E.; Tatham, R.L. & Black, W.C. (2006). *Multivariate Data Analysis*. New Jersey: 6th Edition Prentice-Hall, New Jersey.

Heisig, P. (2009). Harmonization of Knowledge Management- Comparing 160 KM Frameworks Around the World. *Journal of Knowledge Management*, Vol. 13, No. 4.

Hu, L.T. and Bentler, P.M. (1999). "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives. *Structural Equation Modelling*, Volume 6 (1); PP 1-55.

Lee H & Choi B. (2003). Knowledge Management Enablers, Processes and Organizational Performance: an Integrative View and Empirical Examination. *Journal of Management Information System*, Volume 20, No. 01, pp.179-228.

Lee, H. & Choi, B. (2003). Knowledge Management Enablers, Processes and Organizational Performance: an Integrative View and Empirical Examination. *Journal of Management Information System*, Vol. 20 (01), PP 179-228.

Lin, H. H. (2007). Knowledge Sharing and Firm Innovation Capability: An Empirical Study. *International Journal of Manpower.*, Vol 28(3), PP 315-332.

McInerney, R.C., Koeing, E.D.M. (2011). *Knolwdeg Managment Processes in Organizations: Theoretical Foundations & Practices*. Synthesis Lectures on Information Concepts, Retrieval and Services, Vol. 3, No. 01, PP 1-96.

Rodrigues, M.A., Ricart, J.E., Sanchez, P. (2002). Sustainable Development and Sustainability of

Competitive Advantage. Creativity and Innovation Management, Vol. 11, No. 3, PP 135-46.

Schreiber, J.B.; Stage, F. K.; King, J.; Amarury, N.E.A. (2006). Reporting Structural Equation Modelling and Confirmatory Factor Analysis Results- a Review. The Journal of Educational Research, Vol 99, No. 6, PP 323-337.

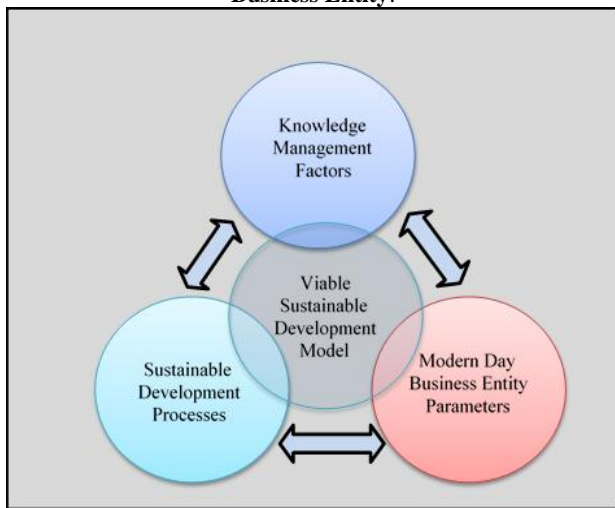
Thomas, James,B., Stephanie Watta Sussman, John, C., (2001). Understanding "Strategic Learning" : Linking Organizational Learning, Knowledge Management and Sense Making. Organizational Science, Vol 12, No. 3, PP 331-345.

United Nations. (2015). Transforming Our World: 2030 Agenda for Sustainable Development . Retrieved February 07, 2019, from <https://sustainabledevelopment.un.org/post2015/transformingourworld>

Wasko, M. M. L. & Faraj S. (2005). Why Should I Share ? Examining Social Capital & Knowledge Contribution in Electronic Networks . MIS Quarterly, Vol 29(1), P P 35-57.

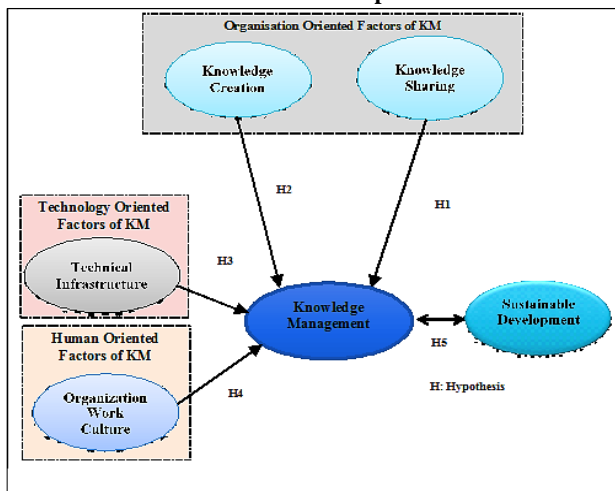
www.wbcsd.org. (n.d.). <https://www.wbcsd.org>. Retrieved February 07, 2019, from <https://www.wbcsd.org>

Figure 1: Framework of KM, Sustainable Development & Business Entity.



Source: Developed for this research paper

Figure 2: Conceptual Model of Knowledge Management for Sustainable Development.



Source: Developed for this research paper

Figure 3: SPSS-AMOS Model of Knowledge Management for Sustainable Development

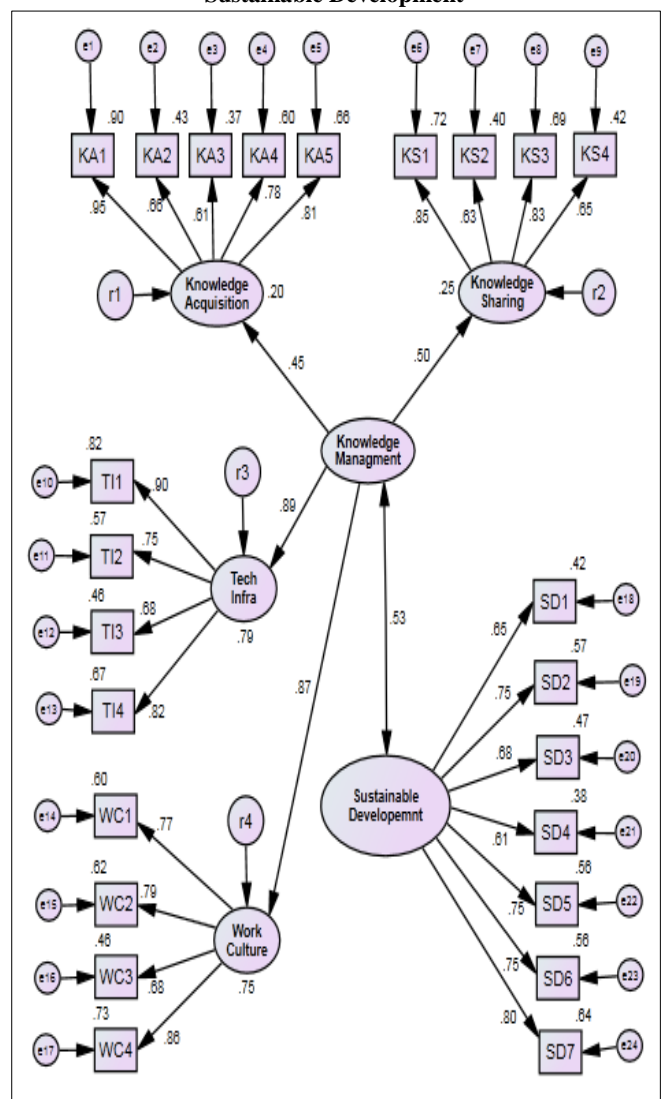


Figure 4: SEM Model of Knowledge Management for Sustainable Development

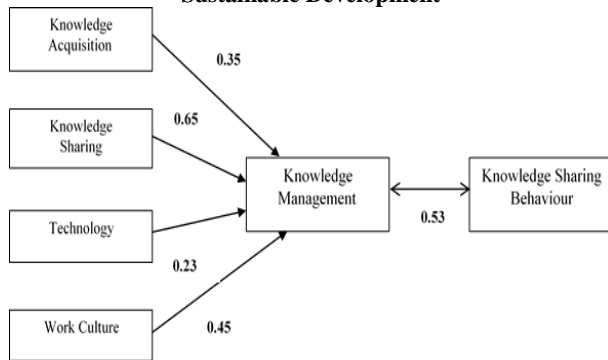


Table 1: Items to measure latent variables.

Knowledge Acquisition/Creation Process	
KA 1	Organization regularly sends employees to participates in conferences, seminars etc.
KA 2	Organization regularly invites external experts for expert talks.
KA 3	Organization promotes employee interaction in solving knowledge related problems.
KA 4	Organization promotes to use library resources like books, journals, e-journals etc.
KA 5	Knowledge up-gradation is an important component for the 'Annual Appraisal' of the employees.
Knowledge Sharing Process	
KS 1	I look forward to opportunities to share my knowledge with my colleagues.
KS 2	Organization promotes informal meetings to disseminate knowledge.
KS 3	We in our knowledge based industry believe that we must share knowledge for better society.
KS 4	Top management promotes knowledge sharing.
Technical Infrastructure & Usage	
TI 1	Organization uses IT infrastructure (Computers, Internet, Email etc., Smart Phones) for their day to day activities.
TI 2	Organization staff is trained to use IT infrastructure
TI 3	Organization has capability to address all IT needs
TI 4	Organization promotes IT skill development of its
Organization Work Culture	
WC 1	Management recognizes that Knowledge Management is core to the progress of the organization.
WC 2	Management visibly rewards employees who have contributed in the area of Knowledge Management.
WC 3	Top management is highly appreciative of new ideas and innovations.
WC 4	Management welcomes suggestions and feedback from stakeholders.

Sustainable Development	
SD 1	Organization Vision Statement is based on sustainable development.
SD 2	Organization Policies are based on Short Term & Long Term Vision Statement.
SD 3	Organization has a strategy to deal with challenges of sustainable development.
SD 4	Organization maintains action taken report of strategies followed.
SD 5	Organization has Action Plan to progress according to organization vision and strategy.
SD 6	Action Plans are based on specific inputs, feedback and data maintained by organization.
SD 7	Organization realises that an action plan without backing of the correct knowledge and information and without correct processing of this knowledge can lead to major crisis.

Table 2: Results of Confirmatory Factor Analysis

Measure	Items	Composite Reliability (CR)	Average Variance Extracted (AVE)
Knowledge Acquisition	5	0.877	0.594
Knowledge Sharing	4	0.831	0.557
Technology	4	0.869	0.626
Work Culture	4	0.840	0.573
Sustainable Development	7	0.879	0.512

Table3: Model Fit Parameters

Criteria	Symb ol	Accepta ble Limit	Researc h Result Values	Authors of Acceptable Criteria/Limi ts
Normed Chi-Square (Normed χ^2)	χ^2 / df	≤ 5	1.195	(Hair, J.F.; Anderson, R.E.; Tatham, R.L. & Black, W.C., 2006)
Comparative Fit Index	CFI	≥ 0.80	0.957	(Hu, L.T. and Bentler, P.M., 1999)
Tucker–Lewis index	TLI	≥ 0.90	0.952	(Hair, J.F.; Anderson, R.E.; Babin, B. J. & Black, W.C., 2010)
Root Mean Square Error of Approximati on	RMSE A	≤ 0.10	0.046	(Byrne, B. M., 2001)

A NEVER DIE ENTREPRENEURIAL SPIRIT - CASE OF A STRUGGLING ENTREPRENEUR

Shabana Abdulkhaliq Memon*

New Entrepreneurial ventures whether small or medium, are considered to be the backbone of any country's economy. The creation of new business ventures along with the number of existing high-growth companies is a strong indicator of a nation's present and future economic development. The Entrepreneurship Center at Miami University of Ohio defines entrepreneurship as "Entrepreneurship is the process of identifying, developing and bringing a vision to life. The vision may be an innovative idea, an opportunity or simply a better way to do something. The end result of this process is the creation of a new venture formed under conditions of risk and considerable uncertainty". There is seeming consensus on the importance of entrepreneurship in ameliorating some socio economic problems especially poverty, unemployment and all sorts of social vices in the society. There is a need to catalyze and scale up and enrich the entrepreneurial ecosystem. An ecosystem is nothing but a system of interconnected stakeholders, institutions and individuals; whose close linkages enable efficient production, diffusion and use of new and economically useful knowledge. We need to create more linkages and strengthen the existing ones, creating a tight mesh. The case mentioned below is of a struggling entrepreneur from Kolhapur, Maharashtra. It highlights his bumpy entrepreneurial journey and his never die entrepreneurial spirit. The case also aims to highlight the importance of nurturing an entrepreneurial mindset in our society which will result in lending a helping hand to startups in their initial leap into the entrepreneurial journey.

Keywords: Entrepreneur, Stakeholders, Management, Innovation, Professional, Services.

Over the last few decade entrepreneurship has been among the fastest areas of economic and business interest. Entrepreneurship is a critical aspect of the knowledge economy and India has a large pool of entrepreneurs, who have the ability to make a difference and provide a further boost to the Indian economy. In this way economic vitality of a country largely depends on the overall level of entrepreneurial capacity and on its ability to create rapidly growing companies. Startups cannot exist in a vacuum, nor are they isolated from cultural, political and structural factors. It is clear that an entrepreneurship ecosystem, at all levels to start with, is the defining factor in creating a sustainable entrepreneurship culture. These efforts will involve making attractive schemes for availability of finance and various other assistances including technical knowhow, training, sales, purchases etc., which will make a favorable impact on the growth of the enterprises and enhance their global competitiveness. Long-term high GDP growth rates are also found in the countries where government and society play an active role in supporting their entrepreneurs. Thus we can remark that entrepreneurs are a natural commodity found in any population, but in order to benefit from them one must actively work to cultivate and nurture these entrepreneurs and create a conducive entrepreneurial culture wherein they can operate, grow and flourish.

I. Review of Literature

Isenberg D (2011) refers very narrowly and classically to the entrepreneur, as a person who is continually pursuing economic value through growth and Entrepreneurship as aspirational and risk-taking; so he argues that Self-Employment is not entrepreneurship: self-employment-plus-aspiration is entrepreneurship; he says it is the aspiration and not business ownership which is the continental divide between the entrepreneur and the non-entrepreneur. Entrepreneurs, in the broadest economic sense, buy inputs low, transform them through risk and sell them high thus he says that entrepreneurship needs different policies and environments, different than that for self-employment and SMEs.

Lingelbach D et.al (2005) in the article 'What's Distinctive About Growth-Oriented Entrepreneurship In Developing Countries?' say that the wealth and poverty of developing countries has been linked in modern times to the entrepreneurial nature of their economies. Entrepreneurship in developing countries is the most

* Assistant Professor, Bharati Vidyapeeth Deemed University Institute of Management, Kadamwadi, Kolhapur, Maharashtra, India.

understudied important global economic phenomenon today. Entrepreneurship is a lonely profession rendered more difficult without the benefit of- mentorship and apprenticeship, leading hotspots of innovation, without a broad pool of well-trained talent, a culture that encourages innovation and new businesses and marquee companies that serve as informal finishing schools for entrepreneurs.

Paulose A (2011) in his doctoral thesis ‘Motivation to become entrepreneurs: The case of Indian immigrants to New Zealand’ examines the factors motivating Indian immigrants to strive to become entrepreneurs in New Zealand. It reveals several issues behind their desire to succeed in this endeavor as: money; seeing a gap in the market and wanting to fill it; the need for a change; to make a living; to get more flexibility with their time; lowered job satisfaction as an employee and lowered access to good jobs. Most of the motivating factors experienced by these Indian immigrant entrepreneurs were similar to entrepreneurs in general and were both positive and negative.

Desai V (1983) states that rapid industrialization in India depends on the growth of small scale industries which has vast potential in terms of creating employment and output, promotion of export, expansion of base for indigenous entrepreneurship and dispersal of industries and entrepreneurship skills in both rural as well as backward areas; but most of the small scale industries are operating under certain handicaps like shortage of raw materials, low levels of technical knowledge and counseling, poor infrastructure, inadequate capital and credit facilities, improper distribution system, lack of facilities for market analysis, research and development. They are also weak in marketing their products beyond their localities especially in international markets.

Naqui Q (2011) highlights on extensive connection between entrepreneurial activity and economic development, it states that ‘Startups are not everything when it comes to job creation, they are the only thing’. It says that startups cannot exist in vacuum nor they are isolated from culture, political and structural factors. An entrepreneurship ecosystem at the national level is the defining factor in creating a sustainable entrepreneurship culture and in repeated success, the impact of which benefits the whole ecosystem, fraternity or community.

Cohen (2005) while exploring the applicability of entrepreneurial ecosystem in creating ‘Sustainable Valley’ Cohen elaborates on the nine principal factors that are the key components. They are informal network,

formal network, university, government professional and support services, capital services and talent pool.

Farr A (2013) CEO of the Allan Gray Orbis Foundation, a non-profit organisation says that equal importance to the skill of the entrepreneur is an environment that encourages and rewards high-impact entrepreneurial leadership and is tolerant of mistakes and failures. Farr conclude that Entrepreneurship should be promoted as a worthy pursuit and should form part of the curriculum - both at school and university level.

Lee and Peterson (2000) Entrepreneurial ecosystem cannot only act as catalyst in speeding up the economic progress of stable economies but also act as a prime mover when it comes to rescuing economies that have faced a sharp decline. The cultural impact on developing entrepreneurial ecosystem cannot be ignored. There is a need for a model which acknowledges the individual without discounting on the social factors that are beyond the control of the individual.

Introduction to the case

Amol completed his diploma in electrical field under MCVC i.e. Maharashtra Council of Vocational Training, he then proceeded to do his bachelor’s in arts. After his graduation he took up a job with water proofing agency, a franchisee of Dr Fixit. He worked there for a year, after getting sufficient experience in this field; he decided to start his own shop which would be selling water proofing chemicals. Things started well and were moving smooth. Amol had a curious mind and he got interested with the idea of ecofriendly bricks, he started doing a research on this concept, browsing through internet, gaining more insight on the ecofriendly idea of business.

Kolhapur houses 5 industrial estates and MIDCs, it is a foundry and auto parts manufacturing hub. Amol starting toying with the idea of using the waste black sand which is available in abundant here, and is always a concern disposing it. Resin coated sand is used in the mould required to make the casting jobs, this sand is to be discarded after the job is done, this is that black waste sand which comes out in large quantities from various foundries situated here. Amol starting studying the content of this resin coated sand which had carbon and resin in it apart from the sand content.

The fever of Ecofriendly products, ecofriendly buildings and like was gaining lots of momentum and thus Amol, who was bitten by this ecofriendly germ decided to go ahead with his idea of, manufacturing ecofriendly bricks, bricks without cement in it, made up of foundry waste

like sand, fly ash, lime, greet etc. He started taking some trials on the sand. Amol discussed his idea of ecofriendly bricks to one of his friend, Mr. Laxmanrao Jadhav from Kolhapur, who was the owner of Prathibha Constructions. Mr. Jadhav appreciated the idea and assured Amol that he would buy these brick for his new construction project which was to be started in next 3 to 4 months in Kolhapur. Mr. Jadhav also wanted to take the advantage of the concept of green building which was catching everybody's attention. The assurance from Jadhav added fuel to Amol passion and he started with the trials and collection of required resources and equipments to bring his dreams into reality.

Amol's brother Amey, a B.Sc. graduate was working as a marketing manager at a publication house, named 'kaalnirnay' in Pune, he was quite settled there, when suddenly some dispute arose among the two partners of the firm and for reasons unknown he had to leave the job. He left his job and come back to Kolhapur dejected. Amol thought that Amey could be a supportive hand in his entrepreneurial venture, his brother, Amey too agreed to the proposal and they started on the entrepreneurial journey.

Resources Accumulation

Now the business idea was there, but resource accumulation had to be done. Both the brothers started working on the machinery required, funds to be raised to procure the machinery, the area of land required for installing the machines for bricks production and other arrangements like labor, raw material and working capital requirement. They started studying with the various types of machines available, and the cost of procuring them. After a good research it was found that they will need around 6 lakhs rupees, this was a big amount for Amol, as he did not have the required fund. Amol decided to go for a bank loan, but it was not easy to get it, lots of formalities and paper work was required to be done. Amol and his brother moved from one bank to another but they were denied, the brothers had no past experience in this field of business and therefore no financial record, like a balance sheet or a cash flow statement to give to the banks. Amol went from pillar to post to get the finance sanctioned; but all in vain, either the rate of interest was very high for them or the bank denied their application due to lack of any business experience in the past. Another problem troubling them was the procurement of land, where they could set up the plant. With a heavy and dejected heart, Amol went to Mr. Laxmanrao Jadhav and told him the situation; Mr. Jadhav was a close friend and his well-wisher. He offered to give him place on his construction site and also offered to take the loan that

Amol required in his personal name, which would obviously be repaid by Amol.

The Trail Period

Amol full of gratitude and positive with his endeavor started with the brick making, which was still in trial and error phase, he was studying on different formulations and incorporating the lessons learnt from the previous errors. Amol being a man in water proofing area had ideas about different formulations. Initially he had to spend his own money; which was around Rs 3.50 lacs. He thought this was leading him towards progression and would show success. Finally, 10,000 bricks were produced with all the ups and downs, trails and errors, research and rectifications; it took a period of six long months to get it done. Now the time had come to test the strength of the bricks, the bricks were taken to KIT government polytechnic in Kolhapur; the bricks were to undergo water absorption test and its strength to be confirmed as per the ISI standards.

To their utter dismay the result came out to be negative and all the 10,000 bricks were a failure, it was a hard blow which could wreak a struggling startup, Amol was very dishearten but he did not deter, he decided to take a short break, and continue with the same spirit and fervor, he coached himself positive that 'this was just a bend and not the end' and stood strong, persistent and determined. Both the brothers thought of giving one more try, they did further research, changed the formulation and went ahead with making the ecofriendly bricks with the new formulation. After all the research, hard work the resultant bricks turned out to be a hit, they showed 5 times better result than what is expected according to ISI standards. Strength, water absorption, bonding, finishing etc. all was as per the standard expected and YES! 100% ecofriendly bricks without using cement were produced. These bricks were made of foundry waste like black sand, lime, greet, fly ash and like.

This trail period tested the duo's never die approach and patience as they had used up Amey's provident fund amount and Amol's savings, which was in the form of gold; to keep going in this tough time. Hushhh!!! Alas the silver lining behind the dark cloud could be seen, their struggle reaped fruits. Good that Amol's water proofing shop was running parallel, which was a source of their bread and butter.

Short Lived Rejoice.

Happily, with a conquered feeling both the brothers reported the success to Mr. Laxman Jadhav and bagged orders for bricks for his three construction projects which

were due to start shortly. Mr. Jadhav's requirement was for approx. 3 lakhs bricks. Now things seem to be falling in place and coming in their stride. The two brothers started with their brick manufacturing work on the site of Mr. Jadhav only. Finally, after all the struggle the required 3 lakh bricks, as per the standard were produced and were being used by Mr. Jadhav. Around 2,75,000 bricks were used when a twist came, due to recession and few other personal reasons of Mr. Jadhav, his constructions were withheld. Now what to do with the remaining 25,000 bricks? A question lingered in their minds, troubling them. After lots of brain storming and debates, the duo decided to sell the bricks in the open market, this was not easy; they did not get any support from the individual customer, builders nor the bankers. They realized that the society only shows lip sympathy, all appreciated their innovative ecofriendly idea, but when it came to actually lending a helpful hand no one came forward. Amol went to Pune, got the certification of ISI standard fulfilled, he tried selling the bricks online; but was not satisfied with the response from the public. The same public who had appreciated Amol for his environment friendly business idea and also gave recognition through publishing his story in newspaper (Maharashtra times June 2014) did not come forward to support him in actual. Amol remembers that after his environment friendly business news was published in the newspaper, The Indian Institute Of Foundryman (IIF), Kolhapur chapter invited Amol to a function to felicitate him and asked him to demonstrate his product, The industrialist gathered there appreciated him and proposed that they will give Amol the black sand of their foundry and in return Amol should give them, free of cost, bricks and other related products that could be manufactured like paver blocks, compound wall bricks, curb stones and blocks for flower beds etc. No one was ready to give him any place to do the production, nor any money. Thus the whole issue ended with the end of the demonstration function itself. In spite of putting all the efforts, finance and struggle Amol did not find the things moving, thus with no option left, he planned to bring his ecofriendly brick business to an end

Beginning of a new venture.

The germ of entrepreneurship in Amol did not allow him to rest, he came up with another similar idea of Manufacturing 'Cellular Lightweight Concrete Block'(CLC), The family members were not happy with his decision to restart something again as they had to bear all the inconvenience and brunt of his earlier failed idea.

Amol's water proofing client, Mr. Milind Gadkari had become his very good friend, he had heard Amol's

struggle and was very moved by it, he offered Amol to use his barren land in Bondre Nagar, Kolhapur If he wanted to venture into manufacturing of CLC blocks. This help added to Amol's entrepreneurial fervor, and he decided to go ahead with his plan; he researched and finally decided to purchase the CLC machine from Coimbatore. By this time, he had created a good rapport with the banks and due to his past business activity, some turnover was also seen in the books of account which helped Amol procure a bank loan for the new machinery, he required Rs 5 lacs for the machine and around six lacs for the moulds. The amount of loan sanctioned by the bank was Rs 5 lac which was not sufficient so he had to make personal arrangements; he sold his car and bought in the amount falling short.

Amol's father was a retired man; he helped in fulfilling the families' basic needs from the pension he received, Amol too had some earning from his water proofing agency. Thus he was a bit relaxed from this side as the family needs of food, clothing and shelter were taken care of. Finally, the machine was purchased, it was year 2014, and Amol got started again, he had orders for CLC blocks from few of his water proofing customers, architects, contractors and procured some orders from his marketing effort. Things went on fine for around 3 years with normal ups and down inheritant in any business.

Change is only thing which is Constant

Technology is bringing sweeping changes in all areas, be it our life or business and one has to accept it for survival. In Amol's business too, a new updated version of CLC machinery came called as AAC (Auto Claved Aerated Concrete Block), whose investment was 2.5 crores. New AAC blocks had the merit over cellular light weight blocks as it required reduced steel in the structure, easy to install with less usage of cement and sand thereby time taken to do the work reduces. Accepting this technology was again a challenge for Amol as new investment, new struggle for raising the resources. Thus another blow awaiting for Amol to tackle.

It was around year 2016, the whole of his entrepreneurial journey was very bumpy, the family was also stressed and not ready to support Amol anymore, and also blamed Amol for involving his brother too in his business and not allowing him to earn his own, both the brothers thought on the family allegations and finally it was decided that they will separate, Amey planned to start a Café shop as he had a liking for it, again Mr. Milind Gadkari came to the brothers help by giving his shop on rent which was in Nagala Park, a busy and well known area close to a famous college, Amey started a snacks and café shop, as

it was in demand in that area, the brothers got a whole readymade second hand setup required for the cafe and hired a chef initially. This new venture was supported by their father who withdrew his fixed deposit amount of Rs 3 lacs and gave them. Amol decided to sell the Cellular Lightweight concrete (CLC) Block machine and clear the bank loan and other sundry debts.

Amol's water proofing agency is still going on and is a great support in helping him meet the two ends. His entrepreneurial germ does not make him sit quietly and now he planned to get a garlic peeling machine. There are lot many hotels and Tiffin services in Kolhapur, garlic peeling in a time consuming job, he found out that these hotel owners are ready to buy the peeled garlic and here he gets a profit margin of around 20%. This idea struck him as they too have come in food products after his brother started the café. After some market research Amol came up with the idea of buying this machine, and alas a garlic peeler costing Rs 3.50 lacs was bought from Pune. The land used is of Mr. Milind only. Now things have settled and Amol is going slow but steady on this entrepreneurial journey. He has hired 6 employees, thus a small contribution towards employment generation too. He has a future plan to go for a Garlic dehydration plant and also start with making and selling garlic paste.

Amol still has in mind his unfulfilled dream of ecofriendly bricks and feels that society should have supported him.

Tips by Amol to the startup entrepreneurs

- Put all your energy into your idea, give quality time and love what you do.
- Learn as quickly as you can.
- Be a creative thinker.
- Believe in yourself.
- Find a great mentor.
- Keep going, you need to be persistent.
- Enjoy the journey of life and be patient as success does not happen overnight.
- Never give up on a dream just because of the time it will take to accomplish it.
- Take responsibility.
- Trust your instincts and act on it.

Let me end with a quotation from Chumak: *“I have this dream and I want to see it come true. And I will not give up. To achieve a goal, you have got to be a gambler, you have got to be certain you can do it. As soon as you start hesitating, doubting yourself, you'd better just give up. I*

am always sure of myself and people. I am sure we'll make it”.

Task:

1. As a startup, what lessons could you learn from Amol's experience
2. Plan a suitable strategy for Amol's business to flourish further in future.

References

- Badal S and Streur J (2012) Gallup Business Journal 'What Drives Entrepreneurs to Win' <http://businessjournal.gallup.com/content/156956/drives-entrepreneurs-win.aspx#2>
- Cohen B (2005) Sustainable Valley Entrepreneurial Ecosystem Business Strategy and Environment. Published online in Wiley Inter Science
- Desai V (1983): Problems and Prospects of Small Scale Industries in India, Himalaya Publishing House, Bombay
- Isenberg D (2011) 'The Entrepreneurship Ecosystem Strategy as a New Paradigm for Economic Policy: Principles for Cultivating Entrepreneurship'. (BEEP) The Babson Entrepreneurship Ecosystem Project at the Institute of International and European Affairs, Dublin, Ireland.
- Lingelbach D, Lynda D, Paul A (2005) 'what's Distinctive About Growth-Oriented Entrepreneurship In Developing Countries?' UTSA College of Business Center for Global Entrepreneurship Working Paper No. 1 (<http://ssrn.com/abstract=742605>)
- Lee, Peterson, Suzanne J (2000), culture, entrepreneurial orientation and global competitiveness. Journal of World Business, 35 (4).
- Paulose A (2011) in his doctoral thesis 'Motivation to become entrepreneurs: The case of Indian immigrants to New Zealand' Unitec New Zealand.
- Timmons, J.A. (1989), The Entrepreneurial Mind, Andover, Mass., Brick House Publishing
- Entrepreneur Magazine (2009), http://www.entrepreneur.com/mag/articles.economicstimes.indiatimes.com/2015-05-10/news/62001445_1_behaviour-entrepreneurs-traits
- <http://www.theskillsportal.com/small-business/entrepreneurs/780-creating-an-entrepreneurial-ecosystem.html> (www.allangrayorbis.org)

A Book Review On “Data Warehousing, Data Mining, & OLAP”

Author: Alex Berson & Stephen J. Smith

Publisher: McGraw Hill Education

P-ISBN: 978-0-07-058741-0

Year of Publication: 39th reprint 2019, Edition 2004

Price: 684 INR

Palak Gupta*

In today's business scenario when every piece of data varies from structured to semi-structured, from databases to cloud, from physical to virtual, from stand alone to client server, the key to success is management driven by metrics for achieving strategies, goals and targets. For quick, effective and correct decision making and gaining good competitive intelligence, companies need extensive business intelligence, data analytics, predictive analytics and support and data visualization and so technologies like Data Warehousing, Cloud, Data Mining, OLAP, web architecture, Big Data and advance analytical tools like SAS, R, Python, Teradata etc. are required. The book “Data Warehousing, Data Mining, & OLAP” by Alex Berson & Stephen J. Smith is an informative book that describes how Data Warehousing, Data Mining & OLAP are important for business perspectives. The book revolves around three main pillars of Business Intelligence and Business Performance Management-Data Warehousing, Data Mining and Online Analytical Processing. Data Warehouse (DW) is a huge repository of past databases of a corporate which may be scrubbed, summarized, subject-related, and non volatile. It is made from both internal and external sources full of structured and semi-structured data which are consistent and uniform. It helps in decision making from data that is related to time frame, subject matter, and need. Data Marts are simpler, cheap and smaller subset of data warehouse created and maintained department wise either as independent multiple data marts which are difficult to integrate or as a replicated functional subset of warehouse. Data Marts when combined give Data Warehouse.

Data Mining (DM) is a blend of statistical, machine-learning, intelligent and mathematical agents that mine unknown query results from Data Warehouse. They help in finding new facts of past that are used not only in present but also in future decision making process.

Online Analytical & Processing (OLAP) are end user's activities performed on online systems. It is unrestricted, precise query generation through SQL, Decision Support System applications, statistics, data models, ad hoc reports and visualization summaries. It helps Data Warehouse analysts, knowledge workers, managers and decision makers in data analysis.

The book is divided into five elaborate parts. Part 1 covers Foundation Basics of Data Warehouse and how it is mapped with client server model, massive parallel processing, and distributed DBMS. Part 2 starts with detailed discussions on Data Warehouse components, its technical aspects and Extract Transform Load (ETL). Different schema designs, indexes and RDBMS scalability are well explained with figures and tables. In Part 3, Business Analysis is covered explaining how Reporting and Query tools, Online Analytical Processing, Artificial Intelligence and Statistics are used in business decisions for instant, real time and simple summaries of complex and voluminous data. Part 4 focuses on Data Mining, its use on Data Warehouse and its varied techniques like neural networks, decision trees, clustering, genetic algorithm and rule induction. Part 5 deals with data visualization and future prospects of DW, DM and OLAP. I believe that this book will be very helpful for one to gain knowledge on DW, DM & OLAP from its fundamental concepts to in-depth architecture and functioning. To gain better competitive intelligence. This book can be used by students, corporate professionals or academicians The book is very well structured as a self-teaching guide.

* Assistant Professor, Jagannath International Management School, Kalkaji, New Delhi

Jagannath International Management School

Vasant Kunj, New Delhi

presents



Radio JIMS Vasant Kunj 90.4 MHz

Voice of The Voiceless

Jagan Institute of Management Studies

Rohini, Delhi

Presents



JIMS Rohini Community Radio 96.9 MHz

This radio is being run by the students and is providing an opportunity to develop programmes for community broadcast. The radio station is used by the college as laboratory for training students specializing in radio broadcast and they work in close coordination with community representatives and leaders. At present the radio broadcasts daily for eight hours with original programme of four hours in morning which is repeated in the afternoon. The students are encouraged to explore the needs of the society, thereafter, they conceive, design and broadcast their own programmes in a real life environment.

{ **Nurturing talent** **Re-defining excellence** **Setting new standards...** }



JIMS creating the future!

Jagan Nath Gupta Memorial Educational Society was established in 1993 to develop & train the next generation of professionals who would contribute towards the economic and social development of our country. The delivery standards, thus have been ensured to provide an inspiring learning environment which helps in transforming learning minds into result oriented professionals.

Commitment to the cause of education

An infrastructure of around 10,00,000 sq. feet spread over 9 State-of-the-Art campuses, cutting-edge technology, professional guidance, practical training, international placements, ever evolving curriculum, choice of the best available professional courses... that's not all, the thrust is on the realization of your highest aspirations.

Enviably Infrastructure

All campuses are hi-tech, wi-fi enabled with state-of-the-art laboratories, Labs, well-stocked along with complete recreational facilities. The classrooms are equipped with multimedia and audio-visual equipments to facilitate effective learning and are designed to promote maximum interaction between the faculty and the students.

Guru Mantra

One of our biggest strengths is our faculty members, who have distinguished academic achievements to their credit and are actively involved in teaching, training, research, consultancy and a big pool of expert guest faculty, comprising specialists from industry, government and research institutions for ensuring a new edge to corporate learning and striking a balance between theory and practice.

Academic Programmes*

The academic programmes are specifically designed keeping in mind the current Indian economic scenario and the requisite corporate needs that expose the students to concepts, techniques and decision-making tools through an interactive learning process.

The courses are offered at various post graduate and under graduate levels at various campuses according to the needs of the aspirant at large:

Management	Commerce	Engineering
Information Technology	Journalism (Mass Comm.)	Hotel Management
Art & Design	Architecture	Law

*Select programmes offered at select campuses

Great Corporate Exposure

An excellent learning environment is ensured at all times to display superior leadership qualities along with a value driven mindset and sharp intellectual acumen by way of constant interaction with industry professionals through summer internships, industry visits, guest lectures, seminars, mock interviews, pre-placement talks, campus interviews.

Mentoring and Personal Enhancement

To prepare and equip students with requisite skills to face the corporate world, Personality Development sessions are organised to help build self-awareness and develop a positive attitude amongst students to cope with time and stress issues.

For further information contact:

Delhi: ROHINI 45184100 www.jimsindia.org **KALKAJI** 40619200 www.jagannath.org **VASANT KUNJ** 40619300 www.jimsd.org **LAJPAT NAGAR** 49219191 www.jimssouthdelhi.com

Rajasthan: JAIPUR 0141-4071551/52/52 www.jimsjaipur.org **SITAPURA** 0141-4071500/555 www.jnit.org **Uttar Pradesh:** GREATER NOIDA 0120-3819700 www.jimsgn.org

Haryana: BAHADURGARH 0127-699700-715 www.jagannathuniversityncr.ac.in