

CPJ Global Review

A National Journal of CPJ-CHS & School of Law

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**Chanderprabhu Jain College of
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CHANDERPRABHU JAIN COLLEGE OF HIGHER STUDIES & SCHOOL OF LAW

(Approved by Govt. of NCT of Delhi and Affiliated to G.G.S.I.P. University)

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CPJ GLOBAL REVIEW

CPJ GLOBAL REVIEW is an academic Journal that brings together all the academicians and corporate to provide an insight of management thinking, empirical research studies and management practices around the globe. This National Journal is devoted to disseminate findings from research work and exploration of original ideas concerning Business, Management and Technology.

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EDITORIAL

We are delighted to present to our revered readers the IXth issue of our annual Journal CPJ Global Review. This Journal has strived hard to maintain high academic standards and also periodicity of its annual production. It is dedicated to the dissemination of ideas and concepts of modern day Management, IT and Commerce for stimulating academic fervor and knowledge encouraging applied and theme based research.

We believe that journey to acquire knowledge is never ending and the path is not easy too. The CPJ Global Review provides a conduit between knowledge seekers and who have knowledge thereby making the path a bit easier. The Journal has created a niche for itself as is evidenced by eagerness of reputed academicians, researchers and industry professionals across the country to contribute the articles written by them for publication in our Journal CPJ Global Review.

This Journal is an acclaimed platform and inspires the young academicians and researchers and motivates them for disseminating their research papers, articles, literature review, case studies and book reviews etc. It gives us immense pleasure to present before you the current issue of **CPJ Global Review Vol. IX, Issue-1, July-2017** which covers diverse articles and research papers focusing a plethora of topics. All the papers open up new dimensions of research in the identified latest areas such as, Assessment of Utilization of Technical & Professional HR, Foreign Direct Investment, Identification of different stages of Diabetic Retinopathy, Overview of JIT tools, Enhancing Competitiveness & Ensuring Sustainable Business Growth through Innovative Strategy, Psychological Harassment at workplace, Journey of Royal Enfield from dusk to dawn along with various Strategies adopted, Psychological Capital and Employee Commitment, Role of FDI in Banking Sector, Employability & Salary Structure, How Indian Emerging brand will go Global, You Tube Curative Platform, Demonetization, Significant Role of Data Mining in Finance & Banking Sector, A Study of Total Quality Management in SBI and ICICI Bank with emphasis on Lucknow Region.

We are thankful to all members of Editorial Advisory Committee and our Editorial Board Members, learned reviewers and outstanding contributors for their continuous and incredible support in bringing out this issue successfully.

Finally on behalf of editorial board, I wish to express my sincere gratitude to all contributors/ authors for sharing their valuable ideas and findings with us. Further, we wish to encourage more contributions from academicians, professionals and industry practioners to ensure a continued success of the Journal. Authors, reviewers and guest editors are always welcome.

We hope that this present edition of CPJ Global Review with all its illuminating features will serve the intended purpose and will be of immense use for researchers and our revered readers. Your opinion is highly solicited for the continuous growth of the Journal.

Prof. J.P. Mohla
(Chief Editor)

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ASSESSMENT OF UTILIZATION OF TECHNICAL AND PROFESSIONAL HUMAN RESOURCE ACCORDING TO THEIR QUALIFICATION LEVELS – A CASE STUDY OF DELHI

S. K. Yadav* Anita Nihaliya**

ABSTRACT:

Technical education is very much on the agenda of the government of India under the popular flagship programme mission Skill India. Quantitatively India has made in road successfully in establishment of new technical institutions/ colleges/universities in government as well as private sector. But majority of pass outs from these institutions are not up to mark qualitatively or not acceptable to employing industries. Quality of technical education has to be improved to make the pass outs employable to the industries. Continuous studies should be undertaken to assess the quality of pass outs. Quality of pass outs may be assessed through utilization of pass outs from technical institutions. Earlier National Technical Manpower Information System (NTMIS) under Institute of Applied Manpower Institute (IAMR) sponsored by All India Council of Technical education (AICTE) was conducting such studies regularly on annual continuous basis. The present paper has made an effort to assess of Utilization of Technical Professional pass outs working in industries in Delhi. A tracer survey was conducted among the recently pass outs. Some of the broad findings of the paper are: Majority of Technical Professional pass outs were in regular employment and working in private sector and took minimum time to get their first employment (less than three months). Highest percent of Technical Professional pass outs got their first employment through newspaper/print media, getting monthly emoluments in the range of Rs. 20,001-40,000 and employed in large size establishments. They were performing main functions such as production, repair and maintenance, logistics, stores, HRD, finance and administration

KEY WORDS: *Technical Education, Employment, Quality, Qualification, Utilisation*

INTRODUCTION

In recent years especially during last decade technical education has become the main focus of government of India as well as State Governments. Government of India during last 10-15 years made lot of serious efforts in expansion of technical education by opening new institutions in government sector as well as in private sector. All India Council of Technical education (AICTE) has also been strengthened to expand technical education in India quantitatively and qualitatively. The responsibility was entrusted to AICTE to regulate and monitor the technical educational institutions in India at degree and diploma level.

The present National Democratic Alliance (NDA) central government headed by Shri Narendra Modi has been specially focusing on technical education including

Engineering, Management, Architecture & Town Planning, Pharmacy, Hotel Management & Catering Technology through its Skill India Mission and Pradhan Mantri Kaushal Vikas Yojana. Skill India is one of the important flagship programmes of the present government. Government of India has planned to open Indian Institute of Technology (IIT), National Institute of Technology (NIT), Indian Institute of Management (IIM) and Institute of Hotel Management (IHM) at least one in each state to enhance quality technical education in India. Due to this policy, majority of states presently have IIT, NIT, IHM and IIMs. Remaining states will be soon getting IIT, NIT, IHM and IIMs. In recent years we have been witnessing mushrooming growth of private technical institutions such as universities and colleges etc. These institutes are more than their actual requirement. As resultant, lot of seats in these colleges in many states is lying vacant and they do not find candidates for admission.

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Note: The views expressed in the paper are of authors not institutions they belong

Institutions providing qualitative education are in actual demand. Quantitatively we have reached at saturation level but qualitatively we have to improve a lot. Quality of institutions in respect to technical education has to be improved so as to improve the employability level of pass outs. This is a very serious question and it has to be seriously addressed. Either the institution provides quality education or it should be close down. Institutions will not be allowed to play with the future of students. Substandard pass outs technical professionals are no more demanded by industrial and service establishments. This question has been raising at many forums occasionally from time to time by industrial and service establishments and their associations, government, academia and policy makers. According to the third edition of the National Employability Report that there was a huge gap in skills of engineers, as needed, to work in large industry, less than 8 percent Indian engineers fit for core engineering role (Economic Times, 2016)¹.

AICTE in its wisdom put many inputs to improve the quality of technical educational institutions within its jurisdiction. AICTE run programme for faculty development and institution building for improvement of the quality of teaching staff. Quality of technical institutions depends upon many factors such as quality faculty, infrastructure, laboratories, R&D facilities networking with industrial establishments etc. All these play an important role in quality improvement. According to latest reports available in order to improve the quality of engineers, AICTE has decided to cut down the seats available in India by 40 percent which is approximately 6 lakhs (India Times, 2016)².

To monitor the quality of institutions National Assessment and Accreditation Council (NAAC) was set up with its headquarter at Bengaluru. NAAC assess the quality of institutions based on specific indicators and grading the institutions. NAAC conducts inspection of institutions and prepare the reports on quality of institutions and provide them with grade. In addition to NAAC, some specific studies have been conducted from time to time. Some studies on quality aspects were conducted by then National Technical Manpower Information System (NTMIS), lead centre at National Institute of Labour Economics Research and Development (NILERD) erstwhile Institute of Applied Manpower Institute (IAMR) with its 16 Nodal Centers all over India funded by AICTE, Government of India, Ministry of Human Resources

Development, New Delhi. NTMIS conducted studies on demand and supply of technical professionals as well as utilization of professionals through establishment surveys and tracer studies of pass outs. NTMIS also prepared and published reports on Employment Scenario of recently pass outs Graduate and Diploma Engineers, Management, Pharmacy, Architecture & Town Planning and Hotel Management & Catering Technology professionals in India. Last report was published in 2010 of 2007 pass out batch of engineering degree holders. But NTMIS now has become history after celebration of its silver jubilee as AICTE decided to wind up the project. According to the study conducted by NTMIS on Graduate Engineers of 2007 pass out batch that average period calculated to be 5 months for getting first employment. On an average a fresh Graduate Engineer earns monthly emoluments of Rs. 16,094. Nearly 85 percent of employed engineers were working in their own field in their current job. Lowest percent of employed engineers were employed in small establishments (Yadav and Shukla, 2010)³.

In view of above background, it is imperative that such type of studies may be conducted from time to time which reflects the quality aspects of technical professionals. Utilization of engineers has several dimensions such as sector and field of employment, rates of unemployment, primary activities and mobility (NAP, 1985)⁴. In this series Institute of Applied Manpower Institute (IAMR) renamed as National Institute of Labour Economics Research and Development (NILERD) conducted a sample survey of industrial and service establishments in 2013 in Delhi in which technical professionals are employed as a pilot project to set up National Information System for Technical Human Resource (NISTECHR). The sample survey was conducted among 239 establishments in Delhi. Sample establishments were chosen from central and state government and private establishments mainly from manufacturing, communication, construction, trade & hotels, education and public services etc. Size of the establishment was also considered as one of the criteria for selection of establishments for sample survey.

In the same establishments tracer survey was also conducted simultaneously to study the utilization of all type of technical professionals those who passed out recently during last five years. The establishment and tracer survey was conducted through a set of structured questionnaire. The questionnaire was canvassed among selected establishments and technical professionals.

Since the area of utilization of technical pass outs is very much pertinent and important for technical education planners and policy makers in government, in view of this the present paper is an attempt to assess the utilization of technical professionals passed outs recently.

OBJECTIVE OF THE PAPER

The paper has been prepared with the sole objective to assess the utilization of technical and professional human resource according to their qualification level passed outs recently in Delhi.

RESEARCH METHODOLOGY

IAMR conducted a sample survey in 2013 for setting up NISTECHR among 239 industrial and services establishments and tracer survey of 268 technical professionals in the same establishments which includes 164 Engineering, 6 Architecture and Town Planning, 70 Management, 8 Pharmacy and 20 Hotel Management & Catering Technology professionals passed outs recently. The survey was conducted in Delhi on pilot basis. The survey was conducted through a structured questionnaire in the selected establishments and tracer survey among passed outs working in the same establishments. The data collected through this survey has been used and analyzed to prepare this paper and derive conclusions.

UTILIZATION OF TECHNICAL AND PROFESSIONAL HUMAN RESOURCE

Utilization of Technical and Professional human resource has been analyzed mainly in terms of functions performed, place of work, emoluments, Size and main activity of establishments where working, source of getting first employment, sector and nature of employment and time taken for getting first employment. Details of these items will be discussed as under:

AREA OF RESIDENCE

Analyses of data indicate that majority of Technical and Professional human resource recently passed outs and employed were residing in urban area (80.60 percent) and remaining only 19.40 percent were residing in rural area. Qualification wise analyses observed that out of 12 PhD degree holders, 10 (83.33 percent) were residing in urban area while two (16.67 percent) were residing in rural

area. Out of 95 Post Graduate Degree holders, 81 (85.26 percent) were residing in urban area and remaining 14 (14.74 percent) were residing in rural area. Out of 12 Post Graduate Diploma holders, majority of them i.e. 8 (66.67 percent) were residing in urban area while remaining 4 (33.33 percent) were residing in rural area. Out of 96 Graduate technical Degree holder Professionals, majority of them i.e. 80.21 percent were living in urban area while remaining 19.79 percent were living in rural area. Same is the case in Diploma holders in which out of 53 Diploma holders, 75.47 percent were residing in urban area while 25.53 percent were residing in rural area. Overall qualification wise analyses indicate that out of total 268 technical professionals, highest 96 (35.82 percent) were Graduates followed by Post Graduates i.e. 95 (35.45 percent) and Diploma holders 53 (19.77 percent). Out of total surveyed 216 technical Professionals residing in urban area, highest 81 (25.26 percent) were Post Graduates followed by Graduates 77 (35.65 percent) and Diploma holders 40 (18.52 percent) (Table 1).

PLACE OF WORK

Study indicates that out of 268 respondents, 86.94 percent were working in urban area and remaining 13.06 percent were working in rural area. Qualifications wise analyses indicate that out of 12 PhD degree holders 9 (75.00 percent) were working in urban area. Out of 95 Post Graduate Degree holders 86.32 percent (82) were found working in urban area and 13.68 percent (13) were working in rural area. Out of 12 Post Graduate Diploma holders, 83.33 percent (10) were working in urban area while 16.67 percent were residing in rural area. Out of 96 Graduate Degree holders, 85.42 percent (82) were working in urban area. Out of total 53 Diploma holders, 94.34 percent (50) were also working in urban area and remaining 5.66 percent (3) were working in rural area. Analyses of data concluded that majority of pass outs in all qualifications were working in urban area. A small fraction of pass outs were working rural area (Table 1).

Table 1: DISTRIBUTION OF TECHNICAL AND PROFESSIONAL HUMAN RESOURCE BY QUALIFICATION LEVEL ACCORDING TO PLACE OF WORK AND AREA OF RESIDENCE IN VARIOUS ESTABLISHMENTS OF DELHI

S.No.	Qualification Level	Place of Work			Area of Residence		
		Rural	Urban	Total	Rural	Urban	Total
1	PhD	3 (25.00) [8.57]	9 (75.00) [3.87]	12 (100.00) [4.48]	2 (16.67) [3.85]	10 (83.33) [4.63]	12 (100.00) [4.48]
2	Post-Graduate	13 (13.68) [37.14]	82 (86.32) [35.19]	95 (100.00) [35.45]	14 (14.74) [26.92]	81 (85.26) [37.50]	95 (100.00) [35.45]
3	Post-Graduate Diploma	2 (16.67) [5.71]	10 (83.33) [4.29]	12 (100.00) [4.48]	4 (33.33) [7.69]	8 (66.67) [3.70]	12 (100.00) [4.48]
4	Graduate	14 (14.58) [40.00]	82 (85.42) [35.19]	96 (100.00) [35.82]	19 (19.79) [36.54]	77 (80.21) [35.65]	96 (100.00) [35.82]
5	Diploma	3 (5.66) [8.58]	50 (94.34) [21.46]	53 (100.00) [19.77]	13 (24.53) [25.00]	40 (75.47) [18.52]	53 (100.00) [19.77]
6	Total	35 (13.06) [100.00]	233 (86.94) [100.00]	268 (100.00) [100.00]	52 (19.40) [100.00]	216 (80.60) [100.00]	268 (13.06) [100.00]

Note: 1. () Denotes percentage to Row total
2. [] Denotes percentage to column total

Source: IAMR Survey, 2013

MAIN ACTIVITY OF ESTABLISHMENTS

Analyses of data revealed that out of 12 PhD degree holders, 11(91.67 percent) were found employed/engaged in Educational establishments only one was employed in Post & Telecommunication establishment. Out of 95 Post Graduate Degree holders, highest 63 (66.32 percent) were employed in Educational establishments followed by Manufacturing establishments i.e. 11.58 percent and

Electricity, Gas and Water Supply i.e.7.37 percent. Out of 12 Post Graduate Diploma holders, highest 3 (25.00 percent) were employed in Post & Telecommunication establishments followed by 2 (16.67 percent) in Financial Intermediation establishments and one each employed equally in Manufacturing; Electricity, Gas & Water Supply; Construction: Sale, Maintenance & Repair of

Motor Vehicles; Hotel & Restaurants; Education and Other Activities. Out of 96 Graduate Degree pass outs, highest 19 (19.79 percent) each were employed in Manufacturing and Hotel & Restaurants establishments followed by 14 (14.57 percent) were employed in Educational establishments and 9 (9.38 percent) in Electricity, Gas & Water supply. Out of 53 Diploma pass outs, highest 12 (22.64 percent) each were employed in Education and Transport & Storage establishments followed by 10 (18.87 percent) employed in Sale, Maintenance & Repair of Motor Vehicles, Motorcycles and 6 (11.32 percent) in Health and Social Work.

Over all scenario of all 268 technical pass outs Degree/Diploma holders indicates that highest 101 (37.69 percent)

were employed in Educational establishments followed by 36 (13.43 percent) in Manufacturing establishments and 28 (10.45 percent) in Hotel & Restaurants. Study further observed that no one was employed in Mining & Quarry and Wholesale Trade establishments. 20 (7.46 percent) were engaged in Sale, Maintenance & Repair of Motor Vehicles, Motorcycles, 18 (6.72 percent) were employed in Electricity, Gas & Water supply, 16 (5.97 percent) in Transport and Storage and 9 (3.36 percent) were employed in Other Activities while 7 (2.61 percent) each in Construction, Post and Telecommunications and Financial Intermediation, 6 (2.24 percent) were engaged in Other Community, Social and Personal Services activities and 2 (0.75 percent) were in Real Estate & Renting Business (Table 2).

TABLE 2: DISTRIBUTION OF TECHNICAL AND PROFESSIONAL HUMAN RESOURCE BY QUALIFICATION LEVEL AND MAIN ACTIVITY OF ESTABLISHMENTS WHERE EMPLOYED

S.No.	Main Activity	Qualification Level					
		PhD	Post-Graduate	Post-Graduate Diploma	Graduate	Diploma	Total
1	Manufacturing	0 (0.00) [0.00]	11 (30.56) [11.58]	1 (2.77) [8.33]	19 (52.78) [19.79]	5 (13.89) [9.43]	36 (100.00) [13.43]
2	Electricity, Gas and Water Supply	0 (0.00) [0.00]	7 (38.88) [7.37]	1 (5.56) [8.33]	9 (50.00) [9.38]	1 (5.56) [1.89]	18 (100.00) [6.72]
3	Construction	0 (0.00) [0.00]	1 (14.29) [1.05]	1 (14.29) [8.33]	4 (57.14) [4.17]	1 (14.28) [1.89]	7 (100.00) [2.61]
4	Sale, Maintenance & Repair of Motor Vehicles, Motorcycles	0 (0.00) [0.00]	1 (5.00) [1.05]	1 (5.00) [8.33]	8 (40.00) [8.33]	10 (50.00) [18.87]	20 (100.00) [7.46]
5	Retail Trade	0 (0.00) [0.00]	1 (100.00) [1.05]	0 (0.00) [0.00]	0 (0.00) [0.00]	0 (0.00) [0.00]	1 (100.00) [0.37]

6	Hotel & Restaurants	0 (0.00) [0.00]	5 (17.86) [5.26]	1 (3.57) [8.33]	19 (67.86) [19.79]	3 (10.71) [5.66]	28 (100.00) [10.45]
7	Transport & Storage	0 (0.00) [0.00]	1 (6.25) [1.05]	0 (0.00) [0.00]	3 (18.75) [3.13]	12 (75.00) [22.64]	16 (100.00) [5.97]
8	Post & Telecommunications	1 (14.29) [8.33]	1 (14.28) [1.05]	3 (42.86) [25.00]	1 (14.29) [1.04]	1 (14.28) [1.89]	7 (100.00) [2.61]
9	Financial Intermediation	0 (0.00) [0.00]	2 (28.57) [2.11]	2 (28.57) [16.67]	3 (42.86) [3.13]	0 (0.00) [0.00]	7 (100.00) [2.61]
10	Real Estate & Renting Business	0 (0.00) [0.00]	0 (0.00) [0.00]	0 (0.00) [0.00]	2 (100.00) [2.08]	0 (0.00) [0.00]	2 (100.00) [0.75]
11	Public Administration and Defence; Compulsory Social Security	0 (0.00)	0 (0.00) [0.00]	0 (0.00) [0.00]	1 (100.00) [1.04]	0 (0.00) [0.00]	1 (100.00) [0.37]
12	Education	11 (10.89) [91.67]	63 (62.38) [66.32]	1 (0.99) [8.33]	14 (13.86) [14.57]	12 (11.88) [22.64]	101 (100.00) [37.69]
13	Health and Social Work	0 (0.00) [0.00]	0 (0.00) [0.00]	0 (0.00) [0.00]	3 (33.33) [3.13]	6 (66.67) [11.32]	9 (100.00) [3.36]
14	Other Community, Social and Personal Service Activities	0 (0.00) [0.00]	0 (0.00) [0.00]	0 (0.00) [0.00]	5 (83.33) [5.21]	1 (16.67) [1.89]	6 (100.00) [2.24]
15	Other Activities	0 (0.00) [0.00]	2 (22.22) [2.11]	1 (11.11) [8.33]	5 (55.56) [5.21]	1 (11.11) [1.89]	9 (100.00) [3.36]

16	Total	12 (4.48) [100.00]	95 (35.45) [100.00]	12 (4.48) [100.00]	96 (35.82) [100.00]	53 (19.77) [100.00]	268 (100.00) [100.00]
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Note: 1. No one was found working in the establishments related to Mining & Quarrying and Wholesale trade

2. () Denotes percentage to Row total
3. [] Denotes percentage to column total

Source: IAMR Survey, 2013

EMPLOYMENT SIZE OF EMPLOYING ESTABLISHMENTS

Analyses of data indicates that out of 12 PhD degree holders, highest 7 (58.33 percent) employed in 51-100 employees class size of establishments followed by 2 (16.67 percent) each employed in 10-50 and more than 500 employees class size of establishments. Out of 95 Post Graduates, highest 37 (38.95 percent) were employed in 101-500 employees size establishments followed by 23 (24.21 percent) employed in more than 500 employees size establishments and 20 (21.05 percent) employed in 51-100 employees size establishments. Out of 12 Post Graduate Diploma holders, highest 4 (33.33 percent) were employed in 101-500 employees size establishments followed by 3 (25.00 percent) each were employed in 51-100 employees size establishments and more than 500 employees. Technical Graduate pass outs were employed highest 37 (38.55 percent) in 101-500 employees size establishments followed by 33 (34.37 percent) were employed in more than 500 employees size establishments and 20 (20.82 percent) were employed in 51-100 employees establishments. Out of 53 Diploma holders, highest 20 (37.74 percent) were employed in more than 500 employees size establishments followed by 19 (35.85 percent) employed in 101-500 employees size establishments and 11 (20.75 percent) employed in 51-100 employees size establishments.

Study observed that out of 268 sample surveyed technical professional recently pass outs, highest 98 (36.57 percent) were employed in 101- 500 employees size establishments followed by 81 (30.22 percent) employed in more than 500 employees size establishments and 61 (22.76 percent) employed in 51-100 employees size establishments. Only 28 (10.45 percent) were employed in 1-50 employees size establishments (Table 3).

NATURE OF EMPLOYMENT

Out of 268 technical professionals, majority of them, 203 (75.75 percent) were in regular employment followed by 43 (16.04 percent) on contractual/ ad hoc appointments and 15 (5.60 percent) were working on temporary nature of jobs.

Only remaining 7 (2.61 percent) were in other types of jobs which are not specified. Qualification wise analyses indicate that out of 12 PhDs 9 (75.00 percent) were holding regular employment/position while 2 (16.67 percent) was in temporary position. Vast majority of Post Graduates i.e. 81 (85.26 percent) were in regular position followed by 7 (7.37 percent) were on contract appointments and 3 (3.16 percent) were in temporary position. Out of 12 Post Graduate Diploma holders, 9 (75.00 percent) were holding regular positions while 2 (16.67 percent) were on contractual appointment. Majority of Graduate Degree holders i.e. 75 (78.12 percent) were holding regular position in employment followed by 14 (14.58 percent) were contractual appointees and 5 (5.21 percent) were temporary appointees. Out of 53 Diploma holders, 29 (54.72 percent) were in regular employment followed by 19 (35.85 percent) were on contractual appointment and (9.43 percent) were temporary appointees (Table 4).

SECTOR OF EMPLOYMENT

Analyses of data indicates that out of 268 sample surveyed technical professionals, majority of them i.e. 193 (72.01 percent) got employment in private sector followed by 37 (13.81 percent) in central government and 18 (6.72 percent) in state government. 20 (7.46 percent) got employment in other sectors not specified in the table. Qualification wise analyses indicate that out of 12 PhDs and 10 (83.33 percent) got employment in private

sector and 2 (16.67 percent) were employed in central government. Out of 95 Post Graduates, majority of them i.e. 77 (81.05 percent) were in private sector followed by 7 (7.37 percent) in state government and 6 (6.32 percent) in central government. 5 (5.26 percent) got employment in other sectors of employment. Among 96 Graduate Degree holders, highest 62 (64.58 percent) got employment in private sector followed by 18 (18.75 percent) in central government and 12 (12.50 percent) in other sectors of employment. Only 4 (4.17 percent) were employed in state government establishments. Out of 53 Diploma holders, highest 35 (66.04 percent) were employed in private sector followed by 9 (24.98 percent) in central government and 7 (13.21 percent) in state government (Table 5).

EMOLUMENTS

As regards the monthly emoluments received by the technical professionals, out of 268 surveyed professionals, highest 91 (33.96 percent) were getting monthly emoluments in the range of Rs. 20,001-40,000 followed by 74 (27.61 percent) in the range of Rs. 10,001-20,000 and 46 (17.16 percent) in the range of Rs. 40,001-60,000. 40 pass outs (14.93 percent) were getting monthly emoluments in the range of Rs. 5,001-10,000 and 15 (5.59 percent) were getting above Rs. 60,000. Only two were getting monthly emoluments less than Rs. 5000. Qualification wise analyses of data indicates that out of 12 PhDs, 6 (50.00 percent) were getting monthly emoluments in the range of Rs. 40,001-60,000 followed by 3 (25.00 percent) were getting in the range of Rs. 60,001 and above. One (8.33 percent) was getting monthly emoluments in the range of Rs. 10,001-20,000. Out of 95 Post Graduates, highest 43 (45.26 percent) were getting monthly emoluments in the range of Rs. 20,001-40,000 followed by 25 (26.32 percent) in the range of Rs. 40,001-60,000 and 20 (21.05 percent) in the range of Rs. 10,001-20,000. Surprisingly, 3 (3.16 percent) each were getting monthly emoluments more than Rs. 60,000 and Rs. 5,001-10,000. Only one Post Graduate was getting less than Rs. 5000. Among 12 Post Graduate Diploma holders, one was getting monthly salary more than Rs. 60,000. 4 (33.33 percent) each were getting monthly emoluments in range of Rs. 20,001-40,000 and Rs. 10,001-20,000 and 3 (25.00 percent) were getting in range of Rs. 5,001-10,000.

Among Graduate Degree holders, highest, 26 (27.08 percent) were getting monthly emoluments in the range of Rs. 10,001-20,000 followed by 24 (25.00 percent)

in the range of Rs. 20,001-40,000 and 22 (22.91 percent) in the range of Rs. 5,001-10,000. While one Graduate pass out was getting less than Rs. 5000. Moreover, 14 (14.58 percent) were getting monthly emoluments in the range of Rs. 40,001-60,000 and 9 (15.53 percent) were getting more than Rs. 60,000. Out of 53 Diploma holders, highest 23 (43.40 percent) were getting monthly emoluments in the range of Rs. 10,001-20,000 followed by 17 (32.07 percent) were getting monthly emoluments in the range of Rs. 20,001-40,000 and 12 (22.64 percent) were getting in the range of Rs. 5,001-10,000. Analyses of data clearly indicate that PhDs, Post Graduates, Graduates and Post Graduate Diploma holders were getting highest emoluments. Even some Graduate and Post Graduate Degree holders were getting the lowest salary (Table 6).

TABLE 3: DISTRIBUTION OF TECHNICAL AND PROFESSIONAL HUMAN RESOURCE BY QUALIFICATION LEVEL AND EMPLOYMENT SIZE OF ESTABLISHMENTS IN VARIOUS ESTABLISHMENTS OF DELHI

Sl. No.	Qualification Level	Employment Size of Establishment				Total
		10-50	51-100	101-500	More than 500	
1	PhD	2 (16.67) [7.14]	7 (58.33) [11.48]	1 (8.33) [1.02]	2 (16.67) [2.47]	12 (100.00) [4.48]
2	Post-Graduate	15 (15.79) [53.57]	20 (21.05) [32.78]	37 (38.95) [37.76]	23 (24.21) [28.40]	95 (100.00) [35.45]
3	Post-Graduate Diploma	2 (16.67) [7.14]	3 (25.00) [4.92]	4 (33.33) [4.08]	3 (25.00) [3.70]	12 (100.00) [4.48]
4	Graduate	6 (6.25) [21.43]	20 (20.82) [32.79]	37 (38.55) [37.76]	33 (34.37) [40.74]	96 (100.00) [35.82]
5	Diploma	3 (5.66) [10.72]	11 (20.75) [18.03]	19 (35.85) [19.38]	20 (37.74) [24.69]	53 (100.00) [19.77]
6	Total	28 (10.45) [100.00]	61 (22.76) [100.00]	98 (36.57) [100.00]	81 (30.22) [100.00]	268 (100.00) [100.00]

Note: 1. () Denotes percentage to Row total
2. [] Denotes percentage to column total

Source: IAMR Survey, 2013

TABLE 4: DISTRIBUTION OF TECHNICAL AND PROFESSIONAL HUMAN RESOURCE BY QUALIFICATION LEVEL AND NATURE OF EMPLOYMENT

Sl. No.	Qualification Level	Nature of Employment				Total
		Regular	Temporary	Contractual / Ad-hoc	Any Other	
1	PhD	9 (75.00) [4.43]	2 (16.67) [13.33]	1 (8.33) [2.33]	0 (0.00) [0.00]	12 (100.00) [4.48]
2	Post-Graduate	81 (85.26) [39.90]	3 (3.16) [20.00]	7 (7.37) [16.28]	4 (4.21) [57.14]	95 (100.00) [35.45]
3	Post-Graduate Diploma	9 (75.00) [4.43]	0 (0.00) [0.00]	2 (16.67) [4.65]	1 (8.33) [14.29]	12 (100.00) [4.48]
4	Graduate	75 (78.12) [36.95]	5 (5.21) [33.33]	14 (14.58) [32.56]	2 (2.08) [28.57]	96 (100.00) [35.82]
5	Diploma	29 (54.72) [14.29]	5 (9.43) [33.34]	19 (35.85) [44.18]	0 (0.00) [0.00]	53 (100.00) [19.77]
6	Total	203 (75.75) [100.00]	15 (5.60) [100.00]	43 (16.04) [100.00]	7 (2.61) [100.00]	268 (100.00) [100.00]

Note: 1. () Denotes percentage to Row total
2. [] Denotes percentage to column total

Source: IAMR Survey, 2013

TABLE 5: DISTRIBUTION OF TECHNICAL AND PROFESSIONAL HUMAN RESOURCE BY QUALIFICATION LEVEL AND SECTOR OF EMPLOYMENT

Sl. No.	Qualification Level	Sector of Employment				Total
		Central Govt.	State Govt.	Private	Others	
1	PhD	2 (16.67) [5.41]	0 (0.00) [0.00]	10 (83.33) [5.18]	0 (0.00) [0.00]	12 (100.00) [4.48]
2	Post-Graduate	6 (6.32) [16.22]	7 (7.37) [38.89]	77 (81.05) [39.90]	5 (5.26) [25.00]	95 (100.00) [35.45]
3	Post-Graduate Diploma	2 (16.67) [5.41]	0 (0.00) [0.00]	9 (75.00) [4.66]	1 (8.33) [5.00]	12 (100.00) [4.48]
4	Graduate	18 (18.75) [48.64]	4 (4.17) [22.22]	62 (64.58) [32.12]	12 (12.50) [60.00]	96 (100.00) [35.82]
5	Diploma	9 (24.98) [24.32]	7 (13.21) [38.89]	35 (66.04) [18.14]	2 (3.77) [10.00]	53 (100.00) [19.77]
6	Total	37 (13.81) [100.00]	18 (6.72) [100.00]	193 (72.01) [100.00]	20 (7.46) [100.00]	268 (100.00) [100.00]

Note: 1. () Denotes percentage to Row total
2. [] Denotes percentage to column total

Source: IAMR Survey, 2013

TABLE 6: DISTRIBUTION OF TECHNICAL AND PROFESSIONAL HUMAN RESOURCE BY QUALIFICATION LEVEL AND AVERAGE MONTHLY EMOLUMENTS (RS.) IN VARIOUS ESTABLISHMENTS OF DELHI

S. No	Qualification Level	Monthly Emoluments						Total
		Less than 5000	5001 - 10000	10001 - 20000	20001 - 40000	40001 - 60000	60001 & Above	
1	PhD	0 (0.00) [0.00]	0 (0.00) [0.00]	1 (8.33) [1.35]	3 (25.00) [3.30]	6 (50.00) [13.04]	2 (16.67) [13.33]	12 (100.00) [4.48]
2	Post-Graduate	1 (1.05) [50.00]	3 (3.16) [7.50]	20 (21.05) [27.03]	43 (45.26) [47.25]	25 (26.32) [54.35]	3 (3.16) [20.00]	95 (100.00) [35.45]
3	Post-Graduate Diploma	0 (0.00) [100.00]	3 (25.00) [7.50]	4 (33.33) [5.41]	4 (33.33) [4.40]	0 (0.00) [0.00]	1 (8.34) [6.67]	12 (100.00) [4.48]
4	Graduate	1 (1.04) [50.00]	22 (22.91) [55.00]	26 (27.08) [35.14]	24 (25.00) [26.37]	14 (14.58) [30.43]	9 (15.53) [60.00]	96 (100.00) [35.82]
5	Diploma	0 (0.00) [0.00]	12 (22.64) [30.00]	23 (43.40) [31.07]	17 (32.07) [18.68]	1 (1.89) [2.18]	0 (0.00) [0.00]	53 (100.00) [19.77]
6	Total	2 (0.75) [100.00]	40 (14.93) [100.00]	74 (27.61) [100.00]	91 (33.96) [100.00]	46 (17.16) [100.00]	15 (5.59) [100.00]	268 (100.00) [100.00]

Note: 1. () Denotes percentage to Row total
2. [] Denotes percentage to column total

Source: IAMR Survey, 2013

SOURCE OF GETTING FIRST EMPLOYMENT

Survey outcome reflects that out of 268 total technical professionals surveyed, highest 82 (30.60 percent) got first employment through newspaper/print media followed by 61 (22.76 percent) got first employment through websites/internet. 49 (18.28 percent) got first employment through campus placements and 37 (13.81 percent) were helped by friends and relatives in getting their first employment. 15 (5.60 percent) got first employment through service provider and 12 (4.47 percent) got employment through

any other sources. 8 (2.99 percent) got first employment through employment exchange and 4 (1.49 percent) got first employment through public service commissions.

Qualification wise analyses of pass outs indicates that out of 12 PhDs, highest 7 (58.33 percent) got first employment through newspaper/print media and 3 (25.00 percent) through websites/internet. Out of 95 Post Graduates, highest 37 (38.95 percent) got first employment through

newspaper/print media followed by 22 (23.16 percent) got first employment through websites/internet and 21 (22.11 percent) through campus placement. Out of 12 Post Graduate Diploma holders, highest 4 (33.33 percent) got first employment through newspaper/print media followed by 3 (25.00 percent) through campus placement. Out of 96 Graduate pass outs, highest 25 (26.04 percent) got first employment through websites/internet followed by 21 (21.88 percent) through campus placement and 20 (20.83 percent) through newspaper/print media. Out of 53 Diploma pass outs, highest 17 (32.07 percent) got

first employment through relatives and friends followed by 14 (26.42 percent) through newspaper/print media and 9 (16.98 percent) got first employment through websites/internet. Study concluded that newspaper/print media, websites/internet and campus placement plays an important role in getting employment. Role of friends and relatives cannot be ignored in getting first employment (Table 7).

TABLE 7: DISTRIBUTION OF TECHNICAL AND PROFESSIONAL HUMAN RESOURCE BY QUALIFICATION LEVEL AND SOURCE OF GETTING FIRST EMPLOYMENT

S.No.	Qualification Level	Source of getting first employment								Total
		Campus placement	Through employment exchange	Public service commission	Newspaper / print media	Website / internet	Service provider	Helped by relative and friend	Any Other	
1	Ph.D.	0 (0.00) [0.00]	1 (8.33) [12.50]	0 (0.00) [0.00]	7 (58.33) [8.54]	3 (25.00) [4.91]	0 (0.00) [0.00]	1 (8.34) [2.70]	0 (0.00) [0.00]	12 (100.00) [4.48]
2	Post-Graduate	21 (22.11) [42.86]	0 (0.00) [0.00]	3 (3.16) [75.00]	37 (38.95) [45.12]	22 (23.16) [36.07]	4 (4.21) [26.67]	5 (5.26) [13.51]	3 (3.15) [25.00]	95 (100.00) [35.45]
3	Post-Graduate Diploma	3 (25.00) [6.12]	0 (0.00) [0.00]	0 (0.00) [0.00]	4 (33.33) [4.88]	2 (16.67) [3.28]	0 (0.00) [0.00]	2 (16.67) [5.41]	1 (8.33) [8.33]	12 (100.00) [4.48]
4	Graduate	21 (21.88) [42.86]	7 (7.29) [87.50]	0 (0.00) [0.00]	20 (20.83) [24.39]	25 (26.04) [40.98]	6 (6.25) [40.00]	12 (12.50) [32.43]	5 (5.21) [41.67]	96 (100.00) [35.82]
5	Diploma	4 (7.55) [8.16]	0 (0.00) [0.00]	1 (1.89) [25.00]	14 (26.42) [17.07]	9 (16.98) [14.76]	5 (9.43) [33.33]	17 (32.07) [45.95]	3 (5.66) [25.00]	53 (100.00) [19.77]
6	Total	49 (18.28) [100.00]	8 (2.99) [100.00]	4 (1.49) [100.00]	82 (30.60) [100.00]	61 (22.76) [100.00]	15 (5.60) [100.00]	37 (13.81) [100.00]	12 (4.47) [100.00]	268 (100.00) [100.00]

Note: 1. () Denotes percentage to Row total
 2. [] Denotes percentage to column total
 Source: IAMR Survey, 2013

MAIN FUNCTIONS PERFORMED

As regards the main functions performed in the employing establishments by the 268 sample surveyed technical professionals, study observed that they were performing functions such as Production, Repair & Maintenance, Logistics, Stores, HRD, Finance and Administration. Some of them were performing more than one function. 268 technical professionals were performing 304 functions. Out of 304 functions performed by technical professionals in their employing organizations, highest 140 (46.05 percent) functions performed comes in the category of any other functions other than the specified in the table followed by 53 (17.43 percent) functions performed related to Repair & Maintenance and 47 (15.46 percent) functions performed in Production area. 30 (9.87 percent) functions performed in HRD area, 19 (6.25 percent) functions performed in Finance and 10 (3.29 percent) functions performed in Administration.

All 12 PhD degree holders were performing 12 functions out of which 9 (75.00 percent) functions covers in the

category of any other functions other than the specified in the table. 95 Post Graduate degree holders performed 102 functions out of which 69 (67.65 percent) functions covers in the category of any other functions other than the specified in the table followed by 15 (14.71 percent) functions performed in HRD area and 10 (9.80 percent) functions performed in Production. 12 Post Graduate Diploma holders were performing 14 functions out of which 4 (28.57 percent) functions each covers in the category of Finance and any other functions other than the specified in the table followed by 2 (14.29 percent) functions each performed in Production and HRD. Out of 120 functions performed by Graduate pass outs, highest, 44 (36.67 percent) performed any other functions other than specified in the table followed by 23 (19.17 percent) functions performed in Production and 22 (18.33 percent) performed in Repair & Maintenance area. Out of 56 functions performed by Diploma holders, highest, 28 (50.00 percent) functions performed in Repair & Maintenance followed by 14 (25.00 percent) functions performed any other functions and 11 (19.64 percent) functions performed in Production (Table 8).

TABLE 8: DISTRIBUTION OF TECHNICAL AND PROFESSIONAL HUMAN RESOURCE BY QUALIFICATION LEVEL AND MAIN FUNCTIONS PERFORMED

S.No.	Qualification Level	Main Functions								Total
		Production	Repair & Maintenance	Logistics	Stores	HRD	Finance	Administration	Any Other	
1	Ph.D.	1 (8.33) [2.13]	0 (0.00) [0.00]	0 (0.00) [0.00]	0 (0.00) [0.00]	0 (0.00) [0.00]	1 (8.33) [5.26]	1 (8.34) [10.00]	9 (75.00) [6.43]	12 (100.00) [3.95]
2	Post-Graduate	10 (9.80) [21.28]	2 (1.96) [3.77]	0 (0.00) [0.00]	0 (0.00) [0.00]	15 (14.71) [50.00]	4 (3.92) [21.05]	2 (1.96) [20.00]	69 (67.65) [49.29]	102 (100.00) [33.55]
3	Post-Graduate Diploma	2 (14.29) [4.26]	1 (7.14) [1.89]	1 (7.14) [50.00]	0 (0.00) [0.00]	2 (14.29) [6.67]	4 (28.57) [21.06]	0 (0.00) [0.00]	4 (28.57) [2.86]	14 (100.00) [4.61]
4	Graduate	23 (19.17) [48.93]	22 (18.33) [41.51]	1 (0.83) [50.00]	2 (1.67) [66.67]	12 (10.00) [40.00]	10 (8.33) [52.63]	6 (5.00) [60.00]	44 (36.67) [31.42]	120 (100.00) [39.47]

5	Diploma	11 (19.64) [23.40]	28 (50.00) [52.83]	0 (0.00) [0.00]	1 (1.79) [33.33]	1 (1.79) [3.33]	0 (0.00) [0.00]	1 (1.79) [10.00]	14 (25.00) [10.00]	56 (100.00) [18.42]
6	Total	47 (15.46) [100.00]	53 (17.43) [100.00]	2 (0.66) [100.00]	3 (0.99) [100.00]	30 (9.87) [100.00]	19 (6.25) [100.00]	10 (3.29) [100.00]	140 (46.05) [100.00]	304 (100.00) [100.00]

Note: 1. () Denotes percentage to Row total
2. [] Denotes percentage to column total
3. Some were performing more than one function

Source: IAMR Survey, 2013

TIME TAKEN FOR GETTING FIRST EMPLOYMENT

Study revealed that out of 268 technical professional pass outs, majority of them i.e. 170 (63.43 percent) took minimum time which is less than three months to get first employment followed by 43 (16.04 percent) took 4-6 months and 37 (13.81 percent) took more than a year. 11 (4.11 percent) took 7-9 months to get first employment while remaining 7 (2.61 percent) took 10-12 months. Qualification wise analyses revealed that out of 12 PhDs, 8 (66.67 percent) took less than three months to get first paid employment followed by 3 (25.00 percent) took more than one year. Likewise Post Graduate Degree holders, majority of them, 73 (76.84 percent) took less than three months to get their first employment followed by 11 (11.58 percent) took 4-6 months. Out of 12 Post Graduate

Diploma holders, highest 9 (75.00 percent) got their first employment in less than three months followed by 2 (16.67 percent) took more than one year and one in 4-6 months. Out of 96 Graduate technical pass outs, highest 56 (58.33 percent) got first employment in less than three months followed by 20 (20.84 percent) got employment in 4-6 months and 18 (18.75 percent) took more than one year to get first employment. Out of 53 Diploma holders, highest 24 (45.28 percent) got first employment in less than three months followed by 10 (18.87 percent) in 4-6 months and 8 (15.09 percent) took more than a year. 7 (13.21 percent) got first employment in 7-9 months and 4 (7.55 percent) got first employment in 10-12 months time period (Table 9).

TABLE 9: DISTRIBUTION OF TECHNICAL PROFESSIONAL HUMAN RESOURCE BY QUALIFICATION LEVEL AND TIME TAKEN FOR GETTING FIRST EMPLOYMENT

S.No	Qualification Level	Time taken for getting first paid employment					Total
		Less Than 3 months	4-6 months	7-9 months	10-12 months	More Than 1 year	
1	Ph.D.	8 (66.67) [4.71]	1 (8.33) [2.33]	0 (0.00) [0.00]	0 (0.00) [0.00]	3 (25.00) [8.11]	12 (100.00) [4.48]
2	Post-Graduate	73 (76.84) [42.94]	11 (11.58) [25.58]	3 (3.16) [27.27]	2 (2.11) [28.57]	6 (6.31) [16.22]	95 (100.00) [35.45]

3	Post-Graduate Diploma	9 (75.00) [5.29]	1 (8.33) [2.33]	0 (0.00) [0.00]	0 (0.00) [0.00]	2 (16.67) [5.41]	12 (100.00) [4.48]
4	Graduate	56 (58.33) [32.94]	20 (20.83) [46.51]	1 (1.04) [9.09]	1 (1.04) [14.29]	18 (18.75) [48.64]	96 (100.00) [35.82]
5	Diploma	24 (45.28) [14.12]	10 (18.87) [23.25]	7 (13.21) [63.64]	4 (7.55) [57.14]	8 (15.09) [21.62]	53 (100.00) [19.77]
6	Total	170 (63.43) [100.00]	43 (16.04) [100.00]	11 (4.11) [100.00]	7 (2.61) [100.00]	37 (13.81) [100.00]	268 (100.00) [100.00]

Note: 1. () Denotes percentage to Row total
2. [] Denotes percentage to column total

Source: IAMR Survey, 2013

CONCLUSIONS:

From the analyses of data the following conclusions has been drawn:

Majority of technical professionals recently passed outs and employed were residing in urban area (80.60 percent) and remaining 19.40 percent were residing in rural area.

Likewise majority of respondents i.e. 86.94 percent were working in urban area and remaining 13.06 percent were working in rural area

Out of 268 technical pass outs Degree/ Diploma holders indicates that highest 101 (37.69 percent) were employed in educational establishments followed by 36 (13.43 percent) in manufacturing establishments and 28 (10.45 percent) in Hotel and Restaurants

Study observed that out of 268 pass outs, 98 (36.57 percent) were employed in 101- 500 employees size establishments followed by 81 (30.22 percent) employed in more than 500 employees size establishments and 61 (22.76 percent) employed in 51-100 employees size establishments.

Out of 268 technical professionals, majority of them, 203 (75.75 percent) were in regular employment followed by 43 (16.04 percent) on contractual/ ad hoc appointments and 15 (5.60 percent) were working on temporary nature of jobs.

Majority of pass outs i.e. 193 (72.01 percent) got employment in private sector followed by 37 (13.81 percent) in central government and 18 (6.72 percent) in state government.

As regards the monthly emoluments received by technical professionals, out of 268 surveyed professionals, highest 91 (33.96 percent) were getting monthly emoluments in the range of Rs. 20,001-40,000 followed by 74 (27.61 percent) in the range of Rs. 10,001-20,000 and 46 (17.16 percent) in the range of Rs. 40,001-60,000.

Survey outcome reflects that out of 268 total technical professionals surveyed, highest 82 (30.60 percent) got first employment through newspaper/print media followed by 61 (22.76 percent) got first employment through websites/ internet.

The main functions performed in the employing establishments by the 268 sample surveyed technical professionals, they were performing functions such as production, repair & maintenance, logistics, stores, HRD, finance and administration. Some of them were performing more than one function.

Study revealed that out of 268 technical professional pass outs, majority of them i.e. 170 (63.43 percent) took minimum time which is less than three months to get first employment followed by 43 (16.04 percent) took 4-6

months and 37 (13.81 percent) took more than a year.

REFERENCES:

1. The Economic Times (2016), "Less than 8% Indian engineers fit for core engineering roles", Accessed from website: economictimes.indiatimes.com/jobs/less-than-8-indian-engineers-fit-for-core-engineering-roles/articleshow/52745892.cms, updated on June, 14, 2016 and accessed on dated 12.8.2016.
2. India Times (2016), "Worried about Quality of Engineers AICTE, To Cut 600,000 Seats", "September 21, 2015, Accessed from website: indiatimes.com/news/india-to-improve-quality-of-Indian-engineers-aicte-to-reduce-number-of-engineering-college accessed on dated 12.8.2016.
3. S. K. Yadav and Vandana Shukla (2010), 'Employment Scenario of Graduate Engineers in India 2008', IAMR Report No.1/2010, Institute of Applied Manpower Research, Delhi.
4. National Academic Press (1985), 'Engineering Employment Characteristics-Engineering Education and Practices in United States', Accessed from website: www.nap.edu/read/584 accessed on dated 12.8.2016.

FOREIGN DIRECT INVESTMENT: SPEEDING THE GROWTH OF INSURANCE INDUSTRY IN INDIA

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ABSTRACT:

Globally the growth of insurance is promising, and same is true with the Indian Insurance Sector. Insurance has emerged as one of the fastest vehicles in the panorama of the expanding service sector in India. Foreign Direct Investment (FDI) is also accelerating the growth of Insurance Industry in India. FDI plays an important role in the economic development of a country. It is not only a concern of underdeveloped or developing economy but also is important for well developed nations. The 21st century has opened up the market for global players where no nation can live in isolation. FDI is a win-win situation to the home as well as the host countries. Indian government is taking several measures like opening up of FDI in many sectors, carrying out reforms and improving ease of doing business which makes India an attractive destination for the Global players for their investments. Seeking to invite more FDI in Insurance, the government of India has relaxed FDI norms for the insurance sector by allowing overseas companies to have FDI from 26% to 49 %. The present paper focuses on the benefits of FDI for Indian Insurers. It further highlights the issues, challenges and impact of enhanced FDI on the Insurance sector in India.

KEYWORDS: *Foreign Direct Investment, Insurance Sector, Ease of doing business, Economic Development.*

INTRODUCTION

Foreign direct investment (FDI) is a key element in this rapidly evolving international economic integration, also referred to as globalization. FDI provides a means for creating direct, stable and long-lasting links between economies. Under the right policy environment, it can serve as an important vehicle for local enterprise development, and it may also help improve the competitive position of both the recipient (“host”) and the investing (“home”) economy. In particular, FDI encourages the transfer of technology and know-how between economies. It also provides an opportunity for the host economy to promote its products more widely in international markets. FDI, in addition to its positive effect on the development of international trade, is an important source of capital for a range of host and home economies.

The significant growth in the level of FDI in recent decades, and its international pervasiveness, reflect both an increase in the size and number of individual FDI transactions, as well as the growing diversification of enterprises across

economies and industrial sectors. Large multinational enterprises (MNE) are traditionally the dominant players in such cross-border FDI transactions.

Globally the growth of insurance is promising, and same is true with the Indian Insurance Sector. Insurance has emerged as one of the fastest vehicles in the panorama of the expanding service sector in India. Foreign Direct Investment (FDI) in insurance will further accelerate the growth of Insurance Industry in India. Indian government is taking several measures like opening up of FDI in many sectors, carrying out reforms and improving ease of doing business which makes India an attractive destination for the Global players for their investments. Seeking to invite more FDI in Insurance, the government of India has relaxed FDI norms for the insurance sector by allowing overseas companies to have FDI from 26% to 49 %. The present paper focuses on the benefits of FDI for Indian Insurers. It further highlights the issues, challenges and impact of enhanced FDI on the Insurance sector in India.

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OBJECTIVES AND RESEARCH METHODOLOGY OF THE STUDY

The study is based on secondary data which is collected from the published reports of Insurance Regulatory Development Authority (IRDA), Reserve Bank of India (RBI), Department of Industrial Policy and Promotion (DIPP), journals, websites, etc. The study was planned with the following objectives:

1. To understand the current insurance scenario in India
2. To understand the FDI framework for Insurance in India
3. To find out benefits of increased foreign direct investment limit in insurance sector.
4. To highlight the issues & challenges of FDI in Insurance Sector.

In life insurance business, India was ranked 11th among the 88 countries with a market share of 2.08 per cent in the global life insurance market during 2014., for which data is published by Swiss Re. India was ranked 20th in global non-life insurance markets with a share of 0.69 per cent. (Table 3.1)

The life insurance premium in India increased by 1.0 per cent (inflation adjusted) when global life insurance premium increased by 4.3 per cent. The Indian non-life insurance sector witnessed a growth of 4.8 per cent (inflation adjusted) during 2014. During the same period, the growth in global non-life premium was 2.9 per cent. (Table 3.2)

Table 3.1: Rank and Market Share of India in Insurance in 2014

India	Life	Non-Life
Rank	11	20
Market Share	2.08 %	0.69 %

Source: Swiss Re, Sigma No. 4/2015

TABLE 3.2: TOTAL REAL PREMIUM GROWTH RATE IN 2014 (in per cent)

Regions/Countries	Life	Non-Life	Total
Advanced countries	3.8	1.8	2.9
Emerging markets	6.9	8	7.4
Asia	6.1	7.5	6.5
India	1.0	4.8	1.8
World	4.3	2.9	3.7

Source: Swiss Re, Sigma No. 4/2015

The measure of insurance penetration and density reflects the level of development of insurance sector in a country. While insurance penetration is measured as the percentage of insurance premium to GDP, insurance density is calculated as the ratio of premium to population (per capita premium). The insurance density of life insurance business had gone up from USD 9.1 in 2001 to reach the peak at USD 55.7 in 2010. (Table 3.3) During 2014,

Over the last 10 years, the penetration of non-life insurance sector in the country remained steady in the range of 0.5-0.8 per cent. However, its density has gone up from USD 2.4 in 2001 to USD 11.0 in 2014.

TABLE 3.3: INSURANCE PENETRATION AND DENSITY IN INDIA

Year	Life		Non-Life		Total	
	Density (USD)	Penetration (percentage)	Density (USD)	Penetration (percentage)	Density (USD)	Penetration (percentage)
2011	49	3.4	10	0.7	59	4.1
2012	42.7	3.17	10.5	0.78	53.2	3.96
2013	41	3.1	11	0.8	52	3.9
2014	44	2.6	11	0.7	55	3.3

Note: 1. Insurance density is measured as ratio of premium (in USD) to total population.

2. Insurance penetration is measured as ratio of premium (in USD) to GDP (in USD).

Source: Swiss Re, Sigma, Various Issues.

At the end of March 2015, there are 54 insurance companies operating in India; of which 24 are in the life insurance business and 29 are in non-life insurance business. In addition, GIC is the sole national reinsurer. Of the 54 companies presently in operation, eight are in

the public sector - two are specialized insurers, namely ECGC and AIC, one in life insurance namely LIC, four in non-life insurance and one in reinsurance. The remaining forty six companies are in the private sector.

TABLE 3.4: REGISTERED INSURERS IN INDIA (AS ON 31ST MARCH, 2016)

Type of business	Public Sector	Private Sector	Total
Life Insurance	1	23	24
Non-life Insurance	6*	23*	29**
Reinsurance	1	0	1
Total	8	46	54

* Includes Specialised insurance companies – ECGC and AIC.

** Includes five Standalone Health Insurance Companies- Star Health & Allied Insurance Co., Apollo MunichHealth Insurance Co., Max Bupa Health Insurance Co.,Religare Health Insurance Co. and Cigna TTK HealthInsurance Co.

Source: IRDAI Website

FOREIGN DIRECT INVESTMENT (FDI)

Direct investment is a category of cross-border investment made by a resident in one economy (the direct investor) with the objective of establishing a lasting interest in an enterprise (the direct investment enterprise) that is resident in an economy other than that of the direct investor. The motivation of the direct investor is a strategic long-term relationship with the direct investment enterprise to ensure a significant degree of influence by the direct investor in the management of the direct investment enterprise. The “lasting interest” is evidenced when the direct investor owns at least 10% of the voting power of the direct investment enterprise. Direct investment may also allow the direct investor to gain access to the economy of the

direct investment enterprise which it might otherwise be unable to do. The objectives of direct investment are different from those of portfolio investment whereby investors do not generally expect to influence the management of the enterprise.

A global player may make a direct investment by creating a new foreign enterprise, which is called a Greenfield investment, or by the acquisition of a foreign firm, either called an acquisition or Brownfield investment.

Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry Government of India in its Consolidated FDI Policy (Effective from June 07, 2016) defines FDI as investment by non-resident

entity/person resident outside India in the capital of an Indian company under Schedule 1 of Foreign Exchange Management (Transfer or Issue of Security by a Person Resident Outside India) Regulations, 2000.

It is the intent and objective of the Government of India to attract and promote foreign direct investment in order to supplement domestic capital, technology and skills, for accelerated economic growth. Foreign Direct Investment, as distinguished from portfolio investment, has the connotation of establishing a 'lasting interest' in of the investor.

an enterprise that is resident in an economy other than that The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce & Industry, Government of India makes policy pronouncements on FDI through Press Notes/Press Releases which are notified by the Reserve Bank of India. The procedural instructions are issued by the Reserve Bank of India vide A.P. (DIR Series) Circulars. The regulatory framework, over a period of time, thus, consists of Acts, Regulations, Press Notes, Press Releases, Clarifications, etc.

TABLE 4.1: FINANCIAL YEAR-WISE FDI EQUITY INFLOWS:
(As per DIPP's FDI data base – equity capital components only)

S. Nos.	Financial Year (April – March)	Amount of FDI Inflows		%age growth over previous year (in terms of US \$)
		In ₹ crores	In US\$ million	
FINANCIAL YEARS 2000-01 to 2015-16				
1.	2000-01	10,733	2,463	-
2.	2001-02	18,654	4,065	(+) 65 %
3.	2002-03	12,871	2,705	(-) 33 %
4.	2003-04	10,064	2,188	(-) 19 %
5.	2004-05	14,653	3,219	(+) 47 %
6.	2005-06	24,584	5,540	(+) 72 %
7.	2006-07	56,390	12,492	(+)125 %
8.	2007-08	98,642	24,575	(+) 97 %
9.	2008-09	142,829	31,396	(+) 28 %
10.	2009-10	123,120	25,834	(-) 18 %
11.	2010-11	97,320	21,383	(-) 17 %
12.	2011-12 ^	165,146	35,121	(+) 64 %
13.	2012-13	121,907	22,423	(-) 36 %
14.	2013-14 #	147,518	24,299	(+) 8%
15.	2014-15 #	189,107	30,931	(+) 27%
16.	2015-16 #	262,322	40,001	(+) 29%
CUMULATIVE TOTAL (from April, 2000 to March, 2016)		1,495,860	288,635	-

Note:

- including amount remitted through RBI's-NRI Schemes (2000-2002).
- FEDAI (Foreign Exchange Dealers Association of India) conversion rate from rupees to US dollar applied, on the basis of monthly average rate provided by RBI (DEPR), Mumbai.

Figures for the years 2013-14 to 2015-16 are provisional subject to reconciliation with RBI.

^ Inflows for the month of March, 2012 are as reported by RBI, consequent to the adjustment made in the figures of March, 2011, August, 2011 and October, 2011.

Source: Fact Sheet on Foreign Direct Investment (FDI), from April, 2000 to March, 2016, DIPP

Table 4.1 shows the financial year-wise FDI equity inflows in ₹ crores and US\$ million. In 2015-16, there was an FDI Inflows of ₹ 262,322 crore in Indian economy or US\$ 40,001 million with a growth rate of 29 % over last year. Year 2014-15 also attracted ₹ 189,107 crore or US\$ 30,931 million as FDI equity inflows with a growth of 27%. Last two years were attractive in terms of growth rate in FDI equity inflows.

ENTRY ROUTES FOR INVESTMENT:

Investments can be made by non-residents in the equity shares/fully, compulsorily and mandatorily convertible debentures/fully, compulsorily and mandatorily convertible preference shares of an Indian company, through the Automatic Route or the Government Route.

- Under the Automatic Route, the non-resident investor or the Indian company does not require any approval from Government of India for the investment.
- Under the Government Route, prior approval of the Government of India is required. Proposals for foreign investment under Government route, are considered by Foreign Investment Promotion Board (FIPB)

FDI IN INSURANCE

Government of India through a notification of Reserve Bank of India(RBI) enhanced the limit of foreign investment in insurance sector from 26 to 49 percent under the automatic route subject to certain terms and conditions which had been notified at the end of March 2016. Table 5.1 shows the FDI cap for insurers, insurance brokers, third party administrators, Surveyors and Loss Assessors and Other Insurance Intermediaries in India along with its Entry Route.

TABLE 5.1: FDI IN INSURANCE IN INDIA

Sector/Activity	% of Equity/ FDI Cap	% of Equity/ FDI Cap
i. Insurance Company	49%	Automatic
ii. Insurance Brokers		
iii. Third Party Administrators		
iv. Surveyors and Loss Assessors		
v. Other Insurance Intermediaries appointed under the provisions of Insurance Regulatory and Development Authority Act, 1999 (41 of 1999)		

Source: Consolidated FDI Policy (Effective from June 07, 2016), Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce & Industry, Government of India

CONDITIONS FOR FDI IN INSURANCE AS PER CONSOLIDATED FDI POLICY OF DIPP ARE AS FOLLOWS:

- (a) No Indian Insurance company shall allow the aggregate holdings by way of total foreign investment in its equity shares by foreign investors, including portfolio investors, to exceed forty-nine percent of the paid up equity capital of such Indian Insurance company.
- (b) The foreign investment up to forty-nine percent of the total paid-up equity of the Indian Insurance Company shall be allowed on the automatic route subject to approval/verification by the Insurance Regulatory and Development Authority of India.
- (c) Foreign investment in this sector shall be subject to compliance with the provisions of the Insurance Act, 1938 and the condition that Companies receiving FDI shall obtain necessary license /approval from the Insurance Regulatory & Development Authority of India for undertaking insurance and related activities.
- (d) An Indian Insurance company shall ensure that its ownership and control remains at all times in the hands of resident Indian entities as determined by Department of Financial Services/ Insurance Regulatory and Development Authority of India as per the rules/regulation issued by them from time to time.
- (e) Foreign portfolio investment in an Indian Insurance company shall be governed by the provisions contained in sub-regulations (2), (2A), (3) and (8) of Regulation 5 of FEMA Regulations, 2000 and provisions of the Securities and Exchange Board of India (Foreign Portfolio Investors) Regulations, 2014.
- (f) Any increase in foreign investment in an Indian Insurance company shall be in accordance with the pricing guidelines specified by Reserve Bank of India under the FEMA Regulations.
- (g) The foreign equity investment cap of 49 percent shall apply on the same terms as above to Insurance Brokers, Third Party Administrators, Surveyors and Loss Assessors and Other Insurance Intermediaries appointed under the provisions of the Insurance Regulatory and Development Authority Act, 1999 (41 of 1999).
- (h) Provided that where an entity like a bank, whose primary business is outside the insurance area, is allowed by the Insurance Regulatory and Development Authority of India to function as an insurance intermediary, the foreign equity investment caps applicable in that sector shall continue to apply, subject to the condition that the revenues of such entities from their primary (i.e., non-insurance related) business must remain above 50 percent of their total revenues in any financial year.
- (i) The provisions of paragraphs (i) (b) and (d) of Annexure 9 of Consolidated FDI Policy relating to 'Banking-Private Sector', shall be applicable in respect of bank promoted insurance companies.
- (j) Terms 'Control', 'Equity Share Capital', 'Foreign Direct Investment' (FDI), 'Foreign Investors', 'Foreign Portfolio Investment', 'Indian Insurance Company', 'Indian Company', 'Indian Control of an Indian Insurance Company', 'Indian Ownership', 'Non-resident Entity', 'Public Financial Institution', 'Resident Indian Citizen', 'Total Foreign Investment' will have the same meaning as provided in Notification No. G.S.R 115 (E), dated 19th February, 2015 issued by Department of Financial Services and regulations issued by Insurance Regulatory and Development Authority of India from time to time.

TABLE 5.2: EQUITY SHARE CAPITAL OF LIFE INSURERS (₹ Crore)

Insurer	As on 31st March, 2014	Infusion During the year	As on 31st March, 2015	Foreign Promoter	Indian Promoter	FDI (%)
AEGON RELIGARE	1307	3.5	1310.5	340.73	969.77	26.00%
AVIVA	2004.9	0	2004.9	521.27	1483.63	26.00%
BAJAJ ALLIANZ	150.71	-0.01	150.7	39.18	111.52	26.00%
BHARTI AXA	1978.2	137.5	2115.7	470.15	1645.55	22.22%
BIRLA SUNLIFE	1901.21	0	1901.21	494.31	1406.9	26.00%
CANARA HSBC	950	0	950	247	703	26.00%
DHFL PRAMERICA	340.38	33.69	374.06	97.26	276.8	26.00%
EDELWEISS TOKIO	180.29	0	180.29	46.87	133.41	26.00%
EXIDE LIFE	1600	150	1750	0	1750	0.00%
FUTURE GENERALI	1452	0	1452	370.26	1081.74	25.50%
HDFC STANDARD	1994.88	0	1994.88	518.67	1476.21	26.00%
ICICI PRUDENTIAL	1429.26	2.46	1431.72	370.78	1060.94	25.90%
IDBI FEDERAL	800	0	800	208	592	26.00%
INDIAFIRST	475	0	475	123.5	351.5	26.00%
KOTAK MAHINDRA	510.29	0	510.29	132.68	377.61	26.00%
MAX LIFE	1944.69	-25.88	1918.81	498.89	1419.92	26.00%
PNB METLIFE	2012.88	0	2012.88	523.35	1489.53	26.00%
RELIANCE	1196.32	0	1196.32	311.04	885.28	26.00%
SAHARA	232	0	232	0	232	0.00%
SBI LIFE	1000	0	1000	260	740	26.00%
SHRIRAM LIFE	175	4.37	179.37	0	179.37	0.00%
STAR UNION DAI-ICHI	250	0	250	65	185	26.00%
TATA AIG	1953.5	0	1953.5	507.91	1445.59	26.00%
Total (Private Sector)	25838.51	305.63	26144.14	6146.87	19997.27	23.51%
LIC	100	0	100	0	100	0.00%
Total	25938.51	305.63	26244.14	6146.87	20097.27	23.42%

Source: IRDAI Annual report 2014-15

Table 5.2 shows the Equity Share Capital of Life Insurers in ₹ Crore As on 31st March 2014 and 2015. FDI in life insurance in private sector as on 31st March, 2015 stood at ₹ 6146.87 Crore. FDI in non-life insurance in private sector as on 31st March, 2015 stood at ₹ 1445.53 Crore,

excluding the standalone health insurance companies. In standalone health insurance companies foreign promoters invested ₹ 438.98 Crore, which makes the non-life industry total as ₹ 1884.51 Crore.

Table 5.3: Equity Share Capital of Non-Life Insurers (₹ Crore)

Insurer	As on 31st March, 2014	Infusion During the year	As on 31st March, 2015	Foreign Promoter	Indian Promoter	FDI (%)
BAJAJ ALLIANZ	110.22	0	110.22	28.66	81.56	26.00%
BHARTI AXA	976.55	262.11	1238.66	275.25	963.41	22.22%
CHOLAMANDALAM MS	298.8	0	298.8	77.69	221.11	26.00%
FUTURE GENERALI	710	0	710	181.05	528.95	25.50%
HDFC ERGO	529.28	9.34	538.62	139.17	399.45	25.84%
ICICI LOMBARD	445.05	1.54	446.59	114.49	332.1	25.64%
IFFCO TOKIO	269.32	0	269.32	70.02	199.3	26.00%
L&T	495	125	620	0	620	0.00%
MAGMA HDI	100	0	100	25.5	74.5	25.50%
LIBERTY VIDEOCON	359.35	320	679.35	122.9	556.45	18.09%
RAHEJA QBE	207	0	207	53.82	153.18	26.00%
RELIANCE	122.77	0	122.77	0	122.77	0.00%
ROYAL SUNDARAM	315	0	315	81.9	233.1	26.00%
SBI	175	28	203	52.78	150.22	26.00%
SHRIRAM	258	0.09	258.09	0	258.09	0.00%
TATA AIG	505	0	505	131.3	373.7	26.00%
UNIVERSAL SOMPO	350	0	350	91	259	26.00%
PRIVATE TOTAL	6226.37	746.08	6972.45	1445.53	5526.89	20.73%
NATIONAL	100	0	100	0	100	0.00%
NEW INDIA	200	0	200	0	200	0.00%
ORIENTAL	150	50	200	0	200	0.00%
UNITED INDIA	150	0	150	0	150	0.00%
PUBLIC TOTAL	600	50	650	0	650	0.00%
TOTAL (NON-LIFE)	6826.37	796.08	7622.45	1445.53	6176.89	18.96%
STANDALONE HEALTH PRIVATE						
APOLLO MUNICH	330.98	18.24	349.22	89.04	260.18	25.50%
CIGNA TTK	100	100	200	52	148	26.00%
MAX BUPA	669	121.5	790.5	205.53	584.97	26.00%
RELIGARE HEALTH	250	100	350	0	350	0.00%
STAR HEALTH	333.86	28.28	362.14	92.41	269.73	25.52%
STANDALONE TOTAL	1683.84	368.02	2051.86	438.98	1612.88	21.39%

Specialised Insurers						
AIC	200	0	200	0	200	0.00%
ECGC	1100	100	1200	0	1200	0.00%
SPECIALISED TOTAL	1300	100	1400	0	1400	0.00%
REINSURER						
GIC	430	0	430	0	430	0.00%
REINSURER TOTAL	430	0	430	0	430	0.00%
GRAND TOTAL (NON-LIFE)	10240.21	1264.1	11504.31	1884.51	9619.77	16.38%

Source: IRDAI Annual report 2014-15

BENEFITS OF INCREASED FDI LIMIT IN INSURANCE

The cabinet committee on economic affairs headed by Prime Minister Narendra Modi has already approved the limit of foreign direct investment in insurance sector to 49 percent from the 26 percent. The cabinet has cleared the FDI limit in insurance companies through FIPB route which necessitates the management control with the Indian promoters. This was a long due reform which the Modi government has undertaken and is surely bound to benefit the insurance sector.

The key benefits of increased foreign direct investment limit in insurance sector are:-

- 1. INFUSION OF CAPITAL:** FDI has the potential to meet India's long term capital requirements to fund the building of infrastructures which is critical for the development of the country. Infrastructure has been the major factor which has restricted the progress of the Indian economy. An increase in FDI in insurance would indirectly be a boon for the Indian economy. Most of the private sector insurance companies have been making considerable losses. The increased FDI limit has brought some much needed relief to these as the inflow of more than 12,000 crore is expected by 2017.
- 2. INCREASED INSURANCE PENETRATION:** With the population of more than 130 cores, the insurance penetration in India was only 3.3% percent of our gross domestic product in 2014 against

approximately 8% global average. This is far less as compared to Japan which has an insurance penetration of more than 10 percent. Increased FDI limit will strengthen the existing companies and will increase the insurance penetration in India.

- 3. PROVIDE CUSTOMERS WITH COMPETITIVE PRODUCTS, MORE OPTIONS AND BETTER SERVICE LEVELS:** Opening the FDI in the insurance sector would be good for the consumers, in a lot of ways. Private as well as government insurers will benefit from the proposed hike of FDI; these companies will offer better and wide range of insurance products to customers at larger competitive prices. With more players in this sector, there is bound to be stringent competition leading to competitive quotes, improved services and better claim settlement ratio.
- 4. JOB CREATION:** With more money coming in, the insurance companies will be able to create more jobs to meet their targets of venturing into under insured markets through improved infrastructure, better operation and more manpower.
- 5. TECHNOLOGY:** As the insurers will have an objective of establishing a lasting interest in an enterprise, Insurers will not increase its investment but also will help the Indian partner with the technology being used by the foreign player at its home country.
- 6. BETTER UNDERWRITING PRACTICES:** The Indian Insurance Industry is suffering from underwriting losses. With the enhancement in FDI

the better underwriting practices will come in India resulting in underwriting profits.

7. **FRAUD CONTROL:** With the new technology infusion and good fraud control practices used worldwide with come in our country along with FDI. This also one of the major concern for our insurance industry.

ISSUES & CHALLENGES OF FDI IN INSURANCE

1. CREDIBILITY OF FOREIGN COMPANIES:

The argument that foreign companies shall bring in more expertise and professionalism into the existing system is debatable after the past incidents of the global financial crisis where firms like AIG, Lehman Brothers and Goldman Sachs collapsed. Earlier too, the Prudential Financial Services (ICICI's partner in India) faced an enquiry by the securities and insurance regulators in the U.S based upon allegations of having falsified documents and forged signatures and asking their clients to sign blank forms. Hence FDI in insurance in India would expose our financial markets to the dubious and speculative activities of the foreign insurance companies at a time when the virtues of regulating such activities are being discussed in the advanced countries.

2. GREATER CHANNELIZATION OF SAVING TO INSURANCE:

One of the most important duties played by the insurance sector is to mobilize national saving and channelize them into investments in different sectors of the economy. However, no significant change seems to have occurred as far as mobilizing savings by the insurance sector is concerned even after the liberalization of the insurance sector in 1999. Therefore the private or foreign participation has not been able to achieve the goal.

3. **RESTRUCTURING OF JOBS:** Foreign partners are changing these Indian players are working. New organizational structures are being implemented in the organizations. The way of doing business is also being changed which also resulted in the retrenchment of employees in some cases.

4. **RURAL PENETRATION:** The situation in rural India is even worse. A small fraction of the people

have bank accounts, and the concept of insurance is very much alien. People have little disposable income, and the only form of life insurance is joint family. The companies with infused FDI will be technology advanced and rural persons have very low Insurance literacy and are not technologies savvy resulting in low penetration.

CONCLUSION:

Indian government is taking several measures like opening up of FDI in many sectors, carrying out reforms and improving ease of doing business which makes India an attractive destination for the Global players for their investments. Seeking to invite more FDI in Insurance, the government of India has relaxed FDI norms for the insurance sector by allowing overseas companies to have FDI from 26% to 49%. This change at one time is beneficial for the industry, but on the other hand will also bring some new challenges for the players in insurance industry. A new relationship of Indian and Foreign players with increased participation of foreign player will definitely bring positive changes and will be beneficial for the growth of the Insurance Industry in India.

REFERENCES:

1. Consolidated FDI Policy Effective from June 07, 2016 (N.D.). Retrieved June 10, 2016, from http://dipp.nic.in/English/Policies/FDI_Circular_2016.pdf
2. FDI Policy: Sectors under Automatic Route with Conditions (N.D.). Retrieved June 10, 2016, from http://dipp.nic.in/English/Policies/Sectors_Under_Automatic_Route_With_Conditions.pdf
3. OECD Benchmark Definition of Foreign Direct Investment, Fourth Edition (2008). Retrieved June 10, 2016, from <https://www.oecd.org/daf/inv/investmentstatisticsandanalysis/40193734.pdf>
4. Quaterly Fact Sheet, Fact Sheet on Foreign Direct Investment (FDI), from April, 2000 to March, 2016. (2016, March). Retrieved June 10, 2016, from http://dipp.nic.in/English/Publications/FDI_Statistics/2016/FDI_FactSheet_JanuaryFebruaryMarch2016.pdf
5. RBI notifies 49% FDI under automatic route in insurance. (2016, March 31). Retrieved June 10, 2016, from <http://economictimes.indiatimes.com/news/economy/policy/rbi-notifies-49-fdi-under-automatic-route-in-insurance/articleshow/51635860.cms>

IDENTIFICATION OF DIFFERENT STAGES OF DIABETIC RETINOPATHY USING SUPPORT VECTOR MACHINE

Sumit Singh Drall*

Abstract:

this work presents different eye diseases like Diabetic Retinopathy, Cataract and Glaucoma which causes our eye damage. Among these three Diabetic Retinopathy is most perilous due to its different stages (Mild NPDR – Non Proliferative Diabetic Retinopathy Moderate NPDR and PDR – Proliferative Diabetic Retinopathy) and segregate it from a normal eye with the study of fundus images. In this work, I have proposed an approach which is based on computer. In that approach features are extracted from these images using image pre-processing and furnish into the SVM (Support Vector Machine) using Sequential minimal optimization algorithm.

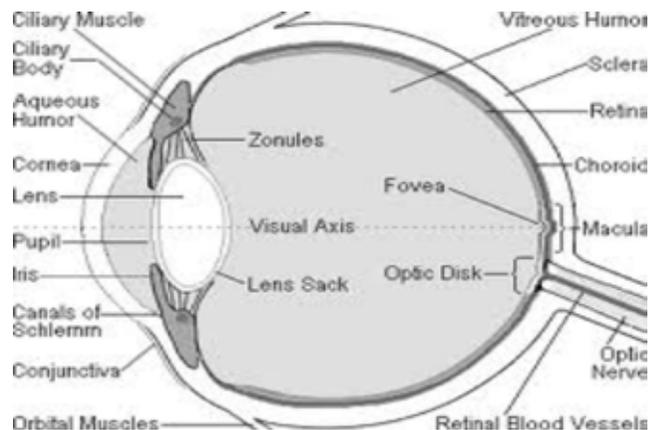


Fig 1. Human eye

Keywords: *Diabetic Retinopathy, Fundus Images, Support vector machine(SVM)*

INTRODUCTION

Diabetic retinopathy is complications of diabetes ketosis, which affects most of the patients who have had diabetes for many years or more worst, can lead to blindness [1], according to the report released by World Health Organization estimates that are more than 300 million will suffer from diabetes by the year 2025. One of the major consequences of this disease is on human eye labeling it as Diabetic Retinopathy. The tangled images obtained from infected eye will be processed using digital Image Processing (DIP) technique [1], which manipulates the image for the purpose of either extracting information from the image or produces an alternative representation of the image. Thus assessing is the quite effective procedure to mirror early signs of diabetic retinopathy. Using assessing procedure big blood clots called hemorrhages, Hard exudates, The shiny rounded region from the blood vessels called optic disk, The fovea determines the middle of the retina, and is that region of highest visual acuity, exudates and micro aneurysms, improper shaped, and found in the succeeding pole of the fundus can be noticed. It can be

classified as Mild, Moderate non proliferative diabetic retinopathy (NPDR) and proliferative diabetic retinopathy (PDR). The disease causes dullness of the eye's lenses, damage to the blood vessels in the retina, so early detection and diagnosis will help in reduction of damage to eye. Thus, on routine medical check which they use of special facilities for detection and monitoring of the said Disease. Researchers have recommended various techniques for helping the doctors using medical image processing. Our aim in this paper is to present an automated aid for doctors which combine medical image processing techniques with artificial neural network. This section of the paper describes eye anatomy along with a brief description of NPDR and PDR effects on the eye.

Primarily, there are two types of diabetic retinopathy: Non proliferative diabetic retinopathy (NPDR) and Proliferative diabetic retinopathy (PDR). NPDR is the most primitive stage of Diabetic Retinopathy. During this condition, small amount of blood and other extra fluid leak into the eye due to damaged blood vessels in the retina. Due to closing of the blood vessels in the retina, PDR occurs inhibiting enough blood flow. In an attempt to

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supply blood to the area where the original vessels closed, the retina responds by growing new blood vessels, called neovascularisation. [2]

For diagnosis and monitoring of various eye diseases, ophthalmologists use fundus images which will be taken as input to our system as well. Fundus photography takes into account the retina, fovea, macula and optic disc and creates an image for it. Fundus images are digitized data given by fundus camera that can be used for detection of diabetic retinopathy.

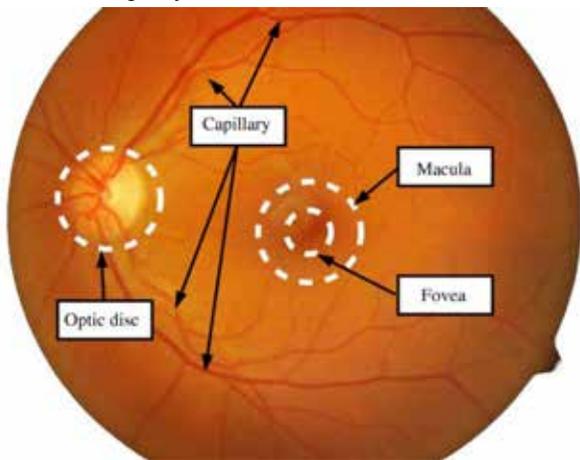


Fig 2. Fundus Image of Normal Eye [3]

Various regions of fundus images are -

Optic Disc: Circular portion at the back where nerve fibers join together to form optic nerve.

Macula: Part of retina which is the main cause for detailed vision.

Fovea: Located at the center of macula, it is the main reason for sharpest vision.

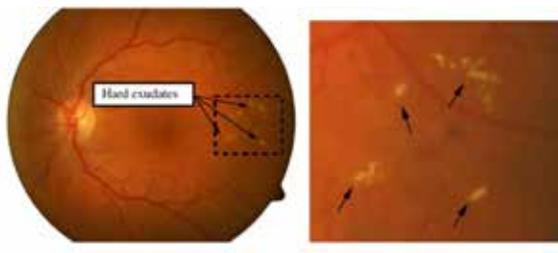


Fig 3. (a) NPDR showing hard exudates and (b) close up of hard exudates

Hard Exudates: Leakage in retina due to cholesterol and fat accumulation.

Microaneurysms: Small protrudes in blood vessels that leak fluid in retina.

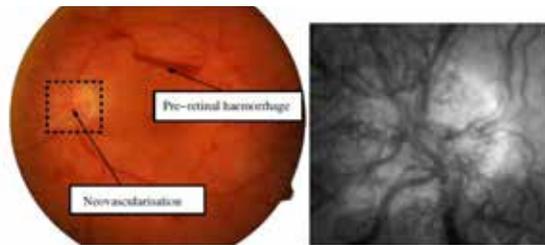


Fig 4 (a) PDR showing neovascularisation and Pre-retinal haemorrhage and (b) close up of neovascularisation

Pre-retinal hemorrhage: Delicate new blood vessels that bleed into the vitreous preventing light rays from reaching the retina.

Neovascularisation: New blood vessels that blocks the normal flow of fluid out of the eye.

The analysis of these fundus images through digital image processing forms the basis of our study. There has been an exponential and plethoric rise in cases of diabetic retinopathy and so, it becomes very essential for us to work on application of technology and tapping into huge potential of computer software towards enriching and advancing medical knowledge. Moreover, simplified approach of detection of various stages of diabetic retinopathy will ease the process of diagnosis and provide an efficient method to differentiate it from a normal eye.

PROPOSED WORK

In this paper, I present an approach for classification of diabetic retinopathy with the help of fundus images using Support Vector Machine. For identification of diabetic retinopathy, collected fundus images from hospitals undergo several image pre-processing techniques in order to extract desired features. Area of on pixels, mean and area of exudates are the three features extracted and fed into the neural network. SVM based training is applied to analyze the data and find an optimal way to classify images into Normal, NPDR or PDR categories.

A. Collection of Fundus Images

An elaborate search for professional fundus images yielded in collection of almost 150 images. The images were taken from two different hospitals in Haryana

and Delhi for the input data-set. Distinctly demarcated images of each category namely PDR, NPRD and normal eye were provided for efficient classification and improved training

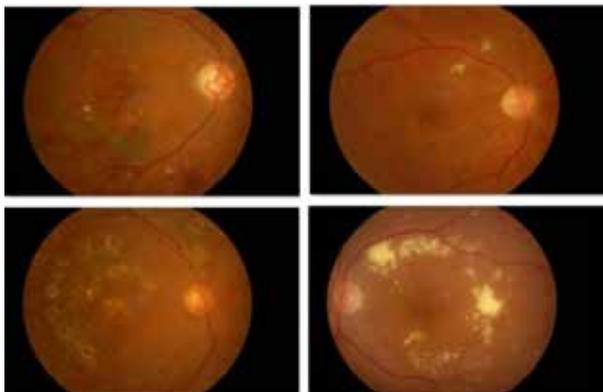


Fig 5. Sample of Fundus Image collected

IMAGE PRE-PROCESSING

Image pre-processing deals with enhancing data images prior to computational processing. It can significantly increase the reliability and efficiency of proposed system.

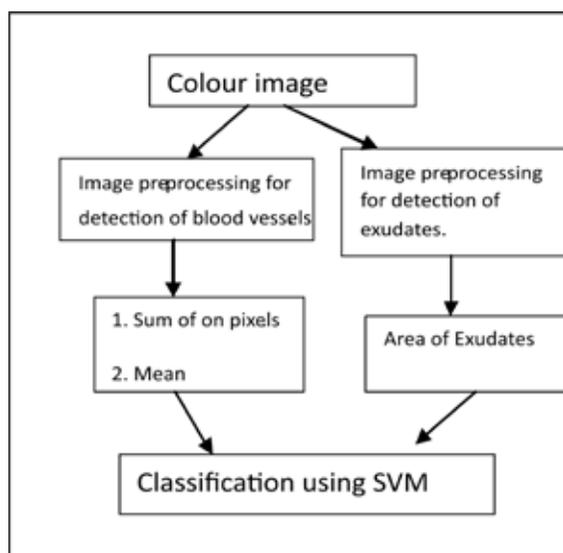


Fig 6. Flow Chart of Proposed System

A. Detection of Blood Vessels and Haemorrhages

For detection of blood vessels and hemorrhages, collected fundus images are processed by gray scale conversion, histogram equalisation, application of digital filters, gradient magnitude segmentation and finally fuzzy c clustering.

Gray Scale Conversion: Most of image pre-processing technique requires conversion of colour images into gray scale since it carries only intensity information and value of each pixel is a single sample. For its implementation, we first fetch the values of Red, Green and Blue (RGB) components and then combine 30% of red, 59% of green and 11% of blue. [4]

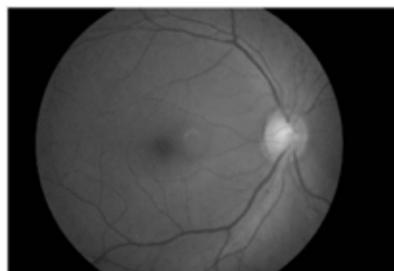


Fig.9 Gray Scale Conversion

Histogram Equalization: After conversion into gray scale, contrast adjustment is brought about by histogram equalization. Through this, intensities are better distributed on the histogram which is accomplished by effective spreading out of most frequent intensity values.

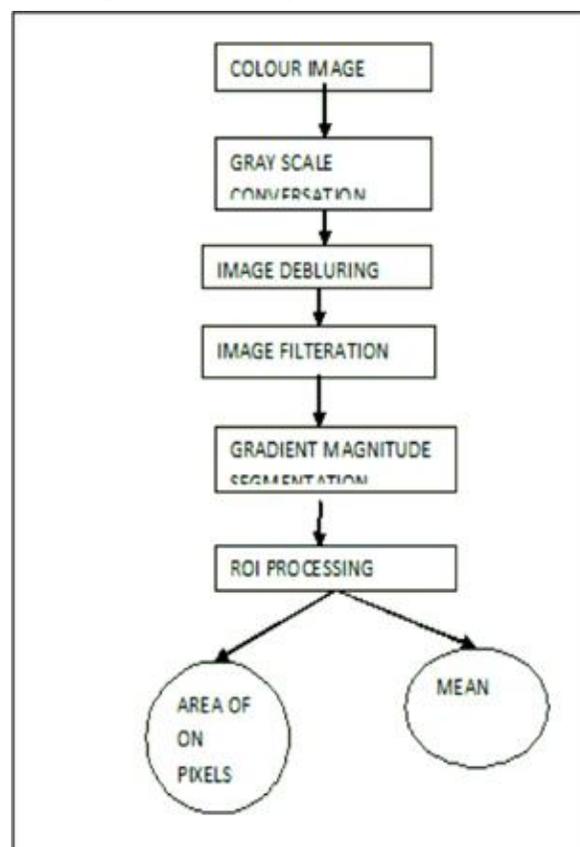


Fig 7. Flow Chart for detection of Blood Vessels and Hemorrhages

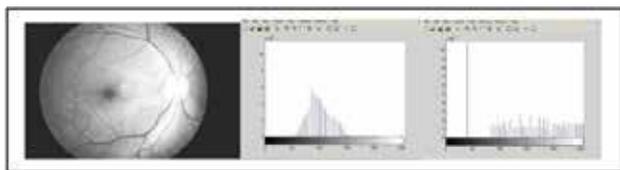


Fig 8. (a) Histogram Equalized Image (b) Before Application (c) After application

Applying Filter and Gradient Magnitude Segmentation: Digital 2-D filters are applied on contrast enhanced image for edge detection and typically, Sobel operator is used to find the approximate absolute gradient magnitude at each point so it is preferred over other operators. Moreover, detection of edges of blood vessels and haemorrhages requires emphasize on region of high spatial frequencies which is the basic principle of sobel operator.

When the kernels are implemented on the input image, it results in different values of the gradient component in each layout (assume it to be G_x and G_y). These are joined together to give us the absolute magnitude of the gradient at all points and the layout of that gradient. [5] The gradient magnitude is given by:

$$|G| = \sqrt{G_x^2 + G_y^2}$$

The gradient is high at the borders and low inside the fundus images thus providing a somewhat distinction between blood vessels, haemorrhages and the other components of the image.

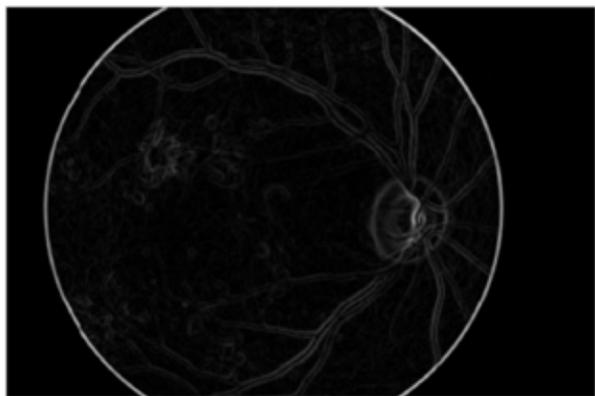


Fig 10. Gradient Magnitude Segmented Image

ROI Processing: ROI (Region of interest) is a portion of an image that we want to filter. We define a ROI by defining a binary mask i.e our image which we want to process, with pixel that define the ROI set to 1 and all the pixels set to 0. We can declare more than one ROI for a single image.

Region can be geographic in nature.

Here, it will be use to detect blood vessels and hemorrhages in eye images by grouping them into one category as on pixels and the remaining part of the eye as another category as off pixels [6]. Threshold is analyzed by binary ROI which outputs the binary image and threshold level of image. It often works better than FUZZY C clustering method since the latter gives larger or smaller threshold on fluorescence photos. A switch of cut-off position is taken as 1 for clear detection of components in binary form.

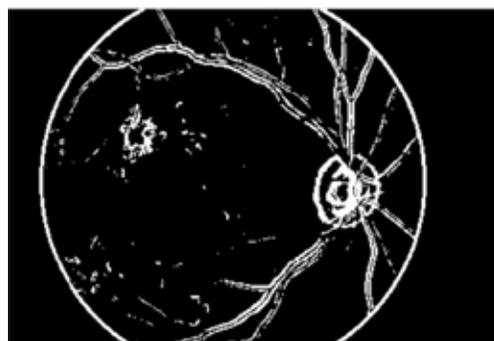


Fig 11. Detected Blood Vessels and Haemorrhages

B. Detection of Exudates

For detection of exudates, image processing is carried out by first selecting the green channel, gray scale conversion, conversion into binary through decided threshold, morphological closing and finally eliminating largest area (optic nerve) to get exudates.

Green Channel Selection and Gray Scale Conversion: As stated by Walter et al. [7], the exudates appear more contrasted in the green channel component than the other channels of the colour image. Hence, the green channel component images are used, in our method, to detect exudates. Consequently, the image is then converted to gray scale to further carry on processing.

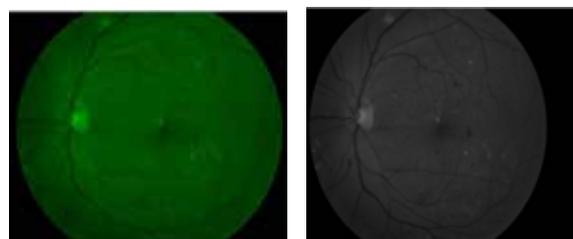


Fig 12. (a) Green Channel Selection (b) Gray Scale Conversion

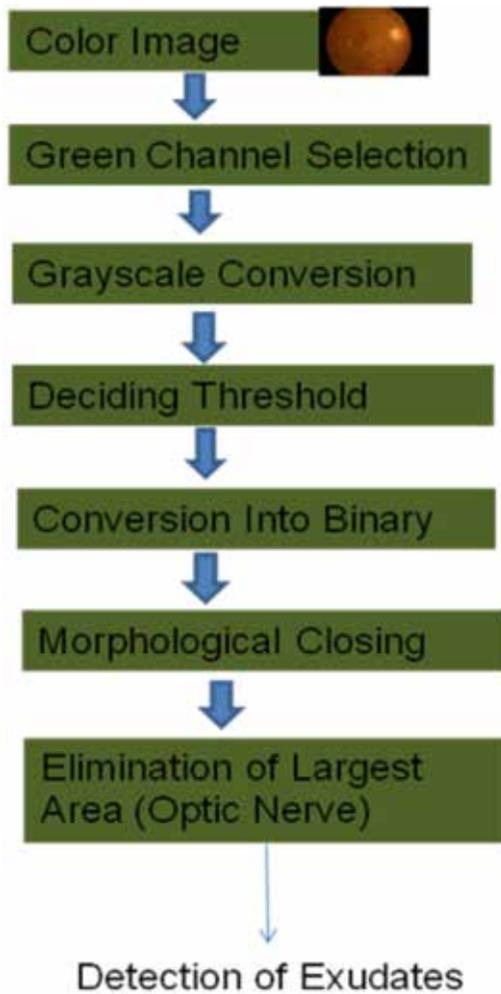


Fig 13. Flow Chart for detection of Exudates

Deciding Threshold and Binary Conversion: Using gray threshold function on the gray scaled image, one stage of threshold value is evaluated. But it was found that these values did not produce desired results for detection of optic disc and exudates. So, a factor of 0.15 was added to the previously calculated result and verified consistent with all the testing fundus images for detection of exudates and optic disc. Finally, with this new threshold level our image was converted into binary that consist of pixel values 1 and 0.

Morphological Closing: The optic disc which is bright has similar features when compared to exudates, and thus can give false recognition; so it becomes necessary to remove it [8]. In fundus images, the optic disc is marginally

separated with the presence of blood vessels at the extreme corner of the disc resulting in extremely close fragmented portions as seen in figure 11. In order to group them together dilation is performed, and then it is followed by erosion to separate the optic disc from the exudates (close operator). The structuring element used is 'disc' since it results in proper dilation of disjointed components of optic disc in a circular fashion [9].

Elimination of Largest Area and Detection of Exudates: Finally, using the regionprops each connected component in the image is formulated with respect to their areas. The region with the maximum area (optic disc) is found and then eliminated in order to get the rest of the binary images just containing the exudates.

(1) FEATURE EXTRACTION

We calculate three different parameters of feature extraction after all the above steps are followed:

1. **Area of ON pixels:** With reference to blood vessels and hemorrhages detection, the total sum of white pixels with value as '1' on the binary image helps us to differentiate between different stages of diabetic retinopathy.
2. **Mean:** It is a highly possible that the images are of uneven resolutions or sizes. Area of on pixels becomes unreliable as it could give less sum values of small fundus images with many hemorrhages as compared to bigger fundus images with no hemorrhages. Thus, there is a need to find out the arithmetic average which would then bring both the images at par during comparison.

$$\text{Mean} = \frac{\text{Sum of ON pixels}}{\text{Total no. of ON + Black pixels}}$$

3. **Sum of exudates:** The total area of exudates present in the image will also help us during classification of the disease. With exudates prominently present in NPDR, it becomes an important feature for efficient demarcation.

IV. SVM (SUPPORT VECTOR MACHINE) FOR CLASSIFICATION OF HYPER PLANES

SVM (Support Vector Machine) is a better alternative for Multilayer Preceptor Network. SVM algorithm is also used to calculate data and clustering and recognition of patterns, used for classification and regression analysis. In common it is used for linear-separation or classification of one class or category from another.

SVM (Support Vector Machine) are supervised learning models with associated learning algorithms that analyze data used for classification and regression analysis. Given a set of training examples, each marked for belonging to one of two categories, an SVM training algorithm builds a model that assigns new examples into one category or the other, making it a non-probabilistic binary linear classifier.

Sequential minimal optimization algorithm (SMO) which break the problem down into two sub parts or we can say sub problems. There are so many advantages of using SMO for SVM implementation.

1. Quadratic Programming (QP) SVM breaks into sub problems which we say as QP problems.
2. Later on these QP problems solved analytically
3. Total amount of memory required for SMO is linear which permit SMO to handle very huge training set
4. SMO is faster for linear SVM's and sparse data set.

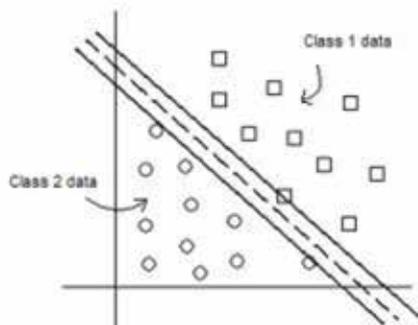


Fig 14. SVM class division diagram

Here is this class diagram a hyper plane is used to separate to classes from each other and later on the margins for this error is taken as training error or test error.

V. CONCLUSION AND FUTURE WORK:

In this paper which gives us an idea about how the things is actually happen it would provide a basis of classification of Normal, NPDR or PDR affected eye with my expected high accuracy percentage of 94% which is already develop few years later. These results will gives the idea that SVM can be use efficiently as a classifier for detecting eye related diseases in fundus images. Even with such results and progress, my network won't give desired results in

case the exudates areas at a particular section in fundus exceed that of optical disc. With these limitations and results, work should be carried on to derive several more features and develop more efficient systems.

REFERENCES:

1. All About Eyes - Eye Disease Resources, © 2000-2013 The Eye Info Network.
2. Eye Smart - What Is Diabetic Retinopathy?, © 2013 American Academy of Ophthalmology.
3. Eye Fundus Image Analysis for Automatic Detection of Diabetic Retinopathy, Tomi Kauppi, Thesis for the degree of Doctor of Science (Technology) presented at Student Union House at Lappeenranta University of Technology, Lappeenranta, Finland on the 12th of December, 2010, pp 25-29.
4. Review of automated diagnosis of diabetic retinopathy using the support vector machine: Priya.R , Aruna.P. INTERNATIONAL JOURNAL OF APPLIED ENGINEERING RESEARCH, DINDIGUL Volume 1, No 4, 2011.
5. R. Gonzalez and R. Woods Digital Image Processing, Addison Wesley, 1992, pp 414 - 428.
6. Vallabha,D., Dorairaj, R., Namuduri,K., Thompson, H.,(2004), Automated Detection and Classification of Vascular Abnormalities in
7. Diabetic Retinopathy in: Proceedings of 13th IEEE Signals, Systems and Computers, 2, pp 1625–1629.
8. T. Walter, J. C. Klein, and P. Massin, "A Contribution of image processing to the diagnosis of diabetic retinopathy detection of exudates in colour fundus images of the human retina," IEEE Trans.Med. Imaging, 21, pp. 1236-43, 2002.
9. Detection of Exudates in Retinal Images Using a Pure Splitting Technique: Hussain F. Jaafar, Asoke K. Nandi, and Waleed Al-Nuaimy.32nd Annual International Conference of the IEEE EMBS Buenos Aires, Argentina, August 31 - September 4, 2010
10. Automated Identification of Diabetic Retinopathy Stages Using Digital Fundus Images - Jagadish Nayak & P Subbanna Bhat & Rajendra Acharya U &

C. M. Lim & Manjunath Kagathi. Springer Science + Business Media, LLC 2007.

11. K. Mehrotra, C.K. Mohan & Sanjay Ranka, "Elements of ANN", MIT Press, 1997.
12. Simon Haykin, "Neural Networks – A comprehensive foundation", Macmillan Publishing Company, New York, 1994.

OVERVIEW OF JIT AN IMPORTANT TOOL OF INVENTORY MANAGEMENT

Dr. Anshu Sarna*

ABSTRACT:

The term inventory denotes any idle resource that could be put to some future use. In addition to cutting down cost, reduced inventory levels help an organization improve quality, planning systems, and supply chain coordination. They also reduce wastage and obsolescence. Hence inventory planning and control continues to derive considerable attention of the management in organizations. JIT or lean manufacturing is the most recent trends in the operations management. Just in time is a management philosophy that strives to eliminate sources of manufacturing waste by producing the right part in the right place at the right time.

It is a very effective tool to reduce the wastage of inventory and manage it effectively. Lean manufacturing also known as just in time or stockless production improves profits and return on investment by reducing inventory levels (increasing the inventory turnover rate), reducing variability, improving product quality, reducing production and delivery lead times and reducing other costs. In a JIT system, underutilized(excess) capacity is used instead of buffer inventories to hedge against problems that may arise. The present paper examines the role of lean manufacturing or JIT in inventory management. Information technology helps JIT in managing inventory effectively as it helps in integrating the components of supply chain network.

KEYWORDS: *Inventory, Inventory management, ABC Analysis, JIT, Information system, Quality, Supply chain network, SCM.*

INTRODUCTION

The term inventory refers to stock of raw materials, parts and finished products held by a business firm. It is the aggregate quantity of materials, resources and goods that are idle at a given point of time. In a wider sense inventory consist of usable but idle resources. The resources may be men, money, materials and machinery.

A business firm maintains inventory to carry on a day to day operations of business, to ensure regular production, to maintain safety margin and to take advantage of price. The problem of inventory management deals with how many units/quantity of inventory should be carried in stock. This problem requires a balance between risk of out of stock and risk of carrying inventory. Out of stock involves the cost of idle men and machines, loss of customers etc. Too high inventories involves risk of loss due to changes in demand, price, style and technology. The objective here is to minimise the cost of holding inventory without taking undue risks. Inventory decision is an important strategic

decision because the level of inventories serve as a guide to production planning. Too much inventory is a cause for alarm as it may result in the failure of business. Too low inventory may result in loss of sales.

Inventory management involves the development and administration of policies, systems and procedures, which will minimise total costs relative to inventory decisions and related functions such as customer service requirements, production scheduling, purchasing and traffic. Inventory control on the other hand pertains primarily to the administration of established policies, systems and procedures. The necessity of inventory control is to maintain a reserve of goods that will ensure manufacturing according to the production plan based on sales requirements and at the lowest possible ultimate cost. Losses from improper inventory control include purchases in excess than what needed, the cost of slowed up production resulting from material not being available when wanted. Effective inventory control offers many benefits. It ensures adequate supply of material and stores to maintain the flow of production. It minimises stockouts

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and shortage of materials, eliminates duplication in ordering stocks by centralising the source from which purchase requisitions are made.

Losses from improper inventory control include purchases in excess than what is needed, the cost of slowed up production resulting from material not being made available at the time of requirement. Each time, a machine may be required to shut down for lack of materials or each time, a sale is postponed or cancelled for lack of finished goods. Both situations are not good for a company, as they adversely affect its functioning.

ABC ANALYSIS OF INVENTORY MANAGEMENT:

One of the widely used techniques for control of inventories is the ABC analysis. The objective of ABC control is to vary the expenses associated with maintaining appropriate control according to potential savings associated with a proper level of such control. It is an approach to classify the items into three classes 'A', 'B', and 'C' according to their worth and number. A category items are 10% of the total items but they contribute 70% of the total value. They are categorised as an expensive items. B category items are 20% of the total items and contribute 20% of the total value. They are classified as medium range items. C category items are 70% of the total items and they contribute 10% of the total value. They are classified as an inexpensive items. Although the analysis segregates the inventories for their better management, but also incurs high holding cost, which can not be reduced below a certain limit.

EOQ TECHNIQUE OF INVENTORY MANAGEMENT:

One of the important problems in inventory control is to balance the cost of holding inventories (holding costs) with the costs of placing orders for inventory replenishment (ordering costs). If a firm orders small quantities frequently its holding cost would be low but ordering costs will increase. On the other hand in case the firm orders large quantities infrequently its ordering costs will be low but holding costs will rise. A balance should be struck between ordering and holding costs so as to minimise inventory costs. The EOQ approach is designed to achieve such a balance. Economic order quantity or optimum order quantity is that size of the order where

total inventory costs (holding costs + ordering costs) are minimised. EOQ is also known as economic lot size.

JIT INVENTORY MANAGEMENT:

Just in time inventory is the minimum inventory that is necessary to keep a system perfectly running. With just in time inventory, the exact amount of items arrive at the moment they are needed, not a minute before or not a minute after. To achieve JIT inventory, managers should reduce the variability caused by some internal and external factors. Most variability is caused by tolerating waste (inventory). For example employees or machines produce units that do not conform to standards. These are waste and they cause variability. Or machine breakdowns are again resulting in loss of production and consequently resulting in variability. These are internal factors that cause variability. However some of the variability is caused by some external factors. For example customers demand may change due to some external factors. In summary to achieve JIT inventory managers must begin with reducing inventory. JIT production means elimination of waste, synchronized manufacturing and little inventory.

JIT is a technique in which stock held by the company is measured in terms of hours of production rather than in days or months (Karmarkar, 1989). It eliminates waste through simplification of manufacturing processes (Schonberger, 1986), eliminates excess inventory in order to reduce related production cost and emphasizes on the use of small lot size so as to meet quick customer requirements.

Just in time inventory is intended to avoid situations in which inventory exceeds demand and places increased burden on your business to manage the extra inventory. Manufacturers using JIT processes want to use materials for production at levels that meet distributor or retailer demand but not in excess. Retailers only want to acquire and carry inventory that meets immediate customer demand. Excess inventory requires storage and management costs.

SUPPLY CHAIN MANAGEMENT AND INVENTORY MANAGEMENT:

Managing customer and vendor relationships is a critical aspect of managing supply chains. In many cases, the collaborative relationship concept has been considered the essence of supply chain management. However, a closer

examination of supply chain relationships, particularly those involving product flows, reveals that the heart of these relationships is inventory movement and storage. Much of the activity involved in managing relationships is based on the purchase, transfer, or management of inventory. As such, inventory plays a critical role in supply chains because it is a salient focus of supply chains.

Perhaps the most fundamental role that inventory plays in supply chains is that of facilitating the balancing of demand and supply. To effectively manage the forward and reverse flows in the supply chain, firms have to deal with upstream supplier exchanges and downstream customer demands. This puts an organization in the position of trying to strike a balance between fulfilling the demands of customers, which is often difficult to forecast with precision or accuracy, and maintaining adequate supply of materials and goods. This balance is often achieved through inventory.

Supply chain management (SCM) effectively integrates the information and materials flow within the supply chain network starting from product design to delivery (Verwijmeren, 2004). Integration of related activities of a production system facilitates smooth flow of materials within the system, thereby cutting the level of in-process inventory drastically. As a result of effective supply chain management, right product is made available at right time to the customer, which is mainly due to reduced cycle times because of simplified and accelerated operations (O'Brien, 2003). This is in tune with the working with JIT.

INFORMATION SYSTEM IN INVENTORY MANAGEMENT:

Information system is a system of sharing information, and consists of computer hardware, communication technology and software designed to handle information related to business functions (Flowers, 1996). Inventory Management Information system is a database used for storing and administering all types of Data required for efficient and accurate warehouse inventory management. This may include modules or fields for keeping track of all items and locations, requisitions, back orders, required levels of inventory on hand, reorder points, lead times, inventory error tracking, and more. This type of system may interface with an ERP and other applications.

In traditional supply chain inventory management, orders

are the only information firms exchange, but information technology now allows firms to share demand and inventory data quickly and inexpensively.

Advances in information system technology have had a huge impact on the evolution of supply chain management. As a result of such technological advances, supply chain partners can now work in tight coordination to optimise the chain-wide performance, and the realised return may be shared among the partners. A basic enabler for tight coordination is information sharing, which has been greatly facilitated by the advances in information technology.

In short Management information system organizes all company data in a computerized database. As a business owner one can retrieve data from all sections of the company including sales, manufacturing and inventory to see how efficiently each department is operating. This can tell how well our inventory system works with manufacturing and sales. It can tie inventory costs to sales. In other words, each unit that sells can have a price assigned to it that is based on what we paid for it. This tells us if purchase prices for inventory are leaving enough room for profit. One can also monitor inventory levels with a management information system by asking the database for reports from manufacturing or purchasing, inventory and sales. This shows how quickly products move through the company.

INVENTORY MANAGEMENT THROUGH QUALITY AND JIT:

The basic objectives of any organization in today's competitive world are the customer satisfaction, profitability and timeliness. If the organization is not able to make qualitative product and not able to deliver it on time then there are many players in the market who can deliver their services quickly to the customers. Quality has an important role in inventory management. It accelerates JIT implementation. JIT strives to eliminate inventory by efficient and real time monitoring of materials and resource usage in the work process and replenishing materials at the right time, neither too early nor too late. Sourcing raw materials only at the time of production and not stocking raw materials. Scheduling the manufacturing process on demand and shipping the product directly to customer without incurring inventory storage costs and blocking capital. Quality ensures defect free products and reduces the work in progress and inventory. There are two methods to check inventory. One is inspection

method which is practically not possible to check all the samples and the second one is statistical quality control. Organizations generally use second method to check quality of a product. A customer is more easily attracted towards quality products because of their ability to satisfy him to the maximum level (Singh, 2006).

Quality is being used as a competitive edge to excel. It results in increase in sales and profit to the company due to increase level of quality driven customer satisfaction. Quality products have less waiting time and less lead time resulting in low level of inventory and faster delivery to the customers. On the other hand poor quality products leads to more rejection, poor goodwill to the company and loosing customers goodwill. Just in time inventory control JIT aims at continuous product improvement through many ways such as by identifying things that do not add value to the product or process and removing them. Also by ensuring that the basic product design remains simple and easy to understand. Ensuring quality at source by making each worker responsible for the quality of their work. Further by placing at the disposal of workers "Poka-Yoke" or fool proof tools, methods and jigs to prevent mistakes. JIT management systems and the ever-increasing pressure to reduce work-in-process inventories while simultaneously increasing quality has forced companies to install highly integrated, computerized manufacturing systems, such as flexible manufacturing system (FMS) and computer integrated manufacturing (CIM). CIM contributes in speedy implementation of JIT (Yasin, 1996).

MANUFACTURING ENVIRONMENT IN INVENTORY MANAGEMENT AND JIT:

Manufacturing environment plays a pivot role in the successful implementation of JIT. Earlier manufacturers have forecasted demand for their product on the basis of intuition and experience and then have attempted to smooth out production to meet the forecasted demand. Unfortunately this approach has a number of major drawbacks including large inventories, high defect rates, inability to meet delivery schedules and high costs. The basic elements of JIT were developed by Toyota in the 1950s and became known as the Toyota Production system (TPS).

When companies use JIT and inventory control system, they purchase materials and produce units only as needed to meet customer demand. When JIT is implemented the

receiving inspection is completely eliminated and the responsibility of quality for incoming material rests with the supplier. Incoming material is delivered directly at the point of use at the shop floor. This eliminates the duplicate shop floor inventory. JIT calls for a thorough streamlining of the manufacturing processes at the shop floor. Production scheduling should be based completely on units of the finished product rather than on the production of sub assemblies. This helps to eliminate pile up of work in process inventory and also helps in continuous production.

JIT approach can be used in both manufacturing and merchandising companies. It has the most profound effects, however, on the operations of manufacturing companies which maintains three class of inventories-raw material, work in process, and finished goods. Traditionally, manufacturing companies have maintained large amounts of all three types of inventories to act as buffers so that operations can proceed smoothly even if there are unanticipated disruptions. Raw materials inventories provide insurance in case suppliers are late with deliveries. Work in process inventories are maintained in case a work station is unable to operate due to a breakdown or other reason. Finished goods inventories are maintained to accommodate unanticipated fluctuations in demand. Manufacturing flexibility has increased scope of customization, and hence higher level of customer satisfaction can be achieved. Cellular manufacturing uses the principle of group technology, where families of parts with similar manufacturing processes are grouped together, greatly helps in inventory management. It is an innovative approach to ensure variety in production with additional benefits of reduced material handling, reduced work in process(WIP) inventory, reduced setup time and manufacturing lead time, and simplified planning, routing and scheduling activities (Akturk, 2000)

REAL BUSINESS EXAMPLES:

The Textron Automotive Trimdivision plant at Michigan manufactures lower and upper interior door panels and other inside trim products such as arm rests for Daimler Chrysler cars, as well as mini vans. The plant's high volume, high mix manufacturing process requires 134 door panels and thirty seven additional interior components, with nine different colour combinations and twelve different fabric materials. The company had won many quality and safety awards and knew they were good. Nonetheless, their problem was that they had too much work in process and

finished goods inventory. The surplus created production bottlenecks and hogged floor space. The excess inventory forced the company to lease space in another facility to make backside panels for the Chrysler minivans. The company then adopted the JIT principle. This created a quantum leap in production, WIP plummeted by more than 60 percent, and average finished goods inventory dropped from eight-ten hours to two hours.

The company then adopted the JIT principle. This created a quantum leap in production. WIP plummeted by more than 60 percent, and average finished goods inventory dropped from eight-ten hours to two hours.

PCs JUST IN TIME MANAGEMENT:

Del Computer Corporation has finally tuned its Just-in-Time system so that an order for a customized personal computer that comes in over the internet at 9 AM. can be on a delivery truck to the customer by 9 P.M. In addition, Dell's low cost production system allows it to under price its rivals by 10% to 15%. This combination has made Dell the envy of the personal computer industry and has enabled the company to grow at five times the industry rate. How does the company's just in time system deliver lower costs? "While machines from Compaq and IBM can languish on dealer shelves for two months Dell does not start ordering components and assembling computers until an order is booked. That may sound like no biggie, but the price of PC parts can fall rapidly in just a few months. By ordering right before assembly, Dell figures its parts, on average, are 60 days newer than those in an IBM or Compaq machine sold at the same time. That can translate into a 6% profit advantage in components alone."

Source: Gray McWilliams, "Whirlwind on the web," Business Week, April 7, 1997.

CONCLUSIONS:

The JIT concept is built around the philosophy that inventory is evil. But it is not just a method to reduce inventories. It is a method of producing what is needed when needed and no more. It is based on two tenets: elimination of waste and respect for humans. Its aim is to reduce waste and increase productivity. It is important to note that working with low level of inventory requires waste, breakdowns, process bottlenecks etc. to be essentially reduced to their minimum level. And JIT happens to work most effectively

under this condition.

REFERENCES:

1. Tersine, R. J. (1994). Principles of inventory and materials management.
2. Karmarkar, U. (1989). Getting control of just-in-time. Harvard business review, 89(5), 122-130.
3. Singh, D. K., & Singh, S. (2013). JIT: A Strategic Tool of Inventory Management. International. Journal of Engineering Research and Applications (IJERA), 3, 133-136.
4. Schonberger, R. J., & Manufacturing, V. C. (1986). The Lessons of Simplicity Applied.
5. Lee, H. F., Harmon, R., & Peterson, L. (1990). Reinventing the Factory: Productivity Breakthroughs in Manufacturing Today.
6. Kaihara, T. (2003). Multi-agent based supply chain modelling with dynamic environment. International Journal of Production Economics, 85(2), 263-269.
7. Verwijmeren, M. (2004). Software component architecture in supply chain management. Computers in industry, 53(2), 165-178.
8. Singh, D. K., & Singh, S. (2013). Jit: Various Aspects of Its Implementation. International Journal of Modern Engineering Research (IJMER), 3(3), 1582-1586.
9. Singh, D. K., & Singh, S. (2013). JIT: A Strategic Tool of Inventory Management. International. Journal of Engineering Research and Applications (IJERA), 3, 133-136.
10. Yeo, K. T. (2002). Critical failure factors in information system projects. International Journal of Project Management, 20(3), 241-246.
11. Soroor, J., Tarokh, M. J., & Keshtgary, M. (2009). Preventing failure in IT-enabled systems for supply chain management. International Journal of Production Research, 47(23), 6543-6557.
12. Ekanayaka, Y., Currie, W. L., & Seltsikas, P. (2002). Delivering enterprise resource planning systems

- through application service providers. *Logistics Information Management*, 15(3), 192-203.
13. Metters, R. (1997). Quantifying the bullwhip effect in supply chains. *Journal of operations management*, 15(2), 89-100.
 14. Singh, D. K. (2006). An Exploration of the Components of Customer Satisfaction affecting JIT Implementation. *Prestige Journal of Management and Research*, 10, 87-95.
 15. Yasin, M. M., &Wafa, M. A. (1996). An empirical examination of factors influencing JIT success. *International Journal of Operations & production management*, 16(1), 19-26.
 16. Singh, D. K. (2006). An Automated JIT Manufacturing System. *PCTE Journal of Business Management*, 3(2), 28-32.
 17. Akturk, M. S., &Turkcan, A. (2000). Cellular manufacturing system design using a holonistic approach. *International Journal of Production Research*,38(10), 2327-2347.
 18. Gupta, A. K. (2012). Just in time revisited: literature review and agenda for future research. *International Journal of Research in Mechanical Engineering & Technology*, 2(1), 969-971.
 19. Mahadevan, B. (2015). *Operations management: Theory and practice*. Pearson Education India.
 20. Gupta, D. C. (2000). *Operation Management and Control*. Sulstan Chand && Sons Educational Publishers New Delhi.

ENHANCING COMPETITIVENESS AND ENSURING SUSTAINABLE BUSINESS GROWTH THROUGH INNOVATION STRATEGY: A CASE STUDY

Rituraj Saroha* Dr. Saloni P Diwan**

ABSTRACT:

The study deals with the principles of business innovation, sustainability and competitiveness. The paper traverses through defining business innovation, enumerating various steps to be taken to ensure business innovation and competitiveness, a theoretical review of business innovation and sustainable business solutions, business innovation and competitiveness followed by minutely studying the historical journey of Nestlé, a company well renowned for having a track record of 150 successful years of keeping a keen focus on improving quality of life through business innovation. The paper takes a step-by-step approach in reviewing how Nestlé steered through various business challenges by taking a route of business innovation, sustainability development and never losing its focus. This study, thus, offer vital insights and holds imperatives for any modern day firm hoping to build a sustainable business focused on business innovation and competitiveness.

KEYWORDS: *Business innovation, sustainability development, competitiveness, business challenges*

INTRODUCTION

Sustainable business growth will not happen without business innovation. There is a growing acceptance that to move towards sustainability there must be changes in the ways in which business operates and in the products and services it provides (Holliday et al., 2002). Thus, the challenge for business is to develop innovation strategies that respond to increasing environmental and social pressures, and thus consider the needs and expectations of a wide array of stakeholders (Senge and Carstedt, 2001). At the same time, sustainable development provides an opportunity to enhance competitiveness and growth, as it can become a source of inspiration for efforts at innovation, (Hall and Vredenburg, 2003; Hart and Milstein, 1999). In a market system, sustainable development requires business innovation and companies which can achieve environmental or social goals with superior products or processes that are successful in the marketplace of mainstream customers. Sustainable business solutions incorporate a triple bottom line approach and consider a wide range of stakeholder interests, including environment and society. They are important in driving and implementing corporate innovation for sustainability

can help embed sustainability into business purpose and processes, and serve as a key driver of competitiveness.

Business innovations driving sustainable development do not necessarily occur by accident but can be created by leaders who put them into the core of their business activities. Actors and companies making environmental progress to their core business can be called sustainable entrepreneurs. They generate new products, services, techniques and organizational modes which substantially reduce environmental impacts and increase the quality of life.

The defining challenge for competitiveness has shifted, especially in advanced countries. The challenges of a decade ago were to restructure, lower cost, and raise quality. Today, continued operational improvement is a given, and companies in many countries are able to acquire and deploy the best current technology. In advanced nations with relatively higher labour costs and equal access to global markets, producing standard products using standard methods will not sustain competitive advantage. Instead, advantage must come from the ability to create and then commercialize new products and processes,

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shifting the technology frontier as fast as their rivals can catch up – thus giving vent to vital business innovations.

Business innovation is an organization's process for introducing new ideas, workflows, methodologies, services or products. Business innovation should enable the achievement of goals across the entire organization, with sights set on accomplishing core business aims and initiatives. Innovation often begins with idea generation, wherein ideas are narrowed down during brainstorming sessions after which leaders consider the business viability, feasibility and desirability of each idea. Incorporating innovation in business can help the firms save time and money, and give them the competitive advantage to grow and adapt their businesses in the marketplace.

Business innovation generally refers to changing or creating more effective processes, products and ideas, and can increase the likelihood of a business succeeding. Businesses that innovate create more efficient work processes and have better productivity and performance. For businesses, this could mean implementing new ideas, creating dynamic products or improving your existing services. Innovation can be a catalyst for the growth and success of your business, and help you adapt and grow in the marketplace.

Being innovating does not mean inventing; business innovation can mean changing your business model and adapting to changes in your environment to deliver better products or services. Successful innovation should be an in-built part of your business strategy, where you create a culture of innovation and lead the way in innovative thinking and creative problem solving.

KEY STEPS TOWARDS BUSINESS INNOVATION

Business innovation is the key to competitive advantage for a business. So as to bring about innovation in a business, one must follow a step-by-step approach as given below:

- Conduct an analysis of the market environment, customers' needs and competitors. Be open to new ideas and adaptive to change.
- Develop a strategic, responsive plan, which includes innovation as a key business process across the entire business.

- Leadership in innovation - train and empower employees to think innovatively from the top down. Inspirational leadership and motivation is what drives innovation in business.
- Connect with customers and employees to generate ideas for improving processes, products and services both internally and externally.
- Seek advice. Utilize available resources, business advisors, grants and assistance to drive innovation in your business. This may include seeking Intellectual Property (IP) protection for commercialization of ideas.
- Go to market even if you are not ready. It's very easy to come up with new ideas and become obsessed with them — what the product is, how it can be perfected — rather than concentrating on getting it out to market. A firm has to get its product to market quickly, even if it's only 90% done.

Making these strategies integral to a company sets the stage for an innovation-based approach to business.

The importance of new technologies and innovations for sustainability and competitiveness is a truism among managers, policy makers, and researchers. However, not all new technologies and innovations lead to success in this regard. Given the manifold technological opportunities and types of innovations from which firms can potentially choose, it is desirable to know which innovative activities and technologies are most clearly associated with improved sustainability and competitiveness. Arguably even more important is an understanding of the factors that make the success of new technologies and innovative activities more or less likely in general.

BUSINESS INNOVATIONS & SUSTAINABLE BUSINESS SOLUTIONS: A THEORETICAL BACKGROUND

The literature and business practice review has identified a wide range of examples of mechanisms and solutions that can contribute to business model innovation for sustainability. With careful business model redesign it is possible for mainstream businesses to more readily integrate sustainability into their business and for new start-ups to design and pursue sustainable business from the outset, as suggested by Stubbs and Cocklin (2008) and Porter and Kramer (2011), and business model innovations

can support a systematic, on-going creation of business cases for sustainability (Schaltegger et al., 2012). Business model innovation is increasingly recognised as a key to delivering greater social and environmental sustainability in the industrial system (e.g. Lüdeke-Freund, 2010). However, understanding of sustainable business models and the options available for innovation for sustainability seems limited at present.

The literature generally frames business model innovation in the context of changing the value proposition for the customer. However, it is more than just changing the product and service offerings for the customer; business model innovation involves changing ‘the way you do business’, rather than ‘what you do’ and hence must go beyond process and products (Amit and Zott, 2012). Johnson and Suskewicz (2009) suggest business model innovation represents shifting the focus away from developing individual technologies towards creating new systems. Furthermore, Sommer (2012) emphasises that a business model does not only have a company focus, but involves a wider set of stakeholders, necessitating a broader value-network perspective for innovating and transforming the business model.

BUSINESS INNOVATIONS & COMPETITIVENESS: A THEORETICAL BACKGROUND

On the conceptual level, the adoption of new technology, such as IT, can be viewed as an enabler of process innovations from the perspective of the adopter. If the implementation succeeds, the routines are changed, and the new system is actually utilized. Newly adopted technology can also act as an enabler of product or service innovations from the perspective of the adopter if it is successfully used to offer a new service or to deliver products to customers in a way that is new to the enterprise. For example, a company that adopts and implements new online shop software usually changes the routine of how incoming orders are processed. This is a process innovation. Furthermore, the new online shop software may allow the firm to deliver its products to customers in a new way or to offer additional services, such as tracking orders online or getting immediate information about availability. This would be a service innovation.

Both types of innovations (process and product/service) have clear economic implications. In micro-economic

terms, a product innovation corresponds to the generation of a new production function (Kamien and Schwartz, 1982), which includes the possibility to differentiate an existing product (Beath et al., 1987; Shaked and Sutton, 1982; Vickers, 1986). A process innovation, on the other hand, can be viewed as an outward shift of an existing supply function, which corresponds to lower variable costs in the production of an existing product or service, and is therefore a productivity increase (Beath et al., 1995; Dasgupta and Stiglitz, 1980; Reinganum, 1981).

The payoffs of innovative activities in a firm are determined via a market process that involves not only the activities of the innovator, but also the reactions of customers and competitors. Thus, the payoffs of all actors in a market are interrelated. Economic theory suggests that, *ceteris paribus*, both the creation of a new supply function and the outward shift of an existing supply function can lead to higher output levels and thus revenue growth, although via different mechanisms. Thus, both product and process innovations can lead to growth of the innovator, independent of the firm’s ability to appropriate private profits from the investment that caused the innovation (Götz, 1999; Hannan and McDowell, 1990; Reinganum, 1981; Sutton, 1991).

The relationship between innovation and profitability is more complex because it critically depends on the reaction of competing firms. The fundamental problem for the innovator is to protect its novel process or product from imitation by rivals. As soon as all competitors use the same (improved) process and produce the same product, no single firm in the market will be able to outperform its rivals, including the firm that first brought the innovation to the market (Teece, 1986, 2006). The quicker an innovation is copied by other firms, the less time each innovating firm has to reap additional payoffs from the investment in the innovation. This is known as the appropriability problem (Geroski, 1995). Thus, the timing of an innovation influences the expected payoff.

The game-theoretic literature points out that firms that are able to outpace their direct competitors in technological development will capture market shares and profits from their rivals, possibly up to the degree that they drive their competitors out of business. However, profits from innovation are only sustainable until competitors are able to copy the innovation and all associated complementary assets completely. In addition, potential early mover

advantages will be limited or even reversed if the technologies on which the innovations are based exhibit either falling prices or rapid technological improvements over time (Beath et al., 1995; Fudenberg and Tirole, 1985; Götz, 1999; Reinganum, 1981). Summarizing, economic theory predicts that successful innovators are more likely to grow and to survive in their markets. Various empirical studies are consistent with this message (Audretsch, 1995; Cefis and Marsili, 2005; Mansfield, 1968). They might also be able to capture excess profits, but this is contingent on the behavior of rivals and on other exogenous factors that are beyond the control of the innovator (Geroski et al. 1993; Stoneman and Kwon, 1996). Various empirical studies also show that innovating firms fail to obtain competitive advantages from an innovation, while customers, imitators, and other industry participants benefit (Levin et al., 1987; Teece, 1986). To circumvent this problem, firms typically try to appropriate private returns from innovation using a wide range of mechanisms, including patents, secrecy, lead time advantages, and the use of complementary capabilities (Cohen et al., 2000). Methods of appropriability vary markedly across and within industries, and not all methods work well in all cases (Harabi, 1994; Levin et al., 1987; Teece, 1986).

A different vein of the literature analyzes the firm-level impacts of investments in new technologies, often without linking such investments explicitly to innovation. The consequences of investments into IT have especially been subject to an intense debate among scholars because not all studies have demonstrated clear payoffs from IT (Brynjolfsson and Hitt, 1996, 2000, 2003; Hitt and Brynjolfsson, 1996; Carr, 2003; Chan, 2000; Kohli and Devaraj, 2003). A particular advantage of seeing the adoption of new technologies as an enabler of innovation is that it allows us to identify the firm- and market-specific mechanisms that can lead to different consequences for firms that invested into the same technologies. In addition, it identifies two types of technology-induced changes (process vs. Product innovation) with quite different economic implications. For example, one important difference between process and product innovations is their potential impact on employment. The expansion that usually follows both kinds of innovations creates additional demand for both capital and labour production factors, which implies that innovating firms are more likely to increase employment. This is called the compensation effect (Pasinetti, 1981). However, there can also be a labour-

reducing effect of innovations. For process innovations, this is likely to occur when productivity increasing effects begin to materialize. Productivity increases imply that a given level of output can be produced by a lower level of input. Thus, if demand and output remain constant, a process innovation will lead to a reduction of labour. This is called the substitution effect (Edquist et al., 2001). This effect is less likely to occur for product innovations, whether they are IT-enabled or not.

HISTORICAL ANALYSIS: THE CASE OF NESTLÉ

Nestlé, the Swiss transnational food and beverage company headquartered in Vevey, Switzerland, is the largest food company in the world measured by revenues. Worldwide, people consume more than one billion servings of Nestlé products per day. The company operates in over 197 countries and employs almost 340,000 people. Business innovation has always been a vital part of its strategy right from its inception. The company aims to improve their ability to deliver healthy and tasty choices to its customers.

It was in 1867 in Switzerland, that a premature baby could not breastfeed, which was worrying in an era when many infants died of malnutrition due to a lack of effective breast milk alternatives. Henri Nestlé learned about the case and fed the child his new 'farinelactée' infant food. It was the only product that the boy could digest and he survived. Word of Nestlé's success spread rapidly, and through determination, commitment and a pioneering spirit he built a thriving business. His life-saving innovation was the model for all those who follow throughout Nestlé's 150 years, which shows the company's skill in anticipating and meeting consumers' changing needs through business innovation.

GROWING-UP IN AN INDUSTRIAL AGE THROUGH INNOVATION

Nestlé's journey began in 1866, with the foundation of the Anglo-Swiss Condensed Milk Company, which launched Europe's first condensed milk. This was another life-saving innovated product in an era before refrigeration, when fresh milk spoiled easily in transit. Until the nineteenth century, pure, fresh milk was a prized commodity in towns and cities across Europe. Milk was often a major carrier of disease, as refrigeration was uncommon and it quickly spoiled. Milk adulteration was also rife and

could kill. Chalk, water and other substances were often added to milk. The launch of condensed milk came as a life-changing innovative solution to all these problems. In 1905, Anglo Swiss merged with Nestlé's company to form the Nestlé & Anglo-Swiss Milk Company, which evolved into Nestlé from 1977. Condensed milk is long-lasting and easy to transport, which made it very popular with armed forces. For example, in 1915 the British Army started issuing Nestlé canned milk to soldiers in their emergency rations. Strong demand for the product meant that the company's milk refineries were working flat out. Over several years, Nestlé expanded its range to include unsweetened condensed milk and sterilised milk. In 1916, Nestlé acquired a Norwegian dairy company called Egron, which had patented a spray-drying process for producing milk powder – a product its new owner, Nestlé started selling.

The company's early success was due to its investment in science-based products and modern factories to produce them efficiently. Railways and steamships gave Nestlé & Anglo-Swiss access to new urban markets worldwide and it made savvy use of modern advertising media – newspapers, magazines, billboards – to educate people on product benefits namely, nutrition, quality, safety, affordability and taste. This blueprint for success, bar a few necessary updates, still applies today. Another benefit that Nestlé products have always offered is convenience, and this became especially important after World War Two, when more women entered the workplace, and people demanded foods that were easy to prepare.

Nestlé first entered the chocolate business in 1904 when it took on export sales for Peter & Kohler, later adding brands such as Cailler and KitKat. Henri Nestlé himself plays a key role in the development of milk chocolate from 1875, when he supplies his Veveyneighbour Daniel Peter with condensed milk, which Peter uses to develop the first such commercial product in the 1880s. A competitive market for chocolate in Switzerland encourages Nestlé-Peter-Cailler-Kohler to innovate by launching Galak white chocolate and Rayon, a chocolate with honey and air bubbles, the next year. Vitamins were a major selling point for healthy products in the 1930s, and Nestlé launched vitamin supplement Nestrovit in 1936 to tap this then growing market segment.

SURVIVING CRISIS THROUGH INNOVATION

After the first world war, military demand for canned milk declined, causing a major crisis for Nestlé in 1921. Falling prices and high stock levels led to the first, and only ever, financial loss for Nestlé. Banker Louis Dapples joins as Crisis Manager, and encourages the company to appoint professional managers for the first time as an innovative and creative measure. Administration was centralised and research was consolidated at one laboratory in Vevey, Switzerland. The company thus managed to survive the era by innovating its business processes via many positive initiatives: professionalization of company's management corps, centralization of research function and launching of pioneering products such as Nescafé coffee.

In 1934, Nestlé then goes on to launch the malted chocolate drink, Milo in Australia. Its success followed it being later exported for sale in other markets. The company continues to develop baby and infant foods in this inter-war period, and launches Pelargon in 1934, a full-milk powder for babies enriched with lactic acid bacteria, to improve its digestibility.

By 1938, people could 'start the day with a Nescafé, the world's first great-tasting instant coffee, simply by adding hot water. Nescafé was launched as a 'powdered extract of pure coffee' that retained coffee's natural flavour, but could be prepared by simply adding hot water. It was a revolutionary product idea culminated through sheer grit and strong focus on innovation by Nestlé.

The outbreak of World War Two in 1939 affected virtually every market, but Nestlé continued to operate in difficult circumstances, supplying both civilians and armed forces. Fearing that the Axis powers could occupy Switzerland, Nestlé relocated some managers to a new office in Stamford in the US, which operated as the company's second headquarters during the war. The fighting in Europe made it impossible for Nestlé to export milk from there, so the company supplied Africa and Asia from the US and Australia, and expanded production in Latin America. World war two initially slowed sales of Nescafé, but they picked up as hostilities continue. After the US entered the war, Nestlé brands rapidly gained popularity among American service personnel. At the end of the war, Nescafé was also included in CARE aid supplies in Japan and Europe.

ENHANCING THE QUALITY OF LIFE THROUGH INNOVATION

In 1947, the company added Maggi soups, seasonings and bouillons to its product range. Nestea, another innovative product manufactured using the same method as Nescafé and which can be served both hot or cold, was introduced to the US market in 1948. Today, it is one of the Nestlé's global billionaire brands. By 1948, people could enjoy Nesquik, a cocoa-based powder that dissolves easily in cold milk. By 1957, they could finish the day with Maggi pasta 'ready meals' in cans, which were hugely successful. Its huge success prompted Nestlé to launch more canned, prepared foods, which became a new growth segment. Cans weren't new, but nutritious meals in cans were, and this quickly became a high-growth segment for Nestlé. Such foods had a long shelf life, were easy to heat then eat, and you could even enjoy them cold. Cans were also simple to transport, so you could consume them on a camping trip, for instance, along with your cup of Nescafé. Such products helped to shape the modern world and life would never be the same.

From the 1960s, you could also enjoy the convenience of Nestlé frozen foods and ice creams, which the company entered as domestic fridges and freezers grew in popularity. With increasing numbers of households buying freezers, demand for ice cream was rising. Nestlé bought German producer Jopa and French manufacturer Heudebert-Gervais to capitalise on this growth, and added Swiss brand Frisco in 1962. The company also bought the Findus frozen food brand from Swedish manufacturer Marabou which was one of the first companies to sell frozen foods in Europe and extended the brand to international markets.

Declining breast-feeding rates led some activists to question the baby food marketing strategies of companies including Nestlé in 1977 and they called on people to boycott Nestlé products. The World Health Assembly adopted the WHO code on breast-milk substitutes, and Nestlé became one of the first companies to develop policies based on it and apply them across its business in 1981.

In 1986 Nestlé went one step further by creating its own breakthrough Nespresso system, which changed the way we experience premium coffee. Nespresso machines brew espresso and coffee from coffee capsules or pods in bar machines, a type of pre-apportioned single-use container of ground coffee beans with added flavorings. The company

sells its system of machines and capsules worldwide. The Nespresso story began with a simple idea which enabled anyone to create a perfect cup of coffee, just like a skilled barista and it proved to be another Nestlé innovation that immensely enhanced people's quality of life. Nestlé entered the mineral waters segment by buying a stake in French waters brand Vittel in 1969. Nestlé developed its position in mineral waters by acquiring France's Perrier Group in 1992. Nestlé Sources Internationales was created as a separate waters business in 1993 which was renamed as Nestlé Waters in 2002. Nestlé bought Italian mineral waters business Sanpellegrino Group in 1998. Nestlé Pure Life too was launched in developing countries, to guarantee clean and healthy drinking water and Aquarel was launched in Europe two years later.

TARGETED NUTRITION: THE FUTURE OF FOOD THROUGH INNOVATION

Today Nestlé business spans beverages, waters, dairy, confectionery, petcare, even skincare. In 2011 the company extended its leadership in Nutrition, Health and Wellness by creating Nestlé Health Science and the Nestlé Institute of Health Sciences to research science-based nutritional products aimed at preventing and treating chronic medical conditions and to develop innovative nutritional healthcare products that target optimal brain health, for example, or healthy aging. Through such innovations, Nestlé plans to address the global challenges of malnutrition, growing and aging populations and obesity through innovation. This same passion for nutrition underpins a commitment to improve products by reducing salt, sugar and saturated fats, and fortify them with vitamins, minerals, vegetables and wholegrains.

As Nestlé celebrates 150 years in 2016, the company holds true to its conviction that to prosper in the long-term, it must create value for shareholders, the communities where it operates, and wider society. It's a conviction that enshrines Nestlé's values and all its business processes.

CONCLUSION:

There seems to be a general consensus that if the modern-day businesses are to remain competitive, generate sustainable solutions and alongside maintain performance at a high level, they need to be innovative. To promote innovation, sustainability and thus enhance competitiveness, they need to spend on research and development (R&D). This

supposed need to increase R&D efforts, coupled with the enormous importance of sustainability, competitiveness and fast rate of change of business environment, explain why there is always much ado in today's business world about innovativeness. In this regard, the modern firms can take many cues from the journey of companies like Nestlé, which have stood the test of time and have always had a strong focus on business innovations as a tool to thrive sustainably in ever-changing business environment.

REFERENCES:

1. Amit, R., & Zott, C. (2012). Creating value through business model innovation. *MIT Sloan Management Review*, 53(3), 41.
2. Audretsch, D. B. (1995). Innovation, growth and survival. *International journal of industrial organization*, 13(4), 441-457.
3. Beath, C. M., Silver, M. S., & Markus, M. L. (1995). The information technology interaction model: a foundation for the MBA core course. *MIS quarterly*, 361-390.
4. Beath, J., Katsoulacos, Y., & Ulph, D. (1987). Sequential product innovation and industry evolution. *The Economic Journal*, 97, 32-43.
5. Becker, U. (2009). Innovation and Competitiveness: A Field of Sloppy Thinking. *Internationale Politik und Gesellschaft*, 2009(3), 117-138.
6. Brynjolfsson, E., & Hitt, L. (1996). Paradox lost? Firm-level evidence on the returns to information systems spending. *Management science*, 42(4), 541-558.
7. Brynjolfsson, E., & Hitt, L. M. (2000). Beyond computation: Information technology, organizational transformation and business performance. *The Journal of Economic Perspectives*, 14(4), 23-48.
8. Brynjolfsson, E., & Hitt, L. M. (2003). Computing productivity: Firm-level evidence. *Review of economics and statistics*, 85(4), 793-808.
9. Business Innovation.(n.d.). Retrieved from <http://searchcio.techtarget.com/definition/business-innovation> Carr, N. G. (2003). IT doesn't matter. *Educause Review*, 38, 24-38.
10. Cefis, E., & Marsili, O. (2005). A matter of life and death: innovation and firm survival. *Industrial and Corporate change*, 14(6), 1167-1192.
11. Chan, D. (2000). Detection of differential item functioning on the Kirton Adaption-Innovation Inventory using multiple-group mean and covariance structure analyses. *Multivariate Behavioral Research*, 35(2), 169-199.
12. Dasgupta, P., & Stiglitz, J. (1980). Industrial structure and the nature of innovative activity. *The Economic Journal*, 90(358), 266-293.
13. Edquist, C. (2001). Innovation policy in the systems of innovation approach: some basic principles. In *Knowledge, complexity and innovation systems* (pp. 46-57). Springer Berlin Heidelberg.
14. Fudenberg, D., & Tirole, J. (1985). Preemption and rent equalization in the adoption of new technology. *The Review of Economic Studies*, 52(3), 383-401.
15. Geroski, P. A., & Walters, C. F. (1995). Innovative activity over the business cycle. *The Economic Journal*, 916-928.
16. Götz, G. (1999). Monopolistic competition and the diffusion of new technology. *The Rand Journal of Economics*, 679-693.
17. Hall, J., & Vredenburg, H. (2003). The challenge of innovating for sustainable development. *MIT Sloan Management Review*, 45(1), 61.
18. Hannan, T. H., & McDowell, J. M. (1990). The impact of technology adoption on market structure. *The Review of Economics and Statistics*, 164-168.
19. Hart, S. L., & Milstein, M. B. (1999). Global sustainability and the creative destruction of industries. *MIT Sloan Management Review*, 41(1), 23.
20. Holliday, C. O., Schmidheiny, S., & Watts, P. (2002). *Walking the talk: The business case for sustainable development*. Berrett-Koehler Publishers.
21. Innovation.(n.d.). Retrieved from <http://www.business.gov.au/business-topics/business-planning/innovation/Pages/default.aspx>

22. Johnson, M. W., & Suskewicz, J. (2009). How to jump-start the clean economy. *Harvard business review*, 87(11).
23. Kamien, M. I., & Schwartz, N. L. (1982). *Market structure and innovation*. Cambridge University Press.
24. Koellinger, P. (2008). The relationship between technology, innovation, and firm performance—Empirical evidence from e-business in Europe. *Research policy*, 37(8), 1317-1328.
25. Kohli, R., & Devaraj, S. (2003). Measuring information technology payoff: A meta-analysis of structural variables in firm-level empirical research. *Information systems research*, 14(2), 127-145.
26. Levin, R. C., Klevorick, A. K., Nelson, R. R., Winter, S. G., Gilbert, R., & Griliches, Z. (1987). Appropriating the returns from industrial research and development. *Brookings papers on economic activity*, 1987(3), 783-831.
27. Lüdeke-Freund, F. (2010). Towards a Conceptual Framework of 'Business Models for Sustainability'. *Knowledge collaboration & learning for sustainable innovation*, R. Wever, J. Quist, A. Tukker, J. Woudstra, F. Boons, N. Beute, eds., Delft.
28. Mansfield, E. (1968). *Industrial research and technological innovation; an econometric analysis*.
29. Pasinetti, L. 1981. *Structural Change and Economic Growth*, Cambridge, Cambridge University Press
30. Porter, M. E., & Kramer, M. R. (2011). The Big Idea: Creating Shared Value, Rethinking Capitalism. *Harvard Business Review*, 89(1/2), 62-77.
31. Porter, M. E., & Stern, S. (2001). National innovative capacity. *The global competitiveness report, 2002*, 102-118.
32. Reinganum, J. F. (1981). Dynamic games of innovation. *Journal of Economic theory*, 25(1), 21-41.
33. Schaltegger, S., Lüdeke-Freund, F., & Hansen, E. G. (2012). Business cases for sustainability: the role of business model innovation for corporate sustainability. *International Journal of Innovation and Sustainable Development*, 6(2), 95-119.
34. Senge, P. M., Carstedt, G., & Porter, P. L. (2001). Innovating our way to the next industrial revolution. *MIT Sloan management review*, 42(2), 24.
35. Shaked, A., & Sutton, J. (1982). Relaxing price competition through product differentiation. *The review of economic studies*, 3-13.
36. Sommer, A. (2012). *Managing green business model transformations*. Springer Science & Business Media.
37. Stoneman, P., & Kwon, M. J. (1996). Technology adoption and firm profitability. *The Economic Journal*, 952-962.
38. Stubbs, W., & Cocklin, C. (2008). Teaching sustainability to business students: shifting mindsets. *International Journal of Sustainability in Higher Education*, 9(3), 206-221.
39. Sutton, J. (1991). *Sunk costs and market structure: Price competition, advertising, and the evolution of concentration*. MIT press.
40. Teece, D. J. (1986). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *Research Policy*, 15(6), 285-305.
41. Teece, D. J. (2006). Reflections on "profiting from innovation". *Research Policy*, 35(8), 1131-1146.
42. Vickers, J. (1986). The evolution of market structure when there is a sequence of innovations. *The Journal of Industrial Economics*, 1-12.

PSYCHOLOGICAL HARASSMENT AT WORKPLACE: EXAMINING AMELIORATIONS AFTER DIGITALIZATION

Hema Kataria* Surbhi Pahuja**

ABSTRACT:

Psychological Harassment is gaining wide attention by organizations, employers and media because of increased responsibilities and work pressure at workplace. Psychological Harassment is the leading cause of stress and mental injuries. Understaffing, job insecurity and poor working conditions also contribute to it. The results of Psychological Harassment are absenteeism, lack of motivation, resignations, dissatisfaction, decrease in productivity etc. In order to protect the workforce from this menace, the Government of India incorporated a fundamental right in the Indian Constitution for gender, racial and religious equality this applies to workplace as well. The Equal Remuneration Act, 1976 (ERA), Industrial Disputes Act, 1947 (IDA) also support the same and Section 354 of IPC specifies that outraging the modesty of a woman either through words or gestures will attract serious consequences.

The Purpose of this study is to analyze the decline of Psychological Harassment after digitalization with the help of descriptive research.

KEYWORDS: *Workplace, Digitalization, Harassment*

INTRODUCTION

Psychological harassment is vexatious behavior that manifests itself in the form of conduct, verbal comments, actions or gestures characterized by four criteria: they are repetitive they are hostile or unwanted; they affect the person's dignity or psychological integrity, and they result in a harmful work environment which may be both racial and sexual. The President of MIT also stated that harassment (and favoritism) is adversative to the mission of a university as well as intolerable for individuals.

Forms of harassment relationships include:

A few common ways in which harassment is expressed are making rude, degrading or offensive remarks, making gestures that seek to intimidate, engaging in reprisals. Discrediting the person spreading rumors ridiculing him/her, humiliating him/her, calling into question his/her convictions or his/her private life, shouting, abuse at him/her or psychologically harassing him/her. Belittling the person forcing him/her to perform tasks that are belittling

of below skills, simulating professional misconduct

Preventing the person from expressing himself/herself and yelling at him/her, threatening him/her, constantly interrupting him/her and prohibiting him/her from speaking to others.

Isolating the person, no longer talking to him/her at all, denying his/her presence, distancing him/her from others. Destabilizing the person; making fun of his/her convictions, his/her preferences and his/her political choices.

OBJECTIVES OF THE STUDY:

The Objectives of the study are the following:

- a. To analyze the awareness among candidates regarding rights entitled against Psychological Harassment by the Indian Constitution.
- b. To analyze the impact of Psychological Harassment on the Job Performance

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- c. To analyze the impact of Psychological Harassment on Public Image on an Institution.
- d. To analyze the impact of Digitalization on this issue with special reference to Virtual Teams.

METHODOLOGY:

The research paper is an attempt of Descriptive Research, based on the secondary data sourced from various Annual Reports, journals, magazines, articles and media reports.

RESULT AND ANALYSIS:

Source	Psychoanalysis
(Garbarino 1990, 7)	Researchers considered psychological abuse to be a consequence of other forms of abuse particularly physical or sexual abuse
(Arias and Pape 1999, 56; Astin 1993, 17; O'Leary 1999, 3)	psychological abuse is understood as a separate and distinct form of abuse
(Dutton, Goodman and Bennett 2001, 180)	It have confirmed that psychological abuse is a common and significant form of interpersonal violence in terms of its frequency, and its short and long-term effects
(Tomison and Tucci 1997)	several researchers have argued that victims experience greater trauma from ongoing, severe psychological abuse than from experiencing infrequent physical assault

Table 1.1

VARIOUS THEORETICAL MODELS HAVE BEEN PUT FORWARD TO EXPLAIN PSYCHOLOGICAL

Theory	Psychoanalysis
Cunningham 1998, iii	Psychological abuse
Hammer 2001	The personal and interpersonal characteristics of the victim and the abuser (e.g., genetic predisposition to violence, personality traits), while others stress the importance of attending to social and cultural factors (e.g., social conditions and structures such as patriarchy) that contribute to society's recognition of particular psychological tactics as harmful

Table 1.2

Approaches to Intervention Effects-based approaches and behavior-based approaches (Hamarman and Bernet 2000, 928-930).

Approach	Psychoanalysis
Effects-based approaches	It tends to identify the range of harm experienced by victims ranging from low self-esteem, self-harming behaviors, anxiety, chronic stress, phobias, insomnia and nightmares, to post traumatic stress, depression and suicidal thoughts. Service providers using effects-based models are more likely to recognize a victim of psychological abuse by the harm the abuse has triggered, than by the behavior of the abuser that caused the harm.
Behaviour-based approaches	Identify tactics or "red flag" behaviors of abusers. To label behaviors as psychologically abusive, interveners must watch for intentional, sustained and repeated patterns of behaviors and responses.

A. EFFECTS OF PSYCHOLOGICAL ABUSE

Children (Infancy to age 12)	Adolescents (Ages 13-19) Adults	(Ages 20-64) Older Adults	(Age 65 and up)
Elevated levels of cortisol (a stress hormone) that may cause damage to areas of the brain important for memory formation and emotional regulation	Psychological abuse in dating relationships (both male and female victims)	Fear for self, children and/or pets (female victims)	Discomfort or fear around caregiver
Risk of being bullied	Depression, social withdrawal, poor identity development, eating disorders and self-mutilation (more likely for female victims)	Shame	Difficulty with normal life transitions (e.g., retirement)
Overt aggression (e.g., fighting, making threats, bullying) common as short-term outcome (male and female school-aged victims)	Suicide attempts or discussion (both male and female victims)	Physical problems that have no medical basis (both men and women)	Signs of general psychological distress: <ul style="list-style-type: none"> • depression • fear • anxiety • low self-esteem • shame • anger • self-harming
Anxiety and depression	Delinquent acts, abuse of alcohol/drugs and abusive dating behavior (more likely for male victims)	Depression, withdrawal and abuse of alcohol (gender differences same as teens).	Sudden loss of appetite unrelated to physical disease or aging
Social withdrawal and limited peer interaction			Difficulty sleeping

“In total, 30 million Americans work from home at least once each week, which will increase by 63% in the next five years. About 3 million Americans never go to an office and 54% are happier working from home than in an office. Furthermore,

InterpretationThe continued rise of digitalization allows employees to be highly flexible regarding when and where to work, both inside and outside the traditional

office, a trend captured in the term new ways of working (NWW). With NWW, increased employee flexibility changes the relationship between supervisor and employees, thereby posing both benefits and new challenges for leadership. For supervisors, NWW particularly complicate the nevertheless necessary task of exercising control over employees. In NWW supervisors often rely on electronic performance monitoring techniques as an alternative to traditional forms of supervisory control. Yet,

since employees often perceive electronic monitoring as a signal of their supervisors' distrust, these new monitoring systems can harm the employee-supervisor relationship. At the same time, by accepting the control and monitoring behavior of their supervisors, employees can form high-quality relationships with supervisors, which can in turn translate into greater productivity and mutual trust. By more closely tracing this process, the present chapter investigates how supervisors in NWW can effectively supervise employees by maintaining control while still expressing trust and it can then lead to less issues as the workplace thus reducing the chances of psychological harassment.

Virtual organizations (VO) use novel coordination regimes that rely less on geographical proximity than conventional organizations. They can also deal with less consistency and homogeneity of their member's working-results. But while they are relatively free from old constraints, VOs have their own new problems and challenges.

VOs are fundamentally dependent on virtual communication. Depending on the tools used, virtual communication has characteristics that facilitate coordination (storing and retrieving of communication) and characteristics that complicate coordination (asynchronous communication, absence of nonverbal communication). Also, virtual interaction lacks the motivating and disciplining effect of the physical presence of other people in shared workspaces but at the same point of time it gives an opportunity to the employees to reduce their mental stress caused by psychological harassment especially at the workplace.

CONCLUDING OBSERVATION:

The role of digitalization in each of the occupations differs depending on how digitalization has changed the efficiency of work and nature of work. For cyber security experts, who are techno savvy, the changes in both work efficiency and nature of work have and will be constantly increasing. On the other hand, higher education teachers and healthcare professionals are emerging in digitalization and are on the verge of digital transformation, as the needed changes in the nature of work have not yet occurred to increase the efficiency of work accordingly. For business managers, who are efficient in digital world, the increase in the efficiency of work has been significant. However, the changes in the nature of work have been relatively small. Lastly, for technology innovators the

changes in the nature of work have been tremendous while the change in work efficiency has not yet been realized. Therefore, they are named as being digital re inventionists. In order to make the work more productive for these five occupations, it is necessary to have the right skills in place and change the nature of work to fit to the needs of the new digital economy and the impact on each occupation defers after digitalization and the same is also derived for psychological harassment.

REFERENCES:

1. Takeuchi, Yuichiro. (2014). "Towards Habitable Bits: Digitizing the Built Environment." ACM International Conference on Interactive Tabletops and Surfaces. 209-218. ACM. New York.
2. United States Court of Appeals, 8th Circuit. (2013). Samuel Edeh, Plaintiff-Appellant, v. Equifax Information Services LLC, Defendant-Appellee.
3. United States Department of Labor. (1999). Futurework—Trends and Challenges for Work in the 21st Century. U.S. Department of Labor. Washington, DC.
4. Kaiser, U. (2000). "New Technologies and the Demand for Heterogeneous Labor: Firm-level Evidence for the German Business-Related Service Sector," Economics of Innovation and New Technology Vol. 9(5). 465-486.
5. Kvochko, Elena. (2014). "The Online, Freelance, Globalizing World of Work." *Technomy*. Retrieved
6. Barling, J., Dekker, I., Loughlin, C., Kelloway, E., Fullagar, C., & Johnson, D. (1996). Prediction and replication of the organizational and personal consequences of workplace sexual harassment. *Journal of Managerial Psychology*, 11, 4-25.
7. Equal Employment Opportunity Commission. (1999). Employment guidance: Vicarious employment liability for unlawful harassment by supervisors.
8. Whitman, J. Q., & Friedman, G. S. (2003). The European transformation of harassment law. *Yale Law School Legal Scholarship Repository Faculty Scholarship Series*, 647, 241-274.

9. Schneider, K. T., Tomaka, J., & Palacios, R. (2001). Women's cognitive, affective, and physiological reactions to a male coworker's sexist behavior. *Journal of Applied Social Psychology*, 31, 1995–2018

JOURNEY OF ROYAL ENFIELD FROM DUSK TO DAWN ALONG WITH VARIOUS STRATEGIES ADOPTED

Neha Bharti* Dr. Manish Nangia**

ABSTRACT:

Royal Enfield is the oldest surviving brand of motorcycles in the world. The brand which is more than 100 years old has been in India since 1949. The manufacturer Enfield India was bought over by Eicher Motors Limited in 1994. Since then, the brand is owned by Eicher Motors. It is now an Indian brand. Once considered as the king of the world, the kingdom of Royal Enfield was on the verge of getting snatched away at one point of time in late 1990. Beating the odds, Royal Enfield, the oldest motorcycle brand, is still in production. The legendary bike brand was facing a loss of Rs. 20 crore and was on the edge of a shutdown in 2000. Eicher Motors faced a tough choice in early 2000. This was the time when the company gave one final chance to revive its loss-making brand Royal Enfield, company's motorcycle division. To materialize the opportunity, they wanted to modernize the bikes to appeal to a wider customer base. The manner in which the fortunes of the brand turned can be an excellent example of brilliant product planning, process and brand management coupled with excellent marketing strategies. However, the manufacturer faced challenges as the existing customers wanted their Bullets just the way they had always been. By modernizing, Royal Enfield risked losing traditional fans without possibly gaining any new customers. This paper details how it met the challenge by focusing on different types of strategies.

KEYWORDS: *Product Planning, Marketing Strategies, Brand Management, Customers*

INTRODUCTION

Royal Enfield is the oldest surviving brand of motorcycles in the world. The brand which is more than 100 years old has been in India since 1949. The manufacturer Enfield India was bought over by Eicher Motors Limited in 1994. Since then, the brand is owned by Eicher Motors. Thus, it is now an Indian brand.

Once considered as the king of the world, the kingdom of Royal Enfield was on the verge of getting snatched away at one point of time in late 1990. Beating the odds, Royal Enfield, the oldest motorcycle brand, is still in production. The legendary bike brand was facing a loss of Rs. 20 crore and was on the edge of a shutdown in 2000. The manner in which the fortunes of the brand turned can be an excellent example of brilliant product planning, process and brand management coupled with excellent marketing strategies.

HISTORY

In the year 1890, Enfield Manufacturing Company Limited was set up in England. The Company started manufacturing its product Royal Enfield as brand name. Soon the brand decided to focus on other vehicles as well. In 1899, it started manufacturing a quadricycle called "Royal Enfield Quadricycle." Despite being an innovative concept, the product had limited market potential. In the year 1901, the Company launched its first motorcycle fitted with a 239-cc engine.

In 1909, introduction of a small Motorcycle with a 2 ¼ HP V twin Motosacoche engine of Swiss origin pleasantly surprised the motorcycling world. The next was in 1911, powered by a 2 ¾ HP engine and boasted of the well known Enfield 2-speed gear. In 1912 was the year for iconic JAP 6 HP 770 CC V twin with a sidecar combination which made

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Enfield a household name. In 1914 world experienced the ride of 3 HP motorcycles with Enfield’s own engine which having the standardized Enfield paint scheme of black enameled parts and green tank with gold trim.

In 1949, Enfield started selling its motorcycles in the Indian market as a strategic move for its global expansion serving the need of Indian Army. The Royal Enfield motorcycles were considered an ideal choice for the Indian army for patrolling the country’s border and as a result of that in 1955 the Indian government placed an order of 800 350-cc Royal Enfield motorcycles. Soon after receiving a thumbs up from Indian customers, the company also started manufacturing 500 cc Bullet for Indian markets.

In 1955, the company partnered with Madras Motors in India to form ‘Enfield India’ to assemble, under license, the 350-cc Royal Enfield Bullet motorcycle in Madras (now called Chennai). The tooling was sold to Enfield India so that they could manufacture components. By 1962, all components were made in India. The Indian Enfield uses the 1960 engine (with metric bearing sizes), Royal Enfield still makes an essentially similar bike in 350 cc and 500 cc forms today, along with several different models for different market segments. In 1990, Royal Enfield collaborated with the Eicher Group, an automotive company in India, and merged with it in 1994. Apart from bikes, Eicher Group is involved in the production and sale of tractors, commercial vehicles and automotive gears. Royal Enfield experienced difficulties in the 1990s, and ceased motorcycle production at their Jaipur factory in 2002.

Year	Strategies adopted by Royal Enfield in various years
1890	Enfield Manufacturing Company Limited was set up in England
1899	Started manufacturing “Royal Enfield Quadricycle”
1901	Launched its first motorcycle fitted with a 239-cc engine
1909	Introduction of small Motorcycle with a 2 ¼ HP V twin Motosacoche engine of Swiss origin
1911	Next model powered by a 2 ¾ HP engine and boasted of Enfield 2-speed gear
1912	JAP 6 HP 770 CC V twin with a sidecar combination, motorcycle which made Enfield a household name
1914	3 HP motorcycles this time with Enfield’s own engine which now had the standardized Enfield paint scheme of black enameled parts and green tank with gold trim
1949	Started selling its motorcycles in the Indian market as a part of its global expansion
1955	Indian government placed an order of 800 350-cc Royal Enfield motorcycles, the company started manufacturing 500 cc Bullet for Indian markets
1955	Company partnered with Madras Motors in India to form 'Enfield India' to assemble, under license, the 350-cc Royal Enfield Bullet motorcycle
1965	Reached efficiency of manufacturing all components in India
1990	Royal Enfield collaborated with the Eicher Group
1994	Merged with Eicher Group
2000	Sales of the bike were down to 2,000 units a month against the plant's capacity of 6,000
2001	Electra was launched as Indian market only model with 346 cc classic engine. 4-speed or 5-speed gearbox
2002	Ceased motorcycle production at their Jaipur factory
2002	Launched models of Thunderbird 350
2008	Classic models were launched - inspired by J2, a 1950 model Bullet
2011	Fury: A flat-track style version of the 500cc Bullet Electra EFI, sold exclusively in the UK by importer Watsonian Squire
2013	500 cc variant of the Thunderbird. Fuel injection, digital console, electronic fuel gauge, projector headlamps and 18-inch wheels. Currently the flagship model of Royal Enfield India

2014	Continental GT: Cafe Racer styling. Fuel injection, Digital console, electronic fuel gauge, projector headlamps Twin downtube cradle frame, Paioli, Twin gas charged shock absorbers with adjustable preload, 80mm travel
2015	Eicher Motors had become one of the most expensive automobile stocks in India
2016	Himalayan: Launched as all terrain, all weather bike promising both adventure and comfort
2016	Himalayan Odyssey – Women: Launched as only for women bike promising adventure in style

MARKETING AND NETWORKING STRATEGIES ADOPTED BY ROYAL ENFIELD

1990 was the year for Enfield to enter into a strategic alliance with the Eicher Group in India, and later merged with it in 1994. Royal Enfield positions itself in 'lifestyle' category of the motorcycles market. The year 2000 could have been decisive. That was when the board of directors at Eicher Motors decided to either shut down or sell off Royal Enfield – the company's oldest Chennai-based motorcycle division. For all its reputation, the sales of the bike were down to 2,000 units a month against the plant's capacity of 6,000. Though the bikes had diehard followers, there were also frequent complaints about them with regard to engine seizures, snapping of the accelerator or clutch cables, electrical failures and oil leakages. Many found them too heavy, difficult to maintain, with the gear lever inconveniently positioned and a daunting kick-start. In 2010, 113 lakh motorcycles were sold in India of which the company sold only 52,000. Since the brand is a niche brand, it cannot target the mass market. But in order to survive in the market place they were faced with the daunting task of ensuring that the sales grow gradually and the margins keep on increasing due to increased cost of overheads.

Newspaper reports were of the opinion that there is an increasing demand of high end bikes in India. Kawasaki Ninja, Ducati, Honda all are seeing a spike in sales. Even the legendary brand Harley Davidson is now in India. All these brands are in the 500 cc plus segment. The competition is the last problem for the brand. The only competition to Royal Enfield is Royal Enfield itself. The competitors cannot cause much problem because they are far too costly. While Ninja comes at Rs. 4 to 5 lakh, Harley is available at Rs 7 lakh. Compared to this, the price range at Enfield is Rs. 95,000 to Rs. 1, 70,000 only.

PROBLEMS AND ISSUES FACED BY ROYAL ENFIELD

The problems they faced were manifold but the brand still commanded a loyal following. Most of the customers were of the opinion that the bikes were too heavy and

difficult to maintain. It was time to modernize the Bullet. The marketing mavens at Royal Enfield understood the need for a complete makeover, but they faced a catch-22 situation; doing so could bring in a newer profile of buyers, but they also risked alienating their loyal audience that defined the brand. It was a challenge they had to meet, and they did so in style. Siddhartha Lal, a third generation member of the Delhi-based Lal family, was one of the key promoters of the Eicher group of companies. Lal, then 26, was an unabashed Bullet fan: he even rode a red-coloured Bullet while leading his baraat, instead of the traditional horse. He was of the opinion that 'You can feel the pulse of your customers, only if you get close to them.' This thought process has driven Royal Enfield to set up a wide network of 11 Brand Stores, 250 dealers in all major cities and towns, and over 200 Authorised Service Centres. The Company also exports motorcycles to 42 countries including the United States, Japan, UAE, Korea, Bahrain, United Kingdom, France, Germany, and Argentina through 40 importers and over 300 dealers across the globe.

Royal Enfield fans liked the bikes exactly the way they had always been but change was the need of the hour. The mistaken notions of prospective customers had to be addressed, and any reservations about Bullet and Thunderbird, which was launched in 2002, removed. At the same time, Lal and Ravichandran (joined in 2005 as CEO as part of his revival strategy) were clear that the individuality of Royal Enfield bikes should not be compromised.

The new engine had 30 percent fewer parts and produced 30 per cent more power than the old, with better fuel efficiency. By 2010, all Royal Enfield models had begun to use the new engine. With the quality issues addressed, the management focused on improving the customer's experience of buying and owning the brand. To improve the sales experience, Royal Enfield improved the look of the dealer outlets as well. They declared 2006 as the "year of getting back to the basics" and also formed a

field quality rapid action force to bridge the gap between customer expectations and the reality.

Slowly, the tide turned. Engine related problems and oil leakages in Royal Enfield products almost disappeared. By 2008 dealers were reporting lower workloads. Warranty claims fell sharply. Malfunctioning of the spark plug, on which the electric starter depends, declined, for instance, from 5 percent in 2005-06 to 0.2 percent in 2010-11. Royal Enfield also began conducting marquee rides to promote leisure biking.

STRATEGY TO ENTER INTERNATIONAL MARKETS

In October 2008, Royal Enfield launched in Germany its newly designed 500 cc Classic model – inspired by J2, a 1950 model Bullet – with the new engine. It was a success, admired for its performance and fuel economy. The same strategy was used to launch it in India in November 2009 initially as a 350 cc bike which was priced at Rs 1.20 lakh. This too proved to be a big hit.

Even though the price of bullet were higher than that of the low powered Japanese motorcycle brand sold in India but were cheaper than the major global brands. Even after the prospects of the improvement of brand, the company refrains to revise its prices in order to keep the motorcycles affordable in very price conscious Indian market.

The strong pricing of the brand with improved operating margins rapidly increased the valuation of the company. By the year 2015, Eicher Motors had become one of the most expensive automobile stocks in India.

In August 2015, Royal Enfield Motors announced that it is establishing its North American headquarters and a dealership in Milwaukee, Wisconsin, with the intention to offer three bikes, the Bullet 500, Classic 500 and Continental GT 535 Cafe Racer as they feel this engine size represents an underserved market. The dealership will be Royal Enfield's first company-owned store in the U.S., according to Rod Copes, president of Royal Enfield North America.

Later in August 2015, Eicher announced its entry in Indonesia as a part of its global expansion strategy in the mid-sized (250-750cc) motorcycle segment, initially started retail operations from a dealership in Jakarta.

From April to September 2015, Royal Enfield's domestic sales were up 50 percent over the previous year, despite a declining motorcycle market in India. In 2016, the all

new model "Royal Enfield Himalayan" with 440cc engine Single cylinder, air-cooled, 4 stroke, SOHC inspired to flow in perfect harmony with the mountain. The most versatile model, able to take riders almost everywhere be it the off-road or on-road. Positioning itself as the all weather, all terrain motorcycle, promising both adventure and comfort.

In July 2016, Royal Enfield Himalayan Odyssey was introduced as an "All Women's edition", with a tour of 17 days started from New Delhi on 9th July. The journey started with 20 women participants, positioned as adventure ride promising most memorable motorcycle journey of their lifetime covering approx 2200 kms in some of the roughest terrains and highest mountain passes in India. It can be understood as the expansion of brand; exploring and offering for new market segment HO-W (Himalayan Odyssey Women) called the women riders seeking their rendezvous with adventure.

The company markets its model to two different markets 'India and Bharat'. India captures the urban population and the youth of urban areas and offers light weight and new models with advanced features. The rural population who follow the legacy and the attitude of tough models were termed as 'Bharat' and served by continuing production of existing heavy models.

The unique and open culture of the Company, make Royal Enfield a vibrant and responsive workplace. To its customers in India or elsewhere in the world, Royal Enfield means more than just motorcycles; it maintains a relationship, a sense of belonging to an exclusive community with unfading passion, emotion and interest. The Company augments its leadership position, be it in the power and leisure bike segment in India or the classic bike segment elsewhere in the world, by introducing distinctively styled and higher-powered motorcycles, strengthening existing communities around its products, expanding its network, and delivering a unique motorcycling experience.

There is a sense of aura around the brand. It is very heavy, tough to drive and thus remains elusive to the very few 'men' which can wield it. Very few people drive Bullet but many more aspire for it. The brand offers a riding experience which no other bike can. The thumping sound, the road presence, the sheer 'ego' boost which the brand gives its rider makes him feel 'arrived.'

As the only motorcycle manufactured in India synonymous with adventure and leisure riding, Royal Enfield has more recently stayed away from regular mass media

advertising and has concentrated more on building its brand around the values that the brand stands for. Having a cult status the Royal Enfield motorcycle is known for its versatility, uniqueness and is built to last. Royal Enfield strongly promotes leisure motorcycling as a lifestyle and encourages the Royal Enfield riders/owners to keep riding. In this regard, the company organizes annual events and rides such as the Himalayan Odyssey, The Tour of Rann of Kutch, The Tour of NH 17 (Mumbai to Goa), the Tour of Rajasthan and the Southern Odyssey. It also organizes the Annual festival of biking, Rider Mania in Goa which attracts Royal Enfield riders from all over.

CONCLUSION:

It can be said that the brand dealt with some of its problems but yet to overcome with some of a different nature. The big question here is - How should it scale up without diluting its brand equity? With other options available, will its customers be ready to wait for a 6-month period it takes to provide deliveries? Challenges are also from the global brands such as Harley-Davidson which has entered the Indian market and what if Japanese version of classic bikes starts being assembled in India? The challenges continue to test Brand Royal Enfield and going by its image of moving towards down and not fading in dusk of difficult times, Royal Enfield will continue its monarchy in this segment.

Today, the brand is on a roll. If count famous names, Katrina Kaif drove it in the movie Zindagi Na Milegi Dobara, Ajay Devgan in Singham, Kangana Ranaut in Tanu Weds Manu, South African cricketer Jonty Rhodes also got media attention for having a flair for Royal Enfield and so do actress-turned politician Gul Panag. Even if the brand ignite the passion of coming generation by new models, manages to protect its heritage, maintains the quality, capacity expansions will be a need for Royal Enfield in future.

REFERENCES:

1. <http://royalenfield.com/>
2. http://www.icmrindia.org/casestudies/catalogue/Marketing/Royal_Enfield_Revival-Excerpts.htm#
3. <https://wethriveindia.wordpress.com/tag/royal-enfield-case-study/>
4. <http://economictimes.indiatimes.com/industry/auto/news/two-wheelers/news/meet-siddharth-lal-the-man-who-turned-around-royal-enfield-into-eicher-motors-profit-engine/articleshow/46461712.cms?curpg=2>
5. <http://www.thehindu.com/features/metroplus/Motoring/royal-enfield-himalayan/article8803922.ece>

PSYCHOLOGICAL CAPITAL AND EMPLOYEE COMMITMENT

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ABSTRACT:

Ensuring workforce commitment is a major problem in human resource management. This paper explores to find a way out to solve the said problems by examining the significance of Psychological Capital. Psychological Capital is a positive psychological construct pioneered by Fred Luthans, University of Nebraska, United States. Psychological Capital is a multidimensional positive psychological construct composed of hope, resilience, self-efficacy, and optimism. Findings from Western countries suggest that Psychological Capital is one of the predictors of performance, positive work attitudes, and behaviors (e.g., satisfaction, well-being, & citizenship behaviors). This research examined the relationship of Psychological Capital in employee commitment in Indian cultural context. This study was conducted on a sample of 265 respondents from five public sector banks located in the state of Odisha. Correlation and regression analyses were used to test the hypotheses. Findings suggest that Psychological Capital is positively related to employee commitment.

KEYWORDS: *Psychological Capital, Self-efficacy, Performance, Commitment, Indian Context*

INTRODUCTION

In the dynamic business environment managing human resources is an important task. Organizations face problems like poor employee commitment, poor performance, and job disaffection. Workforce commitment is an important determinant for achieving sustainable development for any enterprise and it is a significant indicator of effective human resource utilization in any organization. Psychological Capital is defined as “an individual’s positive psychological state of development characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward the goals, and when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success” (Luthans et al., 2007, p. 3).

In this research we have attempted to study the relationship of Psychological Capital with employee commitment in Indian cultural context. Psychological Capital being a Western developed construct, its relevance with attitudinal correlates assumes significance in a non-Western cultural

context (see generalizability theory, Cronbach, Gleser, Nanda, & Rajaratnam, 1972; context theory, Johns, 2001a, 2006).

PSYCHOLOGICAL CAPITAL

The construct of Psychological Capital is based on positive psychology literature and has been pioneered by Fred Luthans. He extended the influential work on positive psychology to the workplace and developed the positive organizational behavior (POB) research framework. POB is defined as, “the study and application of positively oriented human resource psychological capacities which are measurable, developable, are significantly and positively related to workplace performance” (Luthans, 2002b, p. 59). As per the proponents of POB, for a construct to be considered under positive organizational behavior, it should satisfy that it is developable (state like), linked to objective outcomes, and should be measurable.

Extensive research on hope has been done by Snyder (2000). Snyder’s (2000) concept of hope refers to an individual positive motivational state based on agency and pathways component. The agency component of hope simply means an individual having goal-directed energy

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and the pathways component reflects ability for planning to meet desired goals. Research done by Snyder (2000) suggests that people high on hope develop practical plans which are achievable and they keep sufficient room for alternate paths to attain their goals (Snyder et al., 1996). Research on hope indicates that hope can be developed (state like) and can be assessed by a scale developed by Snyder et al. (1996). Empirical evidence in China revealed that hope is positively related to satisfaction and commitment (e.g., Youssef & Luthans, 2007; Luthans et al., 2005; Peterson & Luthans, 2003). Indian study undertaken by Combs, Clapp-Smith, and Nadkarni (2010) gives evidence that hope is positively associated with performance in Business Process Outsourcing (BPO) employees.

Self-efficacy reflects feeling about having confidence. Self efficacy has its origin in Bandura's (1997) social cognitive theory. Research conducted by Bandura (1997) confirms that it can be developed through four ways namely through task mastery, modeling the role personality, through feedback, and by psychological arousal or wellness. Parker (1998) developed a scale to measure self-efficacy. Research findings suggest that self-efficacy can be developed through training interventions (Luthans et al., 2010). A Meta-analysis conducted by Stajkovic and Luthans (1998) found that self-efficacy is positively related to performance.

Positive organizational behavior researchers have incorporated a cross disciplinary approach in understanding resilience in organizational contexts. Research in clinical and developmental psychology supports the usefulness of resilience in organizational contexts. Resilience in organizational settings is defined by Luthans (2002a) as "the developable capacity to rebound or bounce back from adversity, conflict, and failure or even positive events, progress, and increased responsibility" (p.702). Resilience is the most recent addition to Psychological Capital, it refers to the capacity to fight back from failures and adversities (Luthans, 2002b) and has significant positive relationship with performance. Psychological resource of resilience has positive association with work attitudes like job satisfaction, commitment, and happiness, (e.g., Luthans et al., 2005; Youssef & Luthans, 2007). Maddi's (1987) research suggests that resilient employees maintain good health, performance, and happiness during downsizing.

Optimism as a construct was developed by Seligman

(1998). It refers to an individual feeling of positivity. An optimistic individual attributes negative events as learning experience and takes positive note in every thing. Research undertaken by Youssef and Luthans (2007) suggest that optimism was positively linked with high performance, job satisfaction, and happiness. Optimism can be developed by giving less importance for the past events, and by being satisfied with the present situation (e.g., Peterson, 2000; Schneider, 2001).

Research made by Hobfoll (2002) on psychological resource theories advocate that psychological resources/capacities namely hope, self-efficacy, optimism, and resilience will help individuals to acquire, maintain, and adjust to the demand of the job and also would help in adaptation in crisis situations.

Individual positive capacities of hope, resilience, optimism, and self-efficacy are measurable and are developable, these are also positively linked to employee performance, satisfaction as found in the research (e.g., Combs et al., 2010; Luthans, 2002b; Luthans et al., 2005; Luthans et al., 2008; Luthans & Youssef, 2007, Seligman, 1998; Schneider, 2001; Snyder et al., 1996).

PSYCHOLOGICAL CAPITAL: PSYCHOMETRIC PROPERTIES

Let us now discuss the concept of Psychological Capital, its relevance to employee commitment and its psychometric properties. Luthans et al. (2007) used the term Psychological Capital to represent individual motivating potentials that provide competitive advantage to an organization similar to what machinery and cash does. Luthans et al. (2007) argue that these psychological resources contribute to individual, organizational performance, and to other positive organizational citizenship behaviors. Hence it called capital.

Psychological Capital is state-like suggesting its developmental potential (e.g., Luthans et al., 2006; Luthans et al., 2008; Luthans et al., 2015). Each of the components of Psychological Capital are developable as evident in the research conducted by Bandura (1997, 2001), Snyder et al. (1996) and Seligman (1998). Psychological Capital construct has synergetic effect. Component of hope, self-efficacy, resilience, and optimism share a common mechanism on organizational outcomes. Psychological Capital as a whole had grater impact on

performance than the individual components (e.g., Luthans et al., 2007). Therefore, we can say that Psychological Capital as a higher order construct is greater than the sum of its individual parts. Research gives evidence that Psychological Capital is measurable and is developable through training intervention.

Above mentioned relationship are supported by research (e.g., Avey et al., 2009; Avey, et al., 2008; Luthans et al., 2005; Luthans, Avey, & Patera, 2008). Research in China, and U.S.A, suggest that Psychological Capital is positively related to performance. Research findings on neuroscience suggest that there is difference in brain activity of high Psychological Capital leaders and low Psychological Capital leaders (Peterson et al., 2008). Few studies have been done on Psychological Capital in Indian samples (e.g., Choubisa, 2009; Gupta & Singh, 2014). Majority of the literature that we have discussed so far are from Western countries. Based on our literature review we have formulated the following hypotheses.

FORMULATED HYPOTHESES

H1: Psychological Capital will have positive relationship with employee commitment.

H2: Age and gender of the participants will not have any significant relationship with Psychological Capital.

METHOD OF STUDY

STUDY DESIGN AND PROCEDURE

This study involved a sample of 265 respondents from five public sector banks located in the state of Odisha. Average age of participants was 38.6 years (SD = 7.9). Response rate for this study was 78%. In the first part of the survey we administered the predictor variable (Psychological Capital) and than a week later we administered the commitment scale on the participants. We followed these steps as per the suggestions of Podsakoff et al. (2003) to avoid "common method variance" bias.

PSYCHOLOGICAL CAPITAL MEASURES

Psychological Capital was measured with the 24-item questionnaire (PCQ; Luthans et al., 2007). Cronbach's alpha was (.88) for this scale and this scale has been found

to be valid in Indian context (Gupta & Singh, 2014). PCQ has been found valid in U.S.A. and China on multiple samples as suggested by Luthans et al. (2007).

COMMITMENT MEASURE

We measured employee commitment with the help of Allen and Meyer's (1990) scale. This is a 6-item scale and responses are measured on a 6-point Likert-type scale with the following response pattern 1 (strongly disagree) to 6 (strongly agree). Validity of the questionnaire can be seen in the work of Allen and Meyer (1996). We found Cronbach's alpha value (.86) in this study.

HYPOTHESES TESTING RESULTS AND DISCUSSION

It was proposed in H1 that Psychological Capital will have positive relationship with employee commitment. We could find support for this hypothesis as evident in Pearson correlation coefficient matrix. As seen in Table 1, there is significant and positive relationship between Psychological Capital and commitment ($r = 0.143$). Further, it can be observed in Table 2 that Psychological Capital successfully predicted commitment ($\beta = 0.064$; $F = 5.453$; $R^2 = 0.020$). Further, H2 proposed that age and gender of the respondents will not have any significant relationship with Psychological Capital. It can be observed from Table No. 1 that age did not have any significant relationship with Psychological Capital and gender also did not have any significant relationship with Psychological Capital. Therefore, H2 is also supported. Since there was absence of significant relationship of age and gender with Psychological Capital, further regressions analysis was not necessary. Overall this study provided evidence that Psychological Capital is positively related to commitment. Demographic variables (age and gender) did not have any significant relationship with Psychological Capital.

TABLE 1. CORRELATION MATRIX

advantage.

Variables		Commitment	Gender	Age	Psychological Capital
Commitment	Correlation	1	-.078	-.215**	.143*
	Sig (2-tailed)		.204	.000	.020
Gender	Correlation	-.078	1	.076	.009
	Sig (2-tailed)	.204		.218	.889
Age	Correlation	-.215**	.076	1	-.048
	Sig (2-tailed)	.000	.218		.434
Psychological Capital	Correlation	.143*	.009	-.048	1
	Sig (2-tailed)	.020	.889	.434	

Note: N= 265; ** 0.01 level (2-tailed) ; * 0.05 level (2-tailed)

TABLE 2. REGRESSION ANALYSIS

Predictor	Predictant	R2	β	F
Psychological Capital	Commitment	.020	.064*	5.453*

Note: N = 265; *p < .05; **p < .01

LIMITATIONS AND FURTHER SCOPE

This study was limited to the banking sector. More samples should be collected across manufacturing and service sectors to get a compressive view of Psychological Capital. Further, research should aim at longitudinal study with a larger sample size in India. We also strongly feel that qualitative study should be undertaken to get a detailed picture on the relevance of Psychological Capital in India cultural context.

MANAGERIAL IMPLICATIONS AND CONCLUSIONS

As Psychological Capital is positively associated with employees' commitment; HR professionals can develop Psychological Capital of their employees by providing Psychological Capital training interventions and thereby improve employee commitment. Further, organizational scholars are unanimous in their opinion that every human being is unique and hence levels of psychological resources in them could be different. Furthermore, it is very difficult to replicate psychological resources of any organization by a competing organization. Therefore, Psychological Capital being a psychological resource having positive organizational outcomes can be a source of competitive

It is very much agreed that every human being is unique and hence level of psychological resources can be different. Findings on the neuroscientific relationship with Psychological Capital suggest that high Psychological Capital leaders have different brain activity compared to low Psychological Capital leaders. Further, research suggests that Psychological Capital is developable by help of training interventions. As this study found positive relationship between Psychological Capital and commitment, we suppose, further research can move into experimental analysis and observe its impact on development of commitment in employees. Detailed experimental study can be undertaken to understand the relevance of Psychological Capital on employee commitment. Findings of this study indicate that Psychological Capital training can be given to employees for enhancing employee commitment, thereby would help organizations to effectively manage and improve their human resources.

REFERENCES

1. Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1-18.
2. Allen, N. J., & Meyer, J. P. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of vocational behavior*, 49(3), 252-276.
3. Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Psychological capital: A positive resource for combating employee stress and turnover. *Human Resource Management*, 48(5), 677-693.
4. Avey J. B., Luthans F. & Wernsing S. (2008). Can Positive Employees Help Positive Organizational Change? Impact of Psychological Capital and Emotions on Relevant Attitudes and Behaviors. *Journal of Applied Behavioral Science*, 44(1), 48-70.
5. Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
6. Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26.
7. Choubisa, R. (2009). POB: A Comparative Analysis of Positive Psychological Capital amongst Public & Private Sector Employees. *AIMA Journal of Management & Research*, 3 (3/4), 1-9.
8. Combs, G.M., Clapp-Smith, R., & Nadkarni, S. (2010). Managing BPO service workers in India: Examining hope on performance outcomes. *Human Resource Management*, 49(3), 457- 476.
9. Cronbach, L.J., Gleser, G.C., Nanda, H., & Rajaratnam, N. (1972). The dependability of behavioral measurements: Theory of generalizability for scores and profiles. New York: John Wiley.
10. Gupta, V., & Singh, S. (2014). Psychological Capital as a mediator of the relationship between leadership and creative performance behaviors: Empirical Evidence from the Indian R&D Sector. *The International Journal of Human Resource Management*, 25(10), 1373-1394.
11. Hobfoll, S. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6(4), 307-324.
12. Johns, G. (2001a). In praise of context. *Journal of Organizational Behavior*, 22 (1), 31-42.
13. Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review*, 31(2), 386-408.
14. Luthans, F. (2002a). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23(6), 695-706.
15. Luthans, F. (2002b). Positive organizational behavior: Developing and managing psychological strengths. *Academy of Management Executive*, 16(1), 57-72.
16. Luthans, F., Avolio, B. J., Walumbwa, F. O., & Li, W. (2005). The psychological capital of Chinese workers: Exploring the relationship with performance. *Management and Organization Review*, 1(2), 247-269.
17. Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of management*, 33(3), 321-349.
18. Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. J. (2006). Psychological capital development: Toward a micro intervention. *Journal of Organizational Behavior*, 27(3), 387-393.
19. Luthans, F., Avey, J. B., & Patera, J. L. (2008). Experimental analysis of a web-based training intervention to develop psychological capital. *Academy of Management Learning and Education*, 7 (2), 209-221.
20. Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford, UK: Oxford University Press.

21. Luthans, F., Avolio, B., Avey, J., & Norman, S. (2007). Positive psychological capital: measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60(3), 541–572.
22. Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. *Human Resource Development Quarterly*, 21(1), 41–67.
23. Luthans, F., Youssef-Morgan, C. M., & Avolio, B. J. (2015). *Psychological Capital and Beyond*. Oxford, New York, NY: Oxford University Press.
24. Maddi, S. R. (1987). Hardiness training at Illinois Bell Telephone. In J. P. Opatz (Ed.), *Health promotion evaluation* (pp. 101–105). Stevens Point, WI: National Wellness Institute.
25. Parker, S. (1998). Enhancing role-breadth self efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology*, 83(6), 835–852.
26. Peterson, S. J., Balthazard, P. A., Waldman, D. A., & Thatcher, R. W. (2008). Neuroscientific Implications of Psychological Capital: Are the Brains of Optimistic, Hopeful, Confident, and Resilient Leaders Different? *Organizational Dynamics*, 37(4), 342-353.
27. Peterson, C. (2000). The future of optimism. *American Psychologist*, 55(1), 44-55.
28. Peterson, S. I., & Luthans, F. (2003). The positive impact and development of hopeful leaders. *Leadership and Organization Development Journal*, 24(1), 26-31.
29. Podsakoff, P. M., MacKenzie, S. C., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
30. Schneider, S. L. (2001). In search of realistic optimism. *American Psychologist*, 56(3), 250–263.
31. Seligman, M. E. P. (1998). *Learned optimism*. New York: Pocket Books.
32. Snyder, C. R., Sympson, S. C., Ybasco, F. C., & Borders, T. F., Babyak, M. A., & Higgins, R. L. (1996). Development and validation of the State Hope Scale. *Journal of Personality & Social Psychology*, 70(2), 321–335.
33. Snyder, C. R. (2000). *Handbook of hope*. San Diego: Academic Press.
34. Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry*, 13 (4), 249-276.
35. Stajkovic, A., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta analysis. *Psychological Bulletin*, 124(2), 240-261.
36. Youssef, C. M., & Luthans, F. (2007). Positive organizational behavior in the workplace: The impact of hope, optimism, and resiliency. *Journal of Management*, 33(5), 774–800.

ROLE OF FDI IN BANKING SECTOR- AN INDIAN PERSPECTIVE

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ABSTRACT:

Indian banking sector has provided a very prominent and substantial platform in the development of economy of India and in creating wealth for the Indian economy. It has been the pillar of strength in the journey of transformation of the Indian economy. In 2008 when the United States of America and world economy faced one of the biggest financial turmoil of the century, the financial sector of India also felt its heat. However, only the Indian banking sector was able to maintain its business and solvency because of the better controlled system, principle based lending and saving habits of Indian middle man. This paper discusses about the history of Indian banking system, need and importance of foreign direct investment in Indian banking system. This paper also considers the fact that FDI in banking sector can easily address some issues like encouraging development of new financial and unique products, enhance the risk taking ability of Indian banking sector, improved efficiency of the sector and better handling of the financial changes of the banking sector.

KEYWORDS: FDI, banking industry, efficiency.

Introduction

Indian banking system is completely unique as far as the other nations of Asian region are concerned because India's one of its own kind geographical, social, economical conditions. Indian has a mammoth volume of land size and approximately 1250 million population and a diverse culture. India has an unbalanced system of income and expenditure. There are exceedingly high levels of illiteracy among major percentage of Indian population but at the same time, the country has many out of the world and revolutionary talents in management and technology. In India near about 30 to 35 percent of population lives in metro cities and urban areas and the rest 60-65 percent is spread in several semi-urban and rural areas. Foreign Direct investment acts as a bridge to mend the gap between investment and savings. In the process of economic development in India, FDI is playing a pivotal role and acting as a developmental instrument, which is highly capable of achieving independence in different areas of the economy and turning the economy overnight. When the new industrial policy was proclaimed in 1991, plethora of incentives and concessions were arranged for the flow of foreign capital to India to augment the growth of economy. Foreign Direct investment acts as a catalyst in galvanizing the economic development India as a rising

nation and economy which has a large space for consumer and capital goods too. India has abundant and diversified natural wealth (resources), has a sound economic policy, better market conditions and highly skilled human resources which make it a favored destination for foreign direct investments. India's economy policy framework is the combination of socialist and capitalistic features combined into one. All these features are easily visible in the size and structure of Indian banking system. Flow of foreign Direct Investment can infuse a new life in Indian banking system and make it at par with leading banking systems in the world.

HISTORY

In the year of 1786, the general Banking of India was emerging, helped by bank of Hindustan and Bengal Bank. The East India Company established Bank of Bengal (1809), Bank of Madras (1843) as autonomous banks and collected them as presidency Banks. These banks were amalgamated in the year of 1920 and Imperial Bank of India was created.

1865 – Allahabad Bank was formed

1894- Punjab National Bank was formed

1906- Bank of India was formed

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1907 to 1913- Indian Bank, Bank of Mysore established
The RBI was formed in 1935.

As a result of the continues failures in Banking system, the Indian government passed the Banking companies act 1949 and later on it is customized as Banking Regulation act.

- In 1965 Reserve bank of India got power to manage the functioning of other nationalized banks
- Imperial Bank of India was nationalized in 1955
- The SBI was established to be active as the controlling authority to RBI.
- 7 banks were nationalized and assigned subsidiaries to SBI in the year of 1960.

After Nationalization of Banks-

- 14 major banks was nationalized in 1969.
- 7 more banks was nationalized in 1980, now 80 % banking sector comes in the under control of Indian government.

Reforms in Financial sector post liberalization

- Rapid transformation of financial sector during the time of and post liberalization which introduced transparency and accountability in the financial markets making them more accessible.
- It led to massive inflow of investments from FII's (Foreign Institutional investors) into the capital markets of India which paved the way for economic growth and stability.

LITERATURE REVIEW:

Agarwal G., Khan M. A. (2011), "Impact of FDI on GDP: A Comparative Study of China and India", the study found that 1% increase in FDI would result in 0.07% boost in GDP of China and 0.02% boost in Indian GDP. We also found that China's growth is more affected by Foreign Direct Investment, than India's growth.

Singh Arjun and Singh Narendra (2011), say that Foreign Direct Investment is a tool for economic growth by its power of local capital, power of generating productivity and employment. FDI also plays a very important role in the polishing and upgrade of skills, technology and

capabilities of management in various sectors of the economy. They also analyzed that since 1991 FDI inflows in service sectors of India have been phenomenal and have contributed in creation of employment of both skilled and unskilled nature.

Bhattacharyya Jita, Bhattacharyya Mousumi (2012), "Impact of FDI and Merchandise and Services Trade of the Economic growth in India: an Empirical study", this study exposed that there was a long term bonding between FDI, banking, services business and economic growth of India. Bi-directional causality is experiential between merchandise trade and economic growth, services trade and economic growth.

Laghane.K.B (2007), LPG (liberalization, privatization, and globalization) sponsored FDI model's impact positively on the effectiveness on the overseas banks and Indian banks. In his study, he founded that FDI must be seen as a tool to reduce poverty, unemployment and increase primary education and priority sector of banking. Due to LPG, Indian banks stand their business at global and many foreign banks setting up market in India.

Singh J. (2010), "Economic Reforms and Foreign Direct Investment in India: Policy, Trends and Patterns", in the context of increasing competition among nations and sub national entities to attract Foreign Direct Investment (FDI), the paper tried to find out the rising trends and patterns of FDI inflows into India in attraction to various policy measures announced by the Indian government since mid-1980 and after. The experiential analysis tends to suggest that the FDI in-flows, in general, show an increasing trend during the post-reform period. Furthermore, country-wise comparison of FDI inflow also indicates that FDI inflow into India has increased considerably in comparison to other developing economies in the recent years. Thus, the study indicates that the FDI inflows into India responded positively to the liberalization measures introduced in the early 1990s.

OBJECTIVES OF THE STUDY:

- To study in detail about the growth of banking sector.
- To comprehend the role of Foreign Direct Investment in the growth of Indian banking sector.
- To identify the problems and bottlenecks of Indian banking sector.

- To analyze the benefits of FDI in Banking sector in India.

RESEARCH METHODOLOGY:

Direct Investment and Portfolio Investment Research and experimental development is work under-taken systematically to increase the stock of knowledge. The first objective of this paper is fulfilled by the analysis of history of banking sector. The data for analysis has been collected primarily from journals, articles, online database of Indian Economy, RBI bulletin, websites or newspaper etc

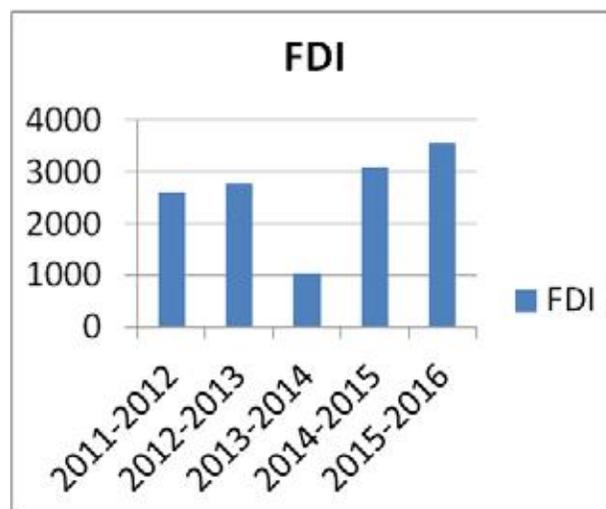
DISCUSSIONS AND ANALYSIS:

The UPA Government selected to carry on the policy of banking deregulation, following the foot marks of the NDA Government. On 28th February, 2005, the Union Budget 2005-2006 was presented before the Parliament. The RBI adopted the notification from the guidelines issued by the Ministry of Commerce and Industry under the previous government and increased the limit of FDI in private sector bank to 74 % under the automatic route. This roadmap of RBI demarcated two phases for presence of foreign banks in India.

In the private banking sector of India, FDI is allowed up to a maximum limit of 74 % of the paid-up capital of the bank. On the other hand, Foreign in the public or nationalized banks in India are subjected to a limit of 20 % in totality. This ceiling is also applicable to the investments in the State Bank of India and its associate banks. FDI limits in the banking sector of India were increased with the aim to bring in more FDI inflows in the country along with the incorporation of advanced technology and management practices. The objective was to make the Indian banking sector more competitive. The Reserve Bank of India governs the investment matters in the banking sector.

According to the guidelines for FDI in the banking sector, Indian operations by foreign banks can be executed by any one of the following three channels: Branches in India- Wholly owned subsidiaries- Other subsidiaries- In case of wholly owned subsidiaries (WOS), the guidelines for FDI in the banking sector specified that the WOS must involve a capital of minimum 300 corers and should ensure proper corporate governance.

Chart 1: Foreign investment inflows in finance Industry in India (in us \$ million)



During the period 2015-16 highest amount of FDI went to financial sector. This shows that for overseas investors' financial sector is creating attraction and with the time it will attract more investors.

BENEFITS OF FDI IN BANKING SECTOR IN INDIA

- Transfer of technology from overseas countries to the domestic markets will lead to infusion of new working techniques which would be a win win situation for both banks as well as customers.
- Ensure better and improved risk management in the banking sector since banks would have funds to establish concentrated departments for measuring, watching and controlling risk.
- Assure better capitalization since FDI inflows will infuse capital enabling banks to undertake operations on a large scale leading to improvement in their efficiency and economy.
- Offer financial stability in the banking sector in India as more capital in the banks will enhance their competitive abilities and desire to grow thereby lending stability to the sector.

PROBLEM FACED BY INDIAN BANKING SECTOR

- Inefficiency in management as the banking sector particularly public sector banks may not be ready to accept the changes that would come along with the

infusion of the capital.

- Instability in financial matters as many of the government policies and directives are still not clear and various bottlenecks are present in the system.
- Innovativeness in financial products or schemes are still missing as innovation involves additional cost which the banking system in India is not ready to bear in the light of shrinking margins.
- Technical developments happening across various foreign markets are again a threat to the Indian banking sector which is still working on traditional lines.
- Non-performing areas or properties are proving to be fatal for the Indian banking sector as its is ever growing and choking the profits of the industry.

It is known that without the financial support, India's growth story will never meet the reality. In year 2011 there has been more than 70% increase in FDI in financial sector compared to 2010. But the big negative that is keeping FDI's venture over whelming in this sector is convertibility factor. Due to delayed project, money is getting locked in projects without developing any revenue/returns. Too many outdated regulations and bureaucratic procedure are keeping projects to run at required pace. FDI can be attracted 49% in private sector banks as per terms of RBI, in case of NBFC's 100 % FDI in merchant banking, investment/portfolio management, investment consultancy, sector broking, asset management, Housing finance, credit card business, credit for rural India etc.

CONCLUSION:

Indian banking sector is proving itself since 1786 till today with the guidelines of RBI and Indian government. It has also proved itself during global economic crisis with its strong policies and procedures without upsetting Indian financial system. Development and diversification in banking sector is now a global practice. Over the last decade, the fast rate of economic growth and progressive policy liberalization has made India an eye-catching destination for world's investments. United States of America have been at the front position of investments in India power up the partnership between the two largest democracies in the world. From the above research it can be concluded that since India is a developing country and the people who are working in non-government organizations have less social security after their retirement. To encourage the saving habits among them our banking sectors are introducing various schemes. Apart from all the above, since the capital raising capacity in India is very less to take the Indian banking sector to worldwide we require investment from abroad. Last but not the least RBI should make policies like such that FDI should not over write the regulations of RBI and should become as a result in the growth of Indian economy.

EMPLOYABILITY AND SALARY STRUCTURE OF THE MANAGEMENT GRADUATES/ POSTGRADUATES IN INDIA

Dr. ANIL K.YADAV*

ABSTRACT:

Employment has been the main objective of attaining any level of education. In addition to this various kinds of remunerations attracts the people to go for higher education. It has been noted that the number of institutions and the corresponding enrolment has been rising with time. The present paper seeks to understand the employability and the salaries the management graduates are getting. The analysis has been done State-wise and the data reveals the waiting period for the first employment and salary offered differs State-wise. The analysis of maximum and minimum salary offered to fresher's and experienced degree holders has also been done. It has been observed that the differences do exist.

INTRODUCTION

Employment has remained the main objective of attaining any level of education. Although, two decade back Late Shri Rajiv Gandhi, our former Prime Minister has said that we should delink education with the job. This sound very interesting while listening but people in reality find it difficult to digest or even to practice. In actuality various Kinds of remuneration attract the people to go for higher education. This also is related with the level of earning. People prefer these related field which gives hefty amount. Moreover, higher education is related with the salaried job. Now a day's mostly, people refer the salaried class. The awareness about the education and also regarding earnings among the people is on the rise.

It has been observed overtime that the number of institutions as well as the number of enrolment has risen. On the other hand, the job market had been saturated due to the recession and also because of the more use of the capital intensive techniques. As a result of this, capital use, the growth in the economy has increased but the jobs have not been created in the same propensity (some economists call this phenomenon as the "jobless growth"). Since the supply of professional manpower rose and jobs did not increase in that proportion, it might have given some pressure on the waiting period for getting the job for The fresher's and also in changing the job for experienced ones. Secondly, it may also have been adversely affecting the salary levels and also the field of work.

The present paper seeks to highlight the employability and the salary structure of Management degree holders of 2007 batch in India.

DATABASE AND METHODOLOGY

The data has been gathered by the Nodal Centres of National Technical Manpower Information System (NTMIS) through the tracer study (follow up survey). The data was collected from the pass- outs of 2007 batch. This data has been collected through a postal communication and also by personal contact. Sooner, the data was collected; it was tallied and tabulated by the Nodal Centres which are spread all over the country. In all there are 20 Nodal Centres at present. The data immediately was sent to the lead Centre of NTMIS which is situated in the Institute of Applied Manpower Research (IAMR), Delhi. The data was analysed at IAMR.

The data pooling had been done since data come from different centres. Afterwards, a percentage analysis has been made of the data and some graphs are drawn out of the data. The data which come from the Nodal Centres was further processed and placed here in various tables

WAITING PERIOD FOR GETTING FIRST EMPLOYMENT

The Management degree holders seems to have been taking less time in getting their first employment as compared to other degree holders (Yadav, 2010). The Management degree holders took only six months on an average to get

* The Views expressed in this paper are of the author and not of the organization in which he is employed.

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adjusted in some organisation or other in India. In addition to this, it has been observed that mostly all graduates they get the job. The scenario of gestation period in the states shows that maximum time was taken by Jammu & Kashmir degree holders i.e., twelve (12) months followed by Punjab, eleven (11) months, West Bengal Ten (10) months and Rajasthan eight (8) months. As against this, while the minimum time for first employment was taken by Maharashtra pass outs i.e. one (1) month followed by

Chandigarh Two (2) months and Haryana four (4) months. Management degree holders of Assam, Arunachal Pradesh and Kerala took 7, 6, 6 and 4 months respectively. Figure No. 1 and 2 also show the time taken for getting the first job at all India level and the state level

FIGURE 1: FIGURE SHOWING WAITING PERIOD FOR GETTING FIRST JOB AT ALL INDIA LEVEL (IN MONTHS).

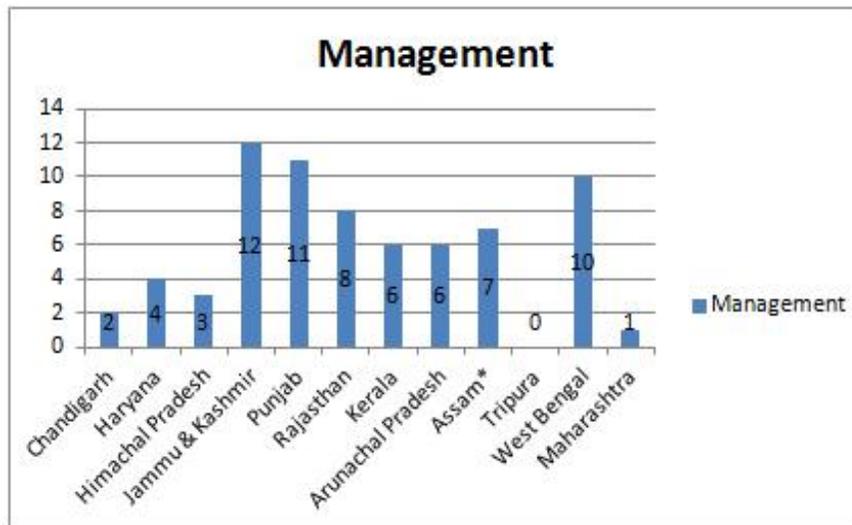


TABLE 1 : TABLE SHOWS THE STATE WISE WAITING PERIOD FOR GETTING JOB IN MANAGEMENT (IN MONTHS).

S. No.	States	Management
1	Chandigarh	2
2	Haryana	4
3	Himachal Pradesh	3
4	Jammu & Kashmir	12
5	Punjab	11
6	Rajasthan	8
7	Kerala	6
8	Arunachal Pradesh	6
9	Assam*	7
10	Tripura	-
11	West Bengal	10
12	Maharashtra	1
	All India	6

NA - Not Available * - Estimated

FIGURE 2: FIGURE SHOWING STATE WISE WAITING PERIOD FOR GETTING THEIR FIRST JOBS (IN MONTHS).



This means that the industrialised states take it shorter to absorb their graduate and it is more so in case of management degree holders. Maharashtra is the most industrialized state of the country and hence has more opportunities as compared to Jammu & Kashmir, Punjab, West Bengal and Rajasthan.

Salaries

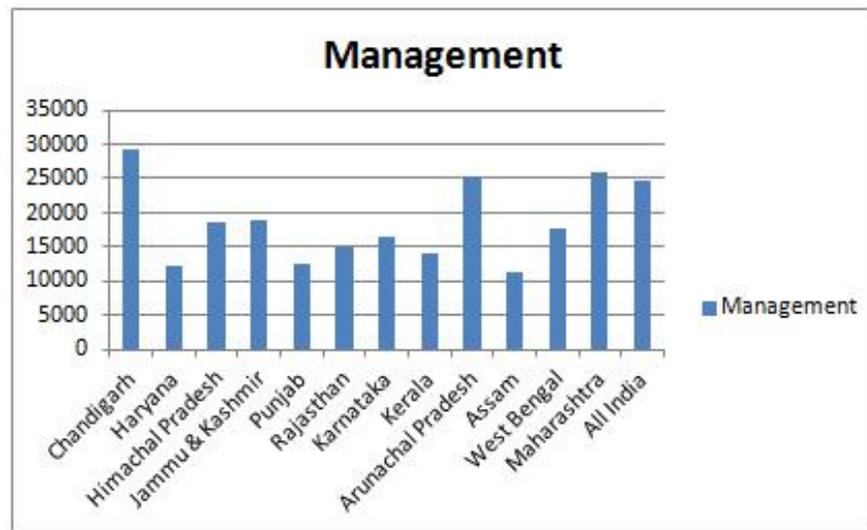
The salaries on the other hand, are the most important aspect to attract the best students of any subject. In the present case we are exploring about the Management degree holders. Therefore, the State and discipline-wise analysis has been made of the average emoluments in respect of fresh and experienced degree holders in Management. The results have been discussed below.

Table 2 shows that the fresh management degree holders received maximum emoluments of Rs. 92400 per month and minimum Rs. 2500 per month in India. The average monthly emoluments received by the pass outs were Rs. 23000 per month.

The State-wise analysis of emoluments of fresh degree holders indicates that the maximum emoluments per month received by the pass outs of Karnataka were Rs. 92400 followed by Maharashtra (Rs. 71000) and Kerala & Chandigarh i.e., Rs. 40000 each. Figure 3 and 4 depict the graphical presentation of the same at state level for fresher's as well as the experience ones.

On other hand, the Minimum emoluments per month were received in the state of Karnataka (Rs. 2500) followed by Kerala (Rs. 3000) and Punjab i.e., Rs. 4000. However, the highest average emoluments were received by the pass outs of Chandigarh (Rs. 29167 per Month) followed by Maharashtra (Rs. 25978) and Arunachal Pradesh (Rs. 25167). The lowest average emoluments were received by the pass-outs of Assam i.e., Rs. 11153 followed by Punjab with Rs. 12375 and Kerala (Rs. 13928).

FIGURE 3: AVERAGE MONTHLY EMOLUMENTS OF FRESHER'S (IN RS)

FIGURE 4: AVERAGE MONTHLY EMOLUMENTS OF EXPERIENCE (IN RS.)

TABLE 2 : STATE-WISE AVERAGE MONTHLY EMOLUMENTS OF MANAGEMENT DEGREE HOLDERS OF 2007 BATCH IN INDIA

S.No.	States	Emoluments					
		Fresher			Experienced		
1	Chandigarh	40000	17500	29167	40000	17500	29167
3	Haryana	30000	5000	12158	30000	5000	12158
4	Himachal Pradesh	27500	15000	18667	27500	15000	18667
5	Jammu & Kashmir	29000	7400	18204	30000	8000	19000

6	Punjab	25000	4000	12299	25000	7000	12375
7	Rajasthan	24000	6000	13729	24000	8000	14811
8	Karnataka	92400	2500	16478	92400	2500	16478
9	Kerala	40000	3000	13928	40000	3000	13928
10	Arunachal Pradesh	27300	20500	25167	27300	20500	25167
11	Assam	20000	6000	11153	20000	6000	11153
12	West Bengal	38000	9000	16139	38000	9000	17753
13	Maharashtra	71000	15000	24740	74550	15250	25978
	All India	92400	2500	23000	92400	2500	24600

NA - Not Available

Source : NTMIS Nodal Centres of India, 2008

ROLE OF EDUCATION FOR EMPLOYMENT

The education plays a very vital role in securing a job. In fact most of the posts advertised, prescribes a particular qualification and also the experience attained. This aspect has been discussed widely by Mehta (1990), Balan (1992), Thakur (1997), Pruthi, Devi and Pruthi (2001), Schomann and O'Connel (2002), Rao (2003), and Bhumali (2004). They are of the view that the education has played a very important role in securing the job.

However, the relevance of education for employment is judged by the fact that whether the degree holder is working in their own field of education or some other area and secondly whether his education is utilised properly in his job.

In order to find out the relevance, we have analysed the data in such a way so that it reflects the employment and educational background. In this section, we have tried to highlight that as to what percentage of the current and past job got the relevant field of work.

It may be observed from table 3 that in Management, a majority of pass-outs were working in their own field both in current as well as in past job i.e. 83 and 75 per cent respectively. It may be derived based on the above analysis that majority of degree holders were working in their own field of education. It strengthens the basic idea that education is linked to the employment. The similar analysis of role played by State-wise education for employment reveals as follows.

The data placed in table 3 indicates that highest percentage of degree holders working in their own field in current

job were in the states of Chandigarh, Himachal Pradesh, Jammu & Kashmir (100 per cent in all the state) followed by Karnataka (99 per cent) and Rajasthan (93 per cent).

While looking at the past job we find that the highest percentage of pass-outs who were working in their own fields belongs to the State of Jammu & Kashmir (100 per cent) followed by Kerala (99 per cent) and Karnataka (92 per cent).

Some states had equal percentage of pass-outs working in their own field both in current and past job. These states were Jammu & Kashmir, Punjab, Karnataka, Kerala, Arunachal Pradesh and Assam which were having 100, 62, 92, 99, 70 and 80 per cent respectively. One may understand by this trend that when percentages have remained unchanged it reflects on the pattern of employment. It also means that employment diversification is taking place in the job market particularly after 90's. More and more calls centres have been opened and the job availability to a fresh MBA is relatively easier. Secondly, the job creation in the same field has been slower. Some economists had been arguing that there has been a jobless growth during this period. Probably because of this fact that the job availability was less and a lower wage rate was offered. we may say that overall lesser percentage of management degree holders are working in their own field in current job than past job i.e. 83 per cent and 75 per cent respectively (Yadav, 2010).

TABLE 3 : EMPLOYED MANAGEMENT DEGREE HOLDERS OF 2007 BATCH IN INDIA WHO ARE WORKING IN THEIR OWN FIELD (IN PERCENTAGES)

S.No.	States	Management	
		Current	Past
1	Chandigarh	100	31
2	Haryana	34	66
3	Himachal Pradesh	100	69
4	Jammu & Kashmir	100	100
5	Punjab	62	62
6	Rajasthan	93	98
7	Karnataka	92	92
8	Kerala	99	99
9	Arunachal Pradesh	70	70
10	Assam*	80	80
11	Mizoram	-	-
12	Tripura	-	-
13	Maharashtra	88	90
	All India	83	75

NA - Not Available * - Estimated

SOURCES OF EMPLOYMENT

In this section, we have explored as to how many sources have been used by the graduates. However, there are many sources through which the pass outs come to know about the vacant positions in different organisations. These sources of employment include Employment Exchange, Public Service Commission, Direct Application, Training & Placement, Newspaper/Print Media, Website/Internet, Placement Service Providers and others. We have also made an effort to see as to which source has been used the most.

It may be noted from table 4 that out of the total (22257), management degree holders, around 33.75 percent secured employment through direct applications followed by 29.21 percent in training & placement and 19.53 percent in other sources. The lowest percentage of degree holders i.e., 0.64 percent had employment through Public Service Commissions followed by 0.76 percent in employment exchange and placement services accounts for 3.36 percent. Around 7.84 percent got employment through Website/Internet and 4.91 percent got employment through

newspaper/ print media. This shows that graduate use all sorts of sources. But they tend to use direct application and the training and placement more.

Analysis of state-wise distribution of degree holders according to sources of employment reveals that highest percentage of Haryana i.e., 41.49 percent, Punjab (36.40 percent), Rajasthan (28.93 percent), Karnataka (38.78 percent), Kerala (58.89 percent), Assam (41.84 percent) and West Bengal (52.60 percent) got placement through direct applications.

Whereas in Himachal Pradesh 34.62 percent, Jammu & Kashmir (64.49 percent), Arunachal Pradesh (60.00 percent) and Maharashtra (35.24 percent) sought employment through training & placement. While in Chandigarh 31.58 percent got employment through Website/Internet.

It has been noticed that a low percentage of degree holders of Rajasthan i.e., around 5.43 percent, Karnataka (1.41

percent), West Bengal (0.52 percent) and Maharashtra (0.07 percent) got employment through employment exchanges. While in Punjab about 1.37 percent and Arunachal Pradesh around 10.00 percent could secure employment through Public Services Commissions.

Similarly, the in Haryana 7.30 percent and in Assam around 6.38 percent got employment through training and placement. In Kerala, the lowest percentage of the pass out got employment through newspaper/print media while in Chandigarh around 28.23 percent got employment through Website/internet. The same percentage in Himachal Pradesh is 10.25 percent and in Jammu & Kashmir it is 1.87 percent who received employment through other sources.

It may now be summarised on the basis of the above churning that degree holders in most of the states got employment through direct application and training and placement. Hence, it may safely be concluded that the direct applications and training & placement emerged as major source of employment for management pass outs.

TABLE 4: DISTRIBUTION OF FRESH EMPLOYED MANAGEMENT DEGREE HOLDERS OF 2007 BATCH IN INDIA BY STATES AND SOURCES OF EMPLOYMENT

S.No.	States	Sources of Employment								Total
		Employment Exchange	Public Service Commission	Direct Application	Training and Placement	Newspaper / Print Media	Website / Internet	Placement Services	Others	
1	Chandigarh	20	0	18	0	14	24	0	9	85
		23.53	0.00	21.18	0.00	16.47	28.24	0.00	10.59	100.00
2	Haryana	0	0	614	108	217	144	108	289	1480
		0.00	0.00	41.49	7.30	14.66	9.73	7.30	19.53	100.00
3	Himachal Pradesh	0	0	19	27	9	8	0	15	78
		0.00	0.00	24.36	34.62	11.54	10.26	0.00	19.23	100.00
4	J & K	0	0	17	69	14	5	0	2	107
		0.00	0.00	15.89	64.49	13.08	4.67	0.00	1.87	100.00
5	Punjab	0	10	265	88	137	128	21	79	728
		0.00	1.37	36.40	12.09	18.82	17.58	2.88	10.85	100.00
6	Rajasthan	77	0	410	483	167	80	0	200	1417
		5.43	0.00	28.93	34.09	11.79	5.65	0.00	14.11	100.00
7	Karnataka	60	0	1653	767	259	578	109	837	4263
		1.41	0.00	38.78	17.99	6.08	13.56	2.56	19.63	100.00
8	Kerala	0	4	371	246	9	0	0	0	630
		0.00	0.63	58.89	39.05	1.43	0.00	0.00	0.00	100.00
9	Arunachal Pradesh	0	1	0	6	0	3	0	0	10
		0.00	10.00	0.00	60.00	0.00	30.00	0.00	0.00	100.00
10	Assam	0	0	59	9	18	37	18	0	141
		0.00	0.00	41.84	6.38	12.77	26.24	12.77	0.00	100.00

11	West Bengal	4	12	404	278	0	0	0	72	770
		0.52	1.56	52.47	36.10	0.00	0.00	0.00	9.35	100.00
12	Maharashtra	9	116	3682	4422	247	737	491	2844	12548
		0.07	0.92	29.34	35.24	1.97	5.87	3.91	22.66	100.00
	All India	170	143	7512	6503	1091	1744	747	4347	22257
		0.76	0.64	33.75	29.22	4.90	7.84	3.36	19.53	100.00

NA - Not Available

Note : Figures in decimal shows percentage of row total

Source : NTMIS Nodal Centres of India, 2008

CONCLUSIONS:

We have tried to highlight the employment profile of management graduates through four various aspects in this paper. These aspects as mentioned in the beginning are: Waiting period, salaries Role of Education for Employment, and Sources of Employment.

It has been noticed that the Waiting Period for obtaining first employment for management degree holders was six months. This means that on an average in 6 months all graduate gets employment. This also suggests that all graduates get absorbed within this stipulated time. This also means that there has been a 100 percent placement. So far as the emoluments are concerned, the maximum emoluments earned by fresh employed management degree holders were Rs. 92400 per month and minimum were Rs. 2500 per month. On an average, the emoluments earned were Rs. 23000 per month. In case of experienced persons, average emoluments were Rs. 24600. While in the case of experienced persons, the maximum and minimum emoluments were same so far as the fresher's are concerned. While, looking at the relevance of education, it has been noticed that 92 percent and 83 percent for the current and past job were employed in their own field of education.

While the analysis of the data on the sources of employment do show that the highest percentage of employed management degree holders i.e., 33.80 percent got employment through direct applications followed by training & placement around 29.26 percent and 19.42 percent by other sources.

REFERENCES:

1. Balan, K (1992), Education and Employment, Ashish Publishing House, Delhi.
2. Bhumali, Anil (2004), Education, Employment and Empowering Women (edited), Serials Publications New Delhi.
3. Mehta, G.S. (1990), Education, Employment and Earnings, Deep & Deep Publications, New Delhi.
4. Pruthi Raj Kumar, Devi Rameshwari and Pruthi, Romila (2001), Education, Employment and Empowerment of Women (edited), Mangal Deep Publications, Jaipur (India).
5. Yadav S.K. and Vandana Shukhla (2010), Employment Scenario of Pharmacy, Management and Hotel Management & Catering Technology Graduates/Post Graduates in India, 2008, A Database Report of the National Technical Manpower Information System, Institute of Applied Manpower Research, Narela, Delhi.

HOW INDIAN EMERGING BRAND WILL GO GLOBAL: CONCEPTUAL FRAMEWORK

* Ms. Nidhi Singh

ABSTRACT:

Purpose– The purpose of this conceptual paper is to outline challenges and explore marketing strategy to be built by Indian brand to go global worldwide.

Design/methodology/approach– The paper integrates concepts including a range of recently published (2005-2014) theoretical works in the branding, global branding, literature review and case study approach.

Findings– The paper provides information to Indian business to know their target market and how to drive demand in present and future market through marketing tools. It provides a learning opportunity for the Indian organisation and discusses on how they should stimulate their resources and provoke more effective responses.

Research limitations/implications– The theoretical concepts that form the foundation of the paper appear to have a significant application to Indian market but have not been tested empirically.

Originality/value– The paper uses literature review and case studies of leading Indian brands to illustrate how Indian brand can or have gone global all over the world.

KEY WORDS: Marketing tools, Marketing Strategies, Indian brand, Globalization

INTRODUCTION

The parsimony and political change across the world are forcing India to be more globally oriented. But as one of the fastest growing economy in the world, India has an imperceptible presence in the list of top global brands. Even Indian brands aggrandize to foreign markets, achieving global status does not seem to be their priority as opposed to making a quick buck and exploiting marketing opportunities as an International brand.

In response, some argue that as Indian is a large country, it may be unnecessary to invest in global brands. In other words, it is enough for indigenous brands to concentrate on the local market. For most Indian brands this is true. Rather than becoming global brands, they simply need to be globally competitive. By globally competitive mean they must be able to hold their own when multinational brands come knocking for the Indian consumer. Yet over time brands may find even being the largest domestic player in India does not allow them to remain globally competitive. Why? India accounts for 2%-3% of global GDP. As a result, in several industries domestic firms playing on the limited Indian playground will find themselves at a scale

disadvantage versus global competitors.

This paper traces to analyze the importance of building brand in global markets and various challenges involved in making a brand global.

HOW INDIAN BRAND MAKE GLOBAL PRESENCE IN THE WORLD MARKET: -

Indian Prime Minister Mr. Narendra Modi announced the “Make in India” initiative; the aim of this campaign is to grow the contribution of manufacturing sector from 15% to 25% contribution as seen with other developing nations of Asia. In the process, the government expects to generate jobs, attract much foreign direct investment, and transform India into a manufacturing hub preferred around the globe

Whether Indian brand will go global there are some facts, as context: first, India’s share in world GDP was 7.31% in 2016 compared to the US’ 15.81% and China’s 17.01% (World Bank PPP study); 1.6% (eight by number) Indian companies figured in the global Fortune 500 list, compared to China’s 19% (95) and USA’s 26% (128); finally, no Indian company featured in the world’s top 100 brands in the 2015 Interbrand’s Best Global Brands study.

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According to **Transnationality Index (TNI)** study shows that only two consumer product companies, Tata Global Beverages and Tata Motors figure in this TNI Top 15 list. The remaining were enterprise brands and derived majority of their revenues from B2B transactions.

Many of the consumer brands of Indian origin have been reluctant in expanding overseas which may be attributed to lack of utilization of resources/talents, investment required, understanding competitive landscape, holistic view of local market, etc.

HERE'S MY LIST OF THREE INDIAN CONSUMER BRANDS THAT ARE POTENTIALLY READY TO GO GLOBAL:

Patanjali Ayurveda Ltd: Patanjali Ayurveda Limited is an Indian FMCG company. Manufacturing units and headquarters are in the industrial area of Hardwar while the registered office is located at Delhi. The company manufactures mineral and herbal products. It has also manufacturing units in Nepal under the trademark Nepal Gramudhyog and imports majority of herbs in India from Himalayas of Nepal. According to CLSA and HSBC, Patanjali is the fastest growing FMCG company in India. It is valued at 3,000 crore (US\$450 million) and some predict revenues of 5,000 crore (US\$740 million) for the fiscal 2015–16.

Baba Ramdev established the Patanjali Ayurved Limited in 2006 along with Acharya Balkrishna with the objective of establishing science of Ayurved in accordance and coordinating with the latest technology and ancient wisdom.

The Company was originally formed as a Private Limited Company on 13th January, 2006 and subsequently converted into Public Limited Company on 25th June, 2007.

According to leading domestic brokerage IIFL “Patanjali Ayurveda Ltd has, in a short span of less than a decade, recorded a turnover higher than what several companies have managed to achieve over several decades. There is no doubt that Patanjali is a disruptive force in the FMCG space and is a credible threat for the incumbents.” IIFL is of the view that the growing appeal of ayurvedic and ‘natural’ products, along with factors like low price and allowing consumers to express Indian-ness in an increasingly nationalistic environment, will help Patanjali achieve sales of Rs. 20,000 crore by FY20.

Soon Patanjali is launching Swadeshi jeans by the end of the year or early next year. There was a great demand

from the youth and, therefore, Patanjali decided to launch Indianised jeans to compete with foreign brands.

Micromax: Micromax is an Indian consumer Electronics Company headquartered in Gurgaon, Haryana. The company was established as an IT software company operating in the embedded devices domain; it later entered the mobile handset business. By 2010, it was one of the largest domestic companies making handsets in the low-cost feature phone segment in India. As of Q3 2014, Micromax is the tenth largest smartphone vendor in the world.

Micromax was incorporated as Micromax Informatics Ltd. on 29 March 2000. It started selling mobile telephones in 2008, focusing on low pricing to compete with international brands. Micromax’s co-founder Rahul Sharma once saw a public call office being powered by a truck battery because of frequent power cuts in its locale. It prompted him to launch a feature telephone with an extended battery life. Micromax launched X1i, its first telephone with a month-long battery back-up. In 2014, Micromax’s sales exceeded those of Samsung to become the mobile telephone manufacturer shipping the most telephones in one quarter in India. On 24 January 2014, Micromax became the first Indian mobile company to start sales in Russia. As on 10 April 2016, Micromax announced a strategic partnership with digital payments company Transfer and global payments technology major Visa to offer the next generation of payments solutions in India.

The company has been investing on advertisements and brand positioning in emerging markets. They have positioned themselves as providing affordable value for money product. They are working on investing more in new markets outside of India.

Fabindia: Fabindia was first started as a one-man export company of home furnishings, by John Bissell in 1960, in the two small rooms adjoining his bedroom in his Golf Links flat, as “Fabindia Inc.”, as it was incorporated in Canton, Connecticut. He used his recently deceased grandmother’s \$20,000 legacy as start-up capital. Originally from Hartford, where his grandfather was the president of the Hartford Fire & Life Insurance Company, Bissell, was previously working as a buyer for Macy’s, New York left his position and came to India in 1958, as a consultant for the Ford Foundation to advise the Government of India run Central Cottage Industries Corporation. He was given a two-year grant to instruct Indian villagers in making goods for export. He firmly believed in the emerging Indian textile industry and was determined to showcase Indian handloom textiles with a

way to provide employment to traditional artisans.

Now catering to the urban India as well, in the coming decade Fabindia differentiated itself from other government-owned and often subsidized players, in handloom fabrics and apparel sector, like KVIC and various state emporiums by adapting its fabrics and designs to urban taste. For this designer were accessed to modernize its line of home linens and most importantly introduced a range of ready-to-wear garments, including churidar-kurta suits for women, men's shirts etc. Even today, its team of designers provides most of the designs and colors, executed by village-based artisans. At the other end, these artisans learnt the basics of quality, consistency and finish, for instance avoiding frayed edges on hand-woven shawls. The result was that traditional apparel and products became mainstream and fashionable, fast adapted by a growing middle class and became identified as the brand for the elite and intellectual as well as affordable ethnic chic.

Over the next two decades from 2000 onwards, FabIndia emerged as a successful retail business in India, with 111 retail outlets within the country and 6 abroad. Fabindia added its non-textile range in 2000, organic foods in 2004, followed by personal care products in 2006; finally, it launched its range of Handcrafted jewellery in 2008. Fabindia sells a variety of products ranging from textiles, garments, stationery, furniture, home accessories, ceramics, organic foods, and body care products, besides exporting home furnishings. Fabindia's retail expansion plans started taking shape 2004 onwards, it opened multiple and larger stores in metros like Mumbai, Chennai and Delhi, while at the same time spreading out beyond metros. It opened stores in cities like Vadodara, Dehradun, Coimbatore and Bhubaneswar, Durgapur soon as revenues also grew from Rs 89 crore in 2004-05 to Rs 129 crore in 2005-06, reaching Rs 200 crore in 2007, in the year when it sourced its products from 22,000 artisans in 21 states. Usually, the village-based artisan gets barely 5% of the tag price of their products as the rest is taken away by the middlemen. To counter this, Fabindia introduced an artisan-shareholder system through "supply-region companies" incorporated as subsidiaries. Here the craftspeople collectively own 26% of the equity in each company, based in nationwide centers, with Artisans Micro Finance, a FabIndia arm holding 49%, and employees and other private investors holding the balance. Also as part its expansion plans, 6% in FabIndia was sold in 2007, at an estimated \$11 million, to Wolfensohn Capital Partners, a private equity firm founded by former World Bank president James Wolfensohn. In 2009, it acquired a 25% stake in UK based £30 million ethnic women's wear retailer, EAST. Today the company has retail outlets in all

major cities of India—137 at last count—in addition to international stores in Dubai, UAE; 3 stores in Bahrain; Doha, State of Qatar; Rome, Italy and one in Guangzhou, China.

In summer of 2014, with an idea to cater the modern Indian youth and also the international buyers who are fond of Indian textiles and clothing, Fabindia launched a western wear brand 'Fables'. The brand was first launched at Fabindia's Connaught Place store in Delhi but later on, it was made available all over the country. Currently FabIndia sells through its own stores across the country, through multi-brand stores and through the online marketplaces such as Myntra, Jabong etc.

The company has positioned itself as provider of organic food, home furnishing, ethnic wear, etc. which are hand-crafted by artisans. They have expanded internationally and have gone in Middle East, Europe, and Asia Pacific. They are good in positioning their offerings as one which is of premium but is of excellent quality.

WHAT WOULD IT TAKE FOR THESE INDIAN CONSUMER BRANDS TO GO GLOBAL?

The overriding reason to go global, of course, is to improve one's potential for expansion and growth. International expansion is not necessarily the best way to grow the company. The Indian market is big enough for most small businesses to expand almost indefinitely. But entering the international arena can protect against the risk of decline in domestic markets and, most important, significantly improve overall growth potential and sell India as a Brand. Along with promise, going global carries an equally heavy load of peril. From chasing too many opportunities to getting whacked by currency fluctuations, the game of international expansion has many threats that domestic-only businesspeople never see. One can grab the brass ring of growth by going global, but only if one can avoid the pitfalls.

Going global is costly in terms of time, money, and focus. It's a great way to grow the business, but it's a longer-term investment that one should only take only when well-capitalized and has organizational bandwidth. Even if you are well-capitalized, the best chance of success lies in sparing your resources and developing a strong connection with your new market.

Focusing on the following areas, to begin with, will put Indian consumer brands on the path to going global:

Understanding of Local Market: Understanding of culture, people buying capacity and local needs is very much needed to sell to the consumer. One significant difference between doing business domestically and internationally is culture. A product that sells well in India may not necessarily have the same appeal elsewhere, so it's crucial to invest time and energy into researching potential foreign markets and be ready to alter the products which are more to liking of the locals.

Investment in Global Talent: Companies need to invest in resources that have global outlook and ability to work in different geographies and can create strategies catering to market segments. They need to ready to shell out more for highly skilled professionals. Trying to juggle an overseas operation while maintaining current domestic customer base with a small staff is incredibly difficult and you likely won't be able to sustain your growth. These Indian companies have to make sure that have the financial and structural stability to add staff members who can handle the new influx of work that comes with such growth.

An organization should have a strong team solely focused on international growth that is ready to face challenges and fully support the expansion.

Strong partners and collaborators: The ability to create brands and consistent imagery across multiple markets requires strong creative, media, digital, and research agency partners. As tricky as it can be to obtain financing for a global expansion program, finding foreign business partners can be even tougher. If you can find foreign distributors for your product, you will be able to simply sell them your products and let them worry about reselling them at a profit in their domestic markets. Distributors are nice because they can offer foreign customers top-notch service and are easier for you do deal with because they typically buy enough of product to build up an inventory. Identifying the strong and passionate people in the new market is really important as they can help the company to put strong foot forward and guide on how to work in that market. Also, they can help in warding off high local and as well as foreign competitions.

Impact of Innovative ideas: Consider the impact of any new ideas. Introducing a new product or marketing campaign becomes a whole new ballgame when Indian companies will operate internationally. Instead of only thinking about how in India customers might receive your new ideas, one also needs to think about and accommodate for the impact these ideas will have on foreign customers. So, the proper research and trial runs become necessary for selling products/services across the various countries. Only then the new ideas have to be implemented so that

they are able to bring the success to the firms.

Employment Regulations and Practices: These may be slightly or very different overseas. A typical pitfall might involve a company sending its offer letter to a prospective employee in the European Union, without realizing that they really need a full-blown employment contract that complies with local regulations. The ramification is that it immediately tilts the balance of power greatly to the employee, at the expense of the company, and makes termination difficult. Also, one need to take care of being compatible with the local laws and should operate in given legal framework.

With high-quality brand propositions, these 3 Indian companies have quite some similarities – ambitious entrepreneurs, professional management, success in domestic market, global competitors challenging them to innovate and expand into newer categories and geographies. They look to be promising and will add to growing list of Indian companies telling the great India growth story.

CONCLUSION:

Consumer is increasingly being looking for the best brands around the world, no matter where they are originated. This illustrated in our experience of Patanjali products which are competitive with multinational FMCG products and how FabIndia put its imprints in global landscape. These emerging products prove the fact that equity of the brands from these emerging market is lagging behind the actual quality of what they deliver. A key element of success is the framing of harmonious and consistent brand architecture across countries and product lines, defining the number of levels and brands at each level.

REFERENCES:

1. Berry ((1993), "How Big Is Your Umbrella? Maybe Not So Big After All," Brand week, vol. 34, no. 49, p. 22.
2. "Bharat Swabhiman Trust||100% voting || 100% national & patriotic thinking|| 100% boycott of multinational companies". www.bharatSwabhimanTrust.org. Retrieved2016-03-08.
3. <https://en.wikipedia.org/wiki/Fabindia>[30.9.16].
4. https://en.wikipedia.org/wiki/Micromax_Informatics[30.9.16].
5. https://en.wikipedia.org/wiki/Patanjali_Ayurved[30.9.16].

6. Hudak (1988) “ Global Branding and Segmentation: Are They Interdependent?”, Journal of Consumer Marketing, vol. 5, no. 3, .27.
7. Jordan (1988) “Going Global: How to Join the Second Major Revolution”, Journal of Consumer.
8. Somya Lakhani (April 25, 2014). “West Turn”. The Indian Express. Retrieved 2015-10-06.
9. PTI. “Micromax world’s 10th largest mobile phone brand in Q1: Gartner”. Live mint. Retrieved 17 September 2015.

YOUTUBE: LUCRATIVE PLATFORM FOR LEAN ADVERTISING

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ABSTRACT:

Internet users are growing in India and advertisers are looking for unusual ways and methods to grasp the attention of their potential customers. Online advertising is gaining popularity as a part of promotion mix and among the different options available online Youtube is emerging as the fastest website in terms of browsing. It is drawing the attention of marketers to promote their product. The rising popularity of YouTube is orienting marketers to use this as an important component of promotion mix. This platform is good not only in terms of reaching to the customers but also due to its cost effectiveness. In a way leading to lean advertising, a new term which is gaining importance.

KEY WORDS: *Youtube, advertising, lean, cost effective*

INTRODUCTION

The ad viewership is increasingly shifting from traditional to online media. Online advertising provides a very good option to the brands to attain higher engagement of their consumers with far less investment. The organizations looking for aggressive promotion of their brand and products opt for social media as one of the platform (Ridout, T. N., Franklin Fowler, E., & Branstetter, 2010). As these online campaigns go viral and are far more successful than the print, TV and radio ads. Their effectiveness could easily be sensed by tracking the amount of time a person spend on online viewership, visit the company website, follow it on twitter.

Advertisers are always working on some innovative strategies to grab the attention of customers to pull them towards their products and services. It is ever changing field of marketing, and Internet has added a new technology driven dimension to create and present unique saleable ideas. Internet is equipped with incredible targeting tools to reach the customers around the world, and efficiently engage them with the help of video which have more emotional involvement as compared to other media. Google offers the marketers an extremely cost effective and quite flexible marketing tool for video based advertising of their products on YouTube. Websites experience an increase of 20% in traffic and of 5% in their brand search after putting up video ads online. The search ads generate around 25% of the sales at just 4% of

the company's total advertising budget (HBR, Report). A plethora of studies has been conducted which discussed web advertising and their outcome. World wide web has a characteristic of easy entry, global approach, relatively low set up cost, 24 x 7 availability and high interactivity (Berthon et al,1996). Advertisement value is affected by information given in the ad, entertainment provide by it thus affecting the attitude towards the advertisements in the cyberspace advertising (Brackett & Carr, 2001). Advertisement information facilitates the customers to assess the products and services more realistically (Norris, 1984) and internet provides the better platform to deliver the information content in comparison to other traditional advertisement medium (Saxena & Khanna, 2013). Internet advertising is capable of disseminating unlimited information with unbounded time (Yoon & Kim, 2001).

RESEARCH QUESTIONS

- Does YouTube be used as an important platform for advertising by the organizations for promoting their brands?
- Is Youtube advertising cost effective and leaves an impact?

So far, YouTube is considered the most viewed video-sharing website on the world wide web. Indeed YouTube was the second most accessed website in the world in 2016, behind Google (Alexa, Quantcast). YouTube accounted

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for 60% of the videos watched online (Gueorguieva, 2010). The basic idea behind YouTube is that “anybody, anywhere in the world, can upload video content about almost anything they like” (Salmond, 2010). As Salmond noted that prior to YouTube’s launch in 2005, it was far more expensive for the people to post their videos online. This made it so that only those with financial resources—usually business firms—could put video online, and even then fast internet connections and expensive hardware requirements made streaming video not possible or practical for most internet users. But after YouTube came, it democratized the consumption and production of video contents online. By considerably lowering the cost of distributing video, it created the opportunity for any user to produce content and have it viewed by millions of other users.

LITERATURE REVIEW

In India the number of Internet user base is expecting a rise of 18.53% by June 2014 which will total to 243 million. With this figure India is expected to overtake US and become the second largest Internet user base country in the world after China which has 300 million Internet users (I-Cube, 2013 report). The report further adds that downward trend in the cost mobile devices and Internet access will further increase the Internet user base in India. The past data shows that increase in the last three years is from 100 to 300 million, as compared to the increase in the last decade which was only from 10 to 100 million. With the escalating number of audience on Internet, it provides the marketers with a very effective platform to share their part of story with their audience.

Today, digital media has dominated the world. Facebook currently boasts over 400 million users and continues to grow at an astounding rate (Crunchbase, 2009). Twitter also exploded in 2009 and attracts “more than seven million unique visitors” (Armano, 2009). Marketers are finding that online and targeted marketing have already proved its success in comparison to the traditional advertising (Bernoff, 2009). As per the recent survey of Forrester Research Six out of 10 marketers have increased their budget for interactive marketing (Bernoff). Not surprisingly, organizations have been using the tailored online forums to reach consumers so as to personalize their experiences and increase the effectiveness of the advertisement. The use of smartphones, has further aggravated the effectiveness of these ads on the digital media. Most organizations, from auto insurance companies to clothing designers, not only have a website, but they also have a mobile application. The key is to utilize these tools for very effective and affordable platform for promoting their products.

As digital media becomes more popular, advertising through digital media also becomes more effective. Facebook, Twitter, and iPhone accounts have mass email distribution capabilities to export events, but businesses are catching on. For example, “the New York Times iPhone application recently added a sharing functionality which allows a user to easily broadcast an article across all networks, such as Facebook and Twitter” (Armano, 2009). Websites, like Posterous, allow users to set up an account that immediately transports all blog information, photos, events, and updates to the users’ social networking accounts like Facebook, Twitter, YouTube, and personal websites. Updates can even be made directly from one’s smartphone allowing the user never to feel out of touch for a moment. This is an extremely useful tool of which marketers should be aware. Through such technology, marketers may literally be in touch with their customers 24 hours a day and have direct access to them. The ability for marketers to communicate directly with their consumers and vice versa represents the fluidity of social media. The result is that customers are able to make suggestions that, in turn, are relayed to product development and customer support more quickly (Maddox, 2010).

YouTube was created in February 2005, as a consumer media company for people to view and share videos worldwide on Internet. YouTube is a free of cost service where the subscribers can upload their videos, thereby sharing these with a possible audience present online. The links of these posted videos can easily be emailed to others to enjoy, resulting in rapid popularity of the videos. The site has now evolved as a popular entertainment destination including video clips from television programmes, sporting events, movies and popular music. Youtube acts a medium to reach a huge audience, particularly youth, both inexpensively and instantaneously. Further, the two-third of the Youtube watching audience comprises of the youth between 18 to 34 years of age. And they watch Youtube more than any cable TV channel (Perrin, 2015). As a consequence Youtube is evolving as an attractive platform for the manufacturers and marketers to promote their goods online.

The technology advancements offer the viewers an additional platform through the hand held devices to enjoy the rich repository of information available on Youtube. This extensive usage of the platform has definitely influenced the way the marketers design and develop their advertising budget and strategy (Nielsen, 2012).

YOUTUBE AND ONLINE VIEWERSHIP IN INDIA

YouTube is an online content community founded in 2005.

It allows the users to view, post, link and comment on the videos. It was the third most visited website on Internet worldwide, with recording of over one billion monthly viewers who watched more than 6 billion hours of video monthly (Bradshaw & Garrahan, 2008). Furthermore, Young generation between the age group 18 to 34 years old impose two third of YouTube viewing population and watch YouTube videos far more than any other cable TV channel (Perrin, 2015). The findings of a Google online survey revealed that YouTube viewers in India spend more than 48 hours in a month watching online videos on the website. The report further discloses that two third of the viewers on YouTube belong to Generation C (under the age of 35 years). And more than half of these share the videos and three quarters actually visit the site mentioned in the video. Experts predict that the viewership of YouTube will continue to grow in India with the penetration of smart phones in generation C. As a result the advertisers find YouTube a very lucrative platform to personally reach Generation C and promote their brands. YouTube experienced a noteworthy jump of approximately 75% in its advertising revenue in 2013 as the online video ads gain popularity among Indian advertisers across all categories.

YouTube in India has more than 60 million unique users and they are spending more than 48 hours in a month viewing the content present on Youtube (Priya, 2016). Given that 65% of India's population is below the age of 35 there is tremendous potential for content creators to monetize more as internet penetration deepens and to create content that caters to this younger audience. YouTube is loaded with repository of insights and information related to markets and consumption (Don Groves, 2016). YouTube enjoys a huge traffic of one billion unique users every month. It supports 76 different languages covering almost 95% of the world's total Internet population. The watch time of Youtube in India has gone up by 80% in 2016 (Jain, 2016). With this data India has acquired the top second position in the countries viewing Youtube worldwide.

According to a report by comScore the online video consumption has doubled in India from March 2011 to

March 2013. The report further tells that YouTube (Google site) enjoys the number one position for viewing online videos. So, as per comScore, the video scene is greatly conquered by YouTube, which has considerable growth opportunities with new channels coming up. Further the report reveals that YouTube enjoys 90 percent reach as compared to Star Plus among metropolitan youth audience in India.

YOUTUBE IN INDIAN BRAND ADVERTISING

The creation of content advertising on YouTube as a platform has attracted advertisers' interest tremendously. They consider this evolving medium as an effective online platform for brand communication advertising. Advertisements on YouTube as a sharing platform are displayed on the site's homepage, which includes elements published or chosen by users. Chiefly, there are two categories of advertisement on YouTube video namely in stream video advertising and in-video advertising. In stream ads are of maximum 15 seconds in duration and viewers have the option of skipping these ads after playing of at least 5 seconds. Whereas the in-video ads are the ads that usually appear on the lower portion of company's video. These ads typically appear for the 15 second mark that the viewer if desired can close or minimize these (Pikas & Sorrentino, 2014). Though television in India continues to be the primary form of media, social media channels such as YouTube continues to grow, which is experiencing a considerable acceleration in the development of advertising investments (Bellman et. al, 2009). Thus, advertisers who are experiencing the effects of advertising substitution between YouTube and other forms of media could operate this new environment in order to obtain the best return of investment with the help of YouTube advertising.

There are so many success stories of popular and viral ads on YouTube. Using YouTube for promotional activities gives the companies the unimaginative reach and power of Social Media marketing. The top 10 ads on YouTube in India (by views) in 2016 are listed in the table given below:

S. No.	Advertisement	Date of publication	Viewership	Likes	Dislikes
1	Maxfresh: Taazgi ka Dhamaka with Ranveer Singh & Amit Trivedi	18 March 2016	4927609	2440	1373
2	Snapdeal: Find you dream husband	22 April 2016	2820050	22	5
3	Surf Excel: Are your kids # Ready For Life?	26 April 2016	8699469	3291	1221
4	Make in India- Mastercard	5 July 2016	6188974	84	47
5	Nike presents Da Da Ding	10 July 2016	5002112	26453	1059

6	Google	5 September 2016	6899724	855	64
7	Close Up: Freshest Party's Back	12 Sep 2016	8498102	3750	2945
8	Manyavar: Virat Kohli ki ladkiwalo se demend	1 November 2016	6555077	25409	3473
9	Nivea #Covering Up Fails- An Epic Undercover Fail	11 November 2016	6305051	51	20
10	Maaza	16 November 2016	7236825	31	14

TABLE 1: TOP TEN VIRAL ADS ON YOUTUBE IN 2016 (*DATA AS ON 24TH MARCH, 2017)

With such speed up increase in video consumption among Indian viewers, many of the leading and upcoming brands look forward to capitalize this prospect for promoting their brands. A number of brands are planning to show some original content on the YouTube channels that they have started with and many more are in the queue to launch their channels. To name some Maruti Suzuki India Ltd, ITC Ltd, Bharti India Ltd, Dabur India Ltd. YouTube is a critical marketing means and these brands have already started to incorporate this into their overall media plans for promotional strategies.

LEAN ADVERTISING ON YOUTUBE

Lean advertising means a lesser amount of budget for advertising however at the same time profitable advertising with increased impact. This online videos platform offers a perfect means to attain higher level of engagement with consumers. Cost of per impression of the advertisements in the traditional media is replaced these days by the cost per engagement of the viewers for online video ads. The reasons for this is that they provide you with a number of tools to measure and track the responses of the target audience. For example one can find the time spend by viewer on the video, number of forwards made (if any) and clicking the link to visit the website or following the company on twitter. Overall, an advertising approach can be called as lean advertising if it costs less and at the same time leaves more impact on the target audience.

The Youtube channel can be used as an environment for advertising by presenting pleasing environment capable of enhancing the consumers hedonic needs (Fischer & Reuber, 2011). Through this source the advertisers can actually supplement the user’s needs for enjoyment, emotional release and diversion (Muntinga et. al., 2011). Hence many marketers have merged advertisement with entertainment in order to reach more customers through the video ads. Thus the placement of advertisements on Youtube has created a new avenue for gaining attention of more consumers (Kotler & Armstrong, 2013).

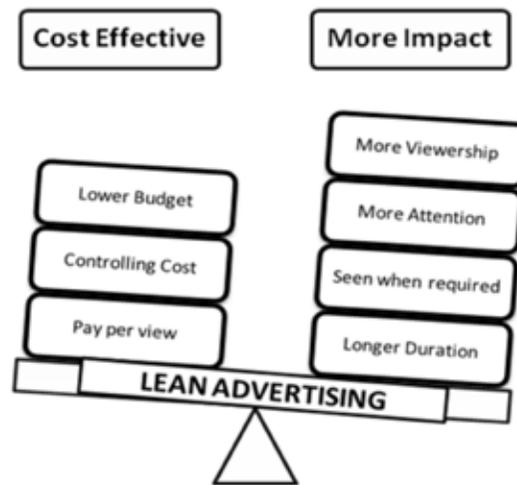


Figure 1: Lean advertising Balance

Some of the advantages of the online video ads are as under:

Choose your audience: It is proven fact that getting your ad in front of right people is always going to earn unprecedented levels of success to your commercial by converting the potential customers into actual buyers. With YouTube, you as advertiser can choose your audience, by targeting exactly those customers who could be looking for the products you are offering. This can be achieved by filtering the audience on demographic and geographic boundaries.

Pay per engagement: Payments for the ads can be based on the number of engaged views of the ads. Advertisers pays only if the user chooses to view the ad and not by the page impression. Further the cost can be controlled by stopping the ads anytime, whenever you think the target for the day is achieved (video is viewed by the required number of audience for the day).

Measurable Effectiveness: Most of the times the viewers choose the ad they want to see as a result business get the

true video count in terms of the reaching the people who actually wants to listen to their story. The performance of the ad can be tracked and could be further used to change the campaign for better engagement and impression. The view count can be tracked with tools available which offer an effective way to evaluate the effectiveness of the ad in terms of popularity.

Re-engaging viewers: Cookies list could help in re-engaging the viewers. The cookie list could be made of those who viewed an ad and they could again be exposed to same campaign whenever they revisit YouTube.

Less Irritating: These ads are less irritating for the viewers because they are always provided with the skip option.

Tell everything: The creative writer of the ad can take his leisure time for storytelling, as there are lesser limitations on time as compared to other media which supports video ads.

Path to company website: The link to the main website of the product promoted through ad can be well embedded with the video to guide the customers to the home page.

Right Timing: With YouTube you are targeting your potential customers at the right moment when they are thinking about the product or service and searching for its information on the web.

Seriousness: As most of the viewers actively choose the online videos, so they are more likely to watch it seriously as compared to the ads which they watch on television.

Brand Engagement: Viewers not only watch the ads but they like them, post reviews and also share them with others online.impact

DISCUSSION & CONCLUSION:

The main purpose of this study was to review the YouTube as an effective platform for advertising. YouTube was originally conceived as a medium for distribution of amateur videos. However, to a great extent its content aligns proper to the conceived aim, but at the same time it is seeing commercialization with so many brands coming up with their video ads and dedicated channels on YouTube. A study by Saxena & Khanna confirms that out of top 50 videos they reviewed six were advertisements (2013).

Through this study ten viral ads on Youtube have been covered. The table 1 given in the above section illustrates the details of these ads in respect to their viewerships,

likes and dislikes. The figures in the table reveal that these advertisements were able to grab the attention of large number of viewers. At the same time the investments made by the organizations for uploading these ads was very less in comparison to that invested in other media. The figure 1 gives an overview of the cut back in the cost factors and improvement in the impact made by the ads on online media. To conclude YouTube is emerging as a very important vehicle for the marketers to place their ads on the World Wide Web.

REFERENCES:

1. Armano, D. (2009). Six social media trends for 2010. Retrieved November, 5, 2010.
2. Berthon, P., Pitt, L.F., & Watson, R.T. (1996). The World Wide Web as an advertising medium: Toward an understanding of conversion efficiency. *Journal of Advertising Research*, 36(1), 43–54.
3. Bradshaw, T., & Garrahan, M. (2008). Rival forecast to catch YouTube. *Financial Times*, <http://us.ft.com/ftgateway/superpage.ft>.
4. Brackett, L.K., & Carr, B.N. (2001). Cyberspace advertising vs. other media: Consumer vs. mature student attitudes. *Journal of Advertising Research*, 41(5), 23–32.
5. Dehghani, M., Niaki, M. K., Ramezani, I., & Sali, R. (2016). Evaluating the influence of YouTube advertising for attraction of young customers. *Computers in Human Behavior*, 59, 165-172.
6. Doveunitedstates. (Apr 2013). Retrieved from <http://www.youtube.com/watch?v=XpaOjMXyJGk>
7. Fischer, E., & Reuber, A. R. (2011). Social interaction via new social media:(How) can interactions on Twitter affect effectual thinking and behavior?. *Journal of business venturing*, 26(1), 1-18.
8. Google India. (Nov 2013). Retrieved from <http://www.youtube.com/watch?v=gHGDN9-oFJE>
9. Helpachildreach5. (Aug 2013). Retrieved from <http://www.youtube.com/watch?v=Nz0sSK7HpIY>

10. IAMAI-IMRB I-cube. (2013). Retrieved 17 February, 2014, from http://www.iamai.in/PRelease_detail.aspx?nid=3222&NMonth=11&NYear=2013
11. Kotler, P., & Armstrong, G. (2013). Principles of marketing 15th global edition. Pearson.
12. Kit Kat. (Jan 2013). Retrieved from http://www.youtube.com/watch?v=xTpv9lc_qMw
13. Li, C., & Bernoff, J. (2009). Marketing in the Groundswell. Harvard Business Press.
14. Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: Exploring motivations for brand-related social media use. *International Journal of advertising*, 30(1), 13-46.
15. Nichols, W. (March 2013). Advertising Analytics 2.0 March 2013. HBR. Retrieved from <http://hbr.org/2013/03/advertising-analytics-20/ar/1>
16. Norris, V.P. (1984). The economic effects of advertising: A review of the literature. *Current Issues & Research in Advertising*, 7(2), 39.
17. Old Spice India (Oct 2013). Retrieved from http://www.youtube.com/watch?v=4bvjQAp0q_8
18. Pikas, B., & Sorrentino, G. (2014). The effectiveness of online advertising: consumer's perceptions of ads on Facebook, Twitter and YouTube. *The Journal of Applied Business and Economics*, 16(4), 70.
19. Ridout, T. N., Franklin Fowler, E., & Branstetter, J. (2010). Political advertising in the 21st century: The rise of the YouTube ad.
20. S, Priya. YouTube users can now watch more Indian language content. <http://techcircle.vccircle.com/2016/12/08/youtube-users-can-now-watch-more-indian-language-content/>
21. Samsung Mobile. (March 2013). Retrieved from <http://www.youtube.com/watch?v=2LHv1FPd1Ec>
22. Saxena, A., & Khanna, U. (2013). Advertising on Social Network Sites: A Structural Equation Modelling Approach. *Vision* 17(1). Sage Publications, 17-25.
23. Sony Xperia. (Jan 2013). Retrieved from <http://www.youtube.com/watch?v=gWysHOj95E>
24. Yoon Sung-Joon, & Kim Joo-Ho. (2001). Is the Internet more effective than traditional media? Factors affecting the choice of media. *Journal of Advertising Research*, 41(6), 53-60.
25. 101 Latest Social Media Facts and Stats from India – 2016. <http://www.soravjain.com/social-media-facts-and-stats-india-2016>
26. 2013: 10 most-viewed YouTube ads in India. 10 Dec 2013. Retrieved from <http://ibnlive.in.com/news/2013-10-mostviewed-youtube-ads-in-india/438813-11.html>

DEMONETISATION: SHORT - TERM PAIN, LONG - TERM GAIN

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ABSTRACT:

The demonetization move being led by PM Modi in India is that initiative that Rs 500 and Rs 1,000 notes should be declared no longer legal tender, to be replaced by other notes of different designs and in one case, denominations. The motive was to wash the stock of "black money" out of the economy and get it into the licit, banked and taxable, part of the economy. And perhaps the main effect is that large portions of the population feel that the basic system is unfair. They're locked out of that easier world where matters are settled in large amounts of cash, where tax is not paid and where favors are bought. However, we should also think about the macroeconomic effects here. And that's difficult--because we're not even sure what the sign of the effect will be in favor or against, that's perhaps the case for the prosecution. The present study will give a detailed study of the macroeconomic effect of demonetization which is going to be. Also study of some major large cap and mid-size companies is done to give a more infused result of demonetization move.

KEYWORDS: *Demonetisation, GOI, Remonitisation, Governance, Transparency, Revenue, Earnings.*

INTRODUCTION

The French were the first to use the word demonetize in the years Between 1850-1855. Since then many countries have used the word and the policy with immense restriction and discomfort for it disrupts Economics and population at large.

India has first demonetized on 12th January 1946, followed by second time on 16th January 1978 and third time on 8th November 2016.

The current demonetisation policy of government of India is the buzzing topic in every nook and corner of India. Demonetisation is the act of corn husking currency units of its status as legal tender. Demonetisation is incumbent whenever there is a collimate of national currency. The old unit of currency must be retired and replaced with a new currency unit.

The opposite of demonetization is re-monetization where a form of payment is restored as legal tender.

There are multiple of reasons why nations demonetize their local units of currency. Some reasons include the combat corruption and to deter a caste system.

In 2016, the Indian government decided to demonetize the 500 and 1,000 rupee notes – the two biggest denomination notes. The notes accounted for 86% of the countries cash supply. The government bourn was to eradicate counterfeit currency, fight tax invasion, eliminate black money, gotten from money laundering and terrorist financing activities and promoting a cashless economy. By making larger denomination notes worthless, individuals and entities with huge sum of black money gotten from parallel cash system were forced to convert the money at bank which is by law required to acquire tax information from entity. If the entity could not provide proof of making and tax payments on the cash, a tax penalty of 200% of the tax awed was imposed.

A side from eliminating black money and counterfeit currency one of the most significant and welcome impacts would be cashless economy. The gradual transition towards digitization and a cashless economy will help curb corruption in the long-run. The increased transparency and record of transactions will make it considerably difficult to hold black money and carry out under-the table deals. The added convenience of using digital payments solutions and Virtual wallets can't be ignored either.

Demonetisation –as rightly said by our Honorable PM Mr.

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Narendra Modi that is “short term pain for long term gain”

SHORT TERM PAINS FROM DE-MONEY

PUBLIC INCONVENIENCE

Public inconvenience is the major disadvantages of the demonetisation measure. People spend a full day in the banks to withdraw the money from the bank account. The queue in some banks is so large that people faint and some have died standing for a long time.

REDUCED MONEY CIRCULATION

There is a severe shortage of money circulation in the economy as a whole. Everyone has a single 2000 rupees note and cannot transact with it in local shops, chicken shops and many other places where swipe machines are absent due to problem of change. There is a severe shortage of 100 rupee note and with a single 2000 rupee note, people find it very hard to get change. People have restricted their daily transactions to the maximum and this has affected the business in all sphere considerably.

ATM CALIBRATION

Only 40 % of the ATM machines have been calibrated to the new currency while the rest of the ATM machines are still put of order. This creates a queue in ATM machines and cash gets exhausted within hours. ATM machines were not fully operational causing further inconvenience to the people. Most of the times, ATM machines were out of cash.

CORRUPTION AND FRAUD

There are many instances of fraudulent activities like the banking personnel and the post office personnel illegally exchanging the old currency for the new currency for a commission amount. The brokers were making hay of the current situation and earn whopping commission of 50 to 60 percent for exchanging the currency using the poor people. The misuse of jandhan accounts to exchange black money is also revealed and restrictions are implied on such accounts. Media has exposed such cases of corruption.

LONG TERM GAINS FROM DE-MONEY

The current demonetisation policy of government of India (GOI) is the buzz ling topic in every nook and corner of India. Demonetisation is done for the overall economic development for India.

The main objective of demonetisation is to curb black money. Curbing black money demonetisation has made it

mandatory for every person in India to deposit their old currency in the banks and exchange for new currency. This will make the cash holders to deposit their money in the account and make it accountable. In this manner black money will be retrieved to a certain extent.

GOOD GOVERNANCE

Demonetisation is done as measure of good governance as suggested in the world's bank ease of doing business report. This measure will increase the ranking of India in various indexes published by world bank, world economic forum, United Nations and IMF etc.

INCREASED TAX REVENUE

There is an incredible surge in tax collections for the past month. Property tax, water tax and other corporation levies in all states have risen considerably. The income tax collections have also raised rapidly. The provision of income tax department monitoring the accounts with more than 250000 rupees deposit and collecting tax with penalties will increase the tax revenue for the government.

IMPACTS OF DEMONETISATION

There are three types of impacts:

1. Very short-term impacts
2. Medium-term impacts
3. Long-term impacts

Very short term impacts

The demonetisation, by removing 86% of the currency in circulation, has resulted in a very severe contraction in money supply in the economy. This contraction, by wiping out cash balances in the economy, will eliminate several transactions for a while since there is no or not enough of medium of exchange available. Since income and Corruption are intrinsically related to transactions in the economy. This effect would be more severe on individuals who earn income in cash and spend it in cash to a lesser extent it would also affect individual who earn income in non-cash forms but need to withdraw in cash from far consumption purposes, since several sectors in the economy still work predominantly with cash.

In terms of the sectors in the economy, the sectors to be adversely affected are all those sectors where demand is usually backed by cash, especially those not within the organized retailing. For insurance, transport, services, fruits and vegetables and all other perishables would face compression in demand which is backed by purchasing

power. This in turn can have two effects: while it is expected, that supply exceeds demand, there would be fall in prices, however, if supply too gets curtailed for want of a medium exchange, prices might in fact rise. Thus, while generally people seem to expect prices to fall it is quite possible that price would instead rise.

Alternatively, to keep the flow going, people might take recourse to credit both the retailers and other agents in the economy might make suppliers on credit in the hope that when the liquidity status is corrected, the payments can be realised. In these cases, the price of commodity might rise instead of falling. In other words, the impact of an incremental reduction in money supply where the demand and supply chain remain unaffected would be different from a case where there is a drastic reduction in money supply and output might adjust rather than the adjustment being in prices. In other words, the expectation that inflation would decline might be belied.

A further impact would be a compression of the demand for non-essentials by all the agents in the economy in the face of uncertainty in the availability of cash. The demand from segments which have access to digital medium of exchange would remain unaffected, but that from the rest of the economy would get compressed. This would transmit the effect to the rest of the sectors in the economy as well.

Another sector where one expects to see effects in the very short run in the real estate space with contraction in demand from one set of agents – say agents who have earned unaccounted incomes and placed them with real estate space – either prices within this segment would fall or transactions would close to happen. While of itself, this would be considered a positive development and evidence of a connection in the unaccounted incomes, it could lead to a compression in investments in the construction sector which can have adverse income and employment consequences for the economy. There are likely to be two spin-offs from this change – one, there would be some increase in tax collections in the short term, and second various could emerge as currency substitutes to the extent people attempt to get rid of unaccounted cash balances through purchase of goods and services and for payment of property taxes, one should witness a spurt in tax collections in indirect taxes as well as property tax in the month after demonetisation which would disappear thereafter. There is evidence already that property tax collections in same

cities are higher than last year. Similarly, in the case of currency substitutes, at mcd tax collection centers at the border, people are being given in view of the balance they were entitled to, which would be valid for six months.

MEDIUM TERM IMPACTS

In the medium term, the effects would be related to the extent to which the currency is not, there would not be any major effects on the economy. However, it is expected that the entire currency would not be replaced – to the extent currency is extinguished and to the extent some of the currency remains as bank deposits, there would be some impacts on the economy. The first effect would be a compression of the economy to the extent the extinguished currency was working as a medium of exchange. The currency that is placed in the banks but not withdrawn, it is argued, would generate an expansion in deposits in the economy. In the discussions on demonetisation, there is a consistent reference to the resultant increase in credit creation in economy like finance Minister Arun Jaitley says, “Bank deposits will increase and they will have more capacity to support the economy”. The total cumulative credit than can potentially be generated is defined in terms of the reserve ratio.

LONG TERM IMPACTS

This essentially represents a change in regime for the real and financial economy. Domestically, there could be some turmoil as the effect will be disproportionately felt by the lower and upper income classes.

Internationally the government is likely to get a thumbs up for the move and more countries could potentially see this as a viable option to curb black money and stem illegal financial activity.

Last, though this move by the government may not be first, having being tried by earlier government as a tool to fight corruption. Such an action achieves larger significance for a globally connected India as it shows boldness in tackling an issue which has remained a thorn in the growth success story of this generation.

IMPACTS OF MACRO VARIABLES

Apart from transition issues faced by banks in judging the impact on the economy, it is important to differentiate between the two changes that the demonetisation can bring about in money supply. The first change, cash being extinguished, to the extent it was being used as a

medium of exchange, would result in a compression in income, employment and consumption in an economy. On the other hand, the effect of the second change, cash being partially replaced in the system would have opposite effects of expansion in potential credit creation. The potential credit creation would translate into actual credit creation provided there is sufficient demand for credit.

If the demand for credit in the economy is large enough, the potential credit can be realized of the credit created, other things remaining the same, it can be expected that at least a part of the credit, will be far productive purposes. This would mean expansion in investment in the economy in the investment in the economy and subsequently an increase in GDP and employment.

DEMONETIZATION: SHORT - TERM PAIN, LONG - TERM GAIN

Company	Sector	Near- Term Impact	Beyond Fy2017	Structural Story
Hdfc Bank	Private Bank	Positive, Being A Leader In Private Bank(40% Casa ; Tier 1- 13.3%), Hdfc Bank Will Gain Deposits, Strength Its Market Share (Deposits , Digitisation) And Grow Its Card Business.	Once The Scenario Normalizes, Inroads In Credit Cards Business, Jump In Business Etc. Would Be Key Positives For Hdfc Bank.	To Retain And Strengthen Leadership. It Has Prime Client Base Of Salaried Individuals; Key For Leveraging Both Liabilities As Well As Retail Loans.
Sbi	Public Sector Bank	Positive, As Sbi Gains Market Share In Deposits, Retail Business (Which Can Be Used To Cross Sell). Even Though For Sbi, Some + Agri Is 20% Of Loans; The RbiForbearance Will Help Mitigate Temporary Repayment Issues.	Growth In Credit Cards Business Would Be Key Positive. Also, Loans (Especially Big Ticket Consortium Loans) May Benefit From Fall In Interest To Revive Stalled Projects.	Long Term Outlook Positive, Consolidation In Business And Merger Of Associates Are Long-Term Positives; Being The Largest Bank Will Help Gain Market Share.
Zee	Media	Marginally Negative. Ad Revenues To Decline, Earnings Estimates To Be Cut.	Fy18/Fy19e Earnings To Get A Boost Once The Situation Normalises And As More Spends Come From Organised Players Amid Pent- Up Demand	Remains Intact, Media Consumption To Increase Significantly And Zeal Being A Leader Will Benefit.
Indian Oil	Oil & Gas	Q3fy17 Would See Strong Volume Growth, As Old Rs 500 And Rs 1000 Notes Will Be Accepted At Fuel Stations Till Nov. 24 But Dec. Sales Could Be Lower, As It Would Have Advanced To November.	Once The Demonetisation Impact Normalises, We Expect Fy 18 – Fy 19 Petroleum Product Consumption Growth To Come Back, As Consumption Of Transportation Fuel Can Only Be Deferred For The Short Term.	Remains Intact, As Stabilisation Of Paradiip Refinery, Strong Grm Outlook And 6-7% Growth In Diesel & Petrol Consumption Would Drive Earnings Growth.

Maruti Suzuki	Automobiles	Negative, As Growth Will Decelerate; Earnings Estimates To Be Cut.	Fy18/Fy19e Earnings To Get Boost, As The Situation Is Expected To Normalise In Q1fy18 Pent-Up Demand Due To Current Deferment Would Lead To Strong Volume Growth.	Long Term Growth Prospects Intact, Passenger Vehicle Volumes To Grow In Double Digits Over The Next 2-3 Years And Maruti Being The Leader Will Benefit.
RBL Bank	Private Bank	Marginally Positive, Rbl Bank Now Has Opportunity To Gain large Corporate Accounts (Interest Rate Are Differential Declines); It Can Also Take Market Share From Unorganised Sector.	Deposits Growth Positive, New Relationships On Strength Of Its Faster Processing And Tailored Solutions, Will Help It To Compete Against Banks With Lower Cost Of Funds.	Growth Trajectory To Continue, Being A Bank It Is In Relatively Better Position, And Can Capitalise On Opportunities Due To Demonetisation.
Godrej	Fmcg	Negative In Short Term, Downgrade In Revenue Estimates For Fy17/ Fy18 Due To Lower Volume.	Demand Environment Is Expected To Turn Normal In Q1fy18. Fy18 And Fy19 Are Expected To Be Better, As Macro Environment Will Improve In Rural Areas And Urban Demand Picks Up.	Long-Term Growth Prospects Intact, Uptick In Demand, Increase In Distribution Reach And Innovation Would Result In Better Earnings Growth For Gcpl.

Bold policy measures; uncertain times: Demonetisation is a bold move by the government to stifle the unaccounted or parallel economy by sucking 86% of the available cash (by banning Rs. 500, Rs. 1000 notes) in the system. The move would have far-reaching implications on the economy and businesses. Many companies are still grappling to assess the impact on their businesses from the demonetisation and other impending follow-up policy measures by the government in its fight against black money.

GST implementation another bump ahead: The situation gets more uncertain given the global volatility and the expected teething troubles that would emerge during the implementation of the goods & services tax (GST) in the next fiscal year. A complete reform of the current indirect tax system would again require companies to recalibrate and realign their business models to the new indirect tax regime.

Near-term pain, long-term gain: Any dramatic change in policy that affects a clear majority of population / economy would have a disruptive near-term impact on business growth and consumer behavior. We expect the situation to take 6-9 months to fully normalize. Economic growth will gradually move to a higher growth trajectory, as the

benefits of a more simplified indirect tax system (i.e. GST) and shift from a predominantly cash economy to formal banking kick in. But, the markets could start discounting the positives well before they materialize.

Valuation – adjusting to expected changes in earnings: The recent correction of ~8-10% in the market is already discounting a large part of the expected impact on fy2017 corporate earnings and the subsequent partial spillover of the adverse impact of recent events on fy2018 earnings estimates. However, the next few months could be bumpy in view of the slew of key upcoming events globally (possible rate hike by the fed & guidance on further rate hikes, volatile global currencies owing to strengthening us dollar, Italian banking mess and Brexit negotiations), and locally (up election, union budget for FY 2018, follow-up measures to curb black money).

Portfolio picks: From investors' perspective, the volatile phase offers an opportunity to gradually buy into quality stocks at reasonable prices. Our preferred picks are:

- Large-cap companies: HDFC bank, SBI, Zee Entertainment, Indian Oil & Maruti Suzuki Corp.

- Mid-sized companies: RBL bank, Godrej Consumer Products and Divi's lab.

HDFC BANK

DEMONETISATION: Neutral for short term, positive for long term

NEAR TERM IMPACT: Being the leader in the private banking space (~40% CASA; Tier 1- 13.3%), HDFC Bank will benefit with the rise in deposits. The move will help it further strengthen and gain market share in deposits and digitization, and improve its card business. It has a prime client base of salaried individuals, which is key for leveraging both, liabilities as well as retail loans.

EARNINGS ESTIMATES: We don't expect a significant impact in FY2017E earnings, while there may be marginal upsides in FY2018E earnings.

LONG TERM IMPACT: Once the demonetisation scenario normalizes, growth in credit cards business, sticky retail business, business growth etc. would be key positives for HDFC Bank.

Stock performance: HDFC Bank has corrected by 11% from its high of Rs1,318

HDFC BANK

Market cap	Rs 2,99,896 cr
52-week high/low	Rs 1,318/929
NSE volume (no of shares)	13.7lakh
BSE code	500180
NSE code	HDFC Bank
Promoter's share (%)	26.91

VALUATION SUMMARY

Particulars	FY2015	FY2016	FY2017E	FY2018E
Net interest income(Rscr)	22,395.7	27,591.5	33,239.2	40,481.5
Net profit (Rscr)	10,215.9	12,296.2	14,984.5	18,358.7
EPS(Rs)	40.8	48.6	59.3	72.6
P/E(x)	28.9	24.2	19.8	16.2
BVPS(Rs)	247.2	287.2	332.5	388.5

P/BV(x)	4.8	4.1	3.5	3.0
RoE(%)	19.4	18.3	19.1	20.1
RoA(%)	1.7	1.9	1.9	1.9

Source :- www.sharekhan.com

STATE BANK OF INDIA

Demonetisation: No major impact, structurally positive for the long term

NEAR-TERM IMPACT: SBI being the largest bank in terms of size and reach will gain market share in deposits (which can be used to cross sell products) from 17.5% of domestic deposits now. For SBI, SME + Agriis 20% of loans, but the RBI's relief on payments will help mitigate temporary repayment issues.

EARNINGS ESTIMATES: While there may be marginal downgrade in estimates for FY2017, we maintain our FY2018E estimates.

LONGTERM IMPACT: Once the demonetisation impact normalizes, inroads into the credit cards business, increase in business growth etc. would be key positives. Also, loans (especially big ticket consortium loans) may benefit from fall in interest rates, helping to revive stalled projects.

STOCK PERFORMANCE: SBI has corrected by ~7% from its recent high of Rs281

SBI

Market cap	Rs 2,02,530cr
52-week high/low	Rs 288/Rs148
NSE volume (No of shares)	2.1cr
BSE code	500112
NSE code	SBIN
Promoters Share (%)	61.2

VALUATION SUMMARY

Particulars	FY2015	FY2016	FY2017E	FY2018E
Net interest income(Rscr)	55,015.3	56,881.8	57,075.7	66,763.6
Net profit(Rscr)	13,101.6	9,950.7	10,776.3	13,268.8
EPS(Rs)	17.5	12.8	13.9	17.1
P/E(x)	14.8	20.3	18.7	15.2
BVPS(Rs)	163.8	177.9	188.5	201.6
P/BV(X)	1.6	1.5	1.4	1.3
ROE (%)	10.6	7.3	7.3	8.4
ROA (%)	0.7	0.5	0.5	0.5

Source:- www.sharekhan.com

ZEE ENTERTAINMENT:

DEMONETISATION: Marginally negative for short term, positive in long term

NEAR TERM IMPACT: On the back of demonetisation, in the short term (for H2FY2017), advertising growth (56% of revenue) will taper off owing to lower spends from FMCG players (45% of total Ad spends), coupled with weak spends from the Auto sector. There will be no material impact on the subscription revenue (34% of total revenue).

EARNINGS ESTIMATES: There may be downgrade in estimates for FY2017/FY2018E, owing to near term impact, and consequently there could be revision in price target.

LONGTERM IMPACT: Once the demonetisation impact normalizes, Ad revenue growth will come back more strongly amid increasing spends from the organised players.

STOCK PERFORMANCE: The stock has corrected by ~25% from its recent high of Rs588.

ZEE ENTERTAINMENT

Market cap	Rs 42,265cr
52-week high/low	Rs 588/Rs350
NSE volume(no of shares)	20.2lakh
BSE code	505537
NSE code	ZEEL
Promoter's share (%)	43.1

VALUATION SUMMARY

PARTICULARS	FY2015	FY2016	FY2017E	FY2018E
Net sales(Rscr)	4,883.7	5,851.5	6,754.6	7,597.4
EBIDTA margin (%)	25.7	25.9	29.4	35.2
Net profit(Rscr)	977.5	1,030.1	1,318.1	1,841.8
EPS(Rs)	10.2	11.2	13.7	19.2
P/E(X)	43.1	39.3	32.0	22.9
EV/EBITDA(X)	34.1	27.7	20.3	14.7
ROCE (%)	22.7	24.0	27.6	32.6
ROE (%)	27.7	24.4	26.1	29.3

Source:- www.sharekhan.com

INDIAN OIL CORP:

DEMONETISATION: Positive for short term, neutral for long term

NEAR-TERM IMPACT: On the back of demonetisation, we expect strong volume for petrol and diesel in Q3FY2017, as the Govt has allowed fuel stations to accept old Rs500 and Rs1000 notes till 24th Nov-2016 but Dec-2016 sales could be lower, as the same would have been accounted for in Nov-2016 sales. Refining, Petrochemicals and Pipelines remain largely immune from the demonetisation impact.

EARNINGS ESTIMATES: We do not expect any material revision in FY2017 earnings, as better Q3FY2017 would offset muted Q4FY2017 petroleum product volumes (if any, due to demonetisation).

LONG-TERM IMPACT: Once the demonetisation impact normalises, we expect petroleum product consumption growth to come back, as consumption of transportation fuel can only be deferred in the short term.

STOCK PERFORMANCE: The stock has corrected by ~11% from its recent high of Rs334.

INDIAN OIL

Market cap	Rs 1,44,609cr
52-week high/low	Rs 334/Rs173
NSE volume(No of shares)	27Lakh
BSE code	530965
NSE code	IOC
Promoter's share (%)	58.3

VALUATION SUMMARY

PARTICULARS	FY2015	FY2016	FY2017E	FY2018E
Net sales(Rscr)	4,49,507	3,55,927	3,50,732	4,21,863
EBIDTA margin (%)	2.3	6.5	9.7	9.0
NET profit	6,578	13,318	14,669	18,021
EPS(Rs)	13.5	27.4	30.2	37.1
P/E(x)	22.0	10.9	9.9	8.0
EV/EBIDTA (%)	19.1	8.3	5.8	5.3
ROE (%)	9.6	18.4	18.1	19.5
NET D/E	0.83	0.64	0.63	0.59

Source:-www.sharekhan.com

MARUTI SUZUKI INDIA:

DEMONETISATION: Negative for short term, positive for long run

NEAR TERM IMPACT: Volume growth is likely to decelerate in the short term (for H2FY2017) on the back of demonetisation. However, Maruti is better placed among the peers, as 80% of its vehicles are purchased on finance (as against industry average of 65-70%). Also, the long waiting period on its new models (Baleno and Brezza) despite the current liquidity squeeze puts it on a better footing than competition.

EARNINGS ESTIMATES: There may be downgrade in estimates for FY2017/FY2018E, owing to near term demonetisation impact, and consequently a possible revision in price target.

LONG TERM IMPACT: Once the demonetisation event crunch normalises and liquidity the passenger vehicle industry growth will come back more strongly, owing to pent up demand due to the current deferment of vehicle purchases by customers.

STOCK PERFORMANCE: Stock has corrected ~20% from its recent high of Rs.5,972

MARUTI SUZUKI

Market cap	Rs 1,46,163cr
52-week high/low	Rs 5,972/Rs 3,202
NSE volume (No of shares)	6.9LAKH
BSE code	532500
NSE code	MARUTI
Promoter's share (%)	56.2

VALUATION SUMMARY

PARTICULARS	FY2015	FY2016	FY2017E	FY2018E
Net sales (Rscr)	49,971	57,746	69,923	82,464
EBIDTA margin (%)	13.4	15.5	16.3	15.8
PAT(Rscr)	3,711	4,571	7,990	8,853
FD EPS(Rs)	122.9	151.3	264.5	293.1
P/E(x)	39.4	32.0	18.3	16.5
EV/EBIDTA(x)	21.4	16.0	11.2	9.3
ROCE (%)	20.5	24.8	32.5	30.4
ROE (%)	15.7	18.0	24.5	22.8

Source:- www.sharekhan.com

RBL BANK

DEMONETISATION: Marginally negative for short term, positive for long term

NEAR TERM IMPACT: RBL Bank is one of the fastest growing banks and the fall in interest rates will help it to grow its business in Retail, SME and Mid Corporates,

besides enabling it to maintain Net Interest Margin (NIM).

EARNINGS ESTIMATES: RBL Bank may see delayed payments in SME segment, but being a bank, and with RBI's forbearance, we believe the impact to be marginal. We don't expect a significant impact on FY2017E earnings, and maintain our FY2018E earnings estimates.

LONG TERM IMPACT: Opportunity for RBL Bank to target large corporate accounts (interest rate differential declines) and forge relationships on strength of its faster processing and solutions, enabling it to compete against banks with lower Cost of Funds and also gain retail business.

STOCK PERFORMANCE: RBL Bank has corrected by 16% from its high of Rs393.

RBL BANK

Market cap	Rs 12,659
52-week high/low	Rs 421/Rs 274
NSE volume(No of shares)	39.9lakh
BSE code	540065
NSE code	RBLBANK
Promoter's share (%)	NA

VALUATION SUMMARY

PARTICULARS	FY2015	FY2016	FY2017E	FY2018E
Net interest income(Rscr)	556.4	819.2	1,171.0	1,688.1
Net profit(Rscr)	207.2	292.5	426.7	609.2
EPS(Rs)	7.1	9.0	11.5	16.5
P/E(x)	39.0	30.5	29.5	20.6
BVPS(Rs)	76.0	92.0	112.4	125.0
P/BV(x)	3.6	3.0	3.0	2.7
ROE (%)	9.7	11.2	11.9	13.8
ROA (%)	0.9	0.9	0.9	1.0

Source:- www.sharekhan.com

GODREJ CONSUMER PRODUCTS:

DEMONETISATION: short-term pain for domestic

business (50% of revenue)

NEAR-TERM IMPACT: On the back of demonetisation, primary and secondary sales are affected in the domestic market (50% of consolidated revenues), resulting in further stress on volume of the FMCG companies (including GCPL) in the near term. The international business spread over LATAM, Africa and Indonesia is expected to achieve good growth in the coming quarters.

EARNINGS ESTIMATES: We expect earnings downgrade for FY2017/FY2018. However, downgrade in estimates is expected to be lower in comparison to other FMCG companies, as GCPL is a globally diversified company with half of its revenue coming from India.

LONG-TERM IMPACT: Once the demonetisation impact normalises, we expect pick-up in consumer demand (likely in Q1FY2018) on the back of better macro economic environment.

STOCK PERFORMANCE: The stock has already corrected by 15% in the last one month.

GODREJ

Market cap	Rs 48,059cr
52-week high/low	Rs1,71/Rs1,120
NSE volume(No of shares)	19.2LAKH
BSE code	5342424
NSE code	GODREJ
Promoter's share	63.3

VALUATION SUMMARY

PARTICULARS	FY2015	FY2016	FY2017E	FY2018E
Net sales (Rscr)	8,276.4	8,757.8	9,994.3	11,536.2
Adjusted PAT(Rscr)	993.1	1,086.7	1,297.7	1,576.6
EPS(Rs)	27.1	31.9	38.1	46.3
P/E(x)	56.1	47.8	39.9	32.9
OPM (%)	16.5	18.7	18.8	19.2
EV/EBIDTA(x)	36.6	31.0	26.6	22.4
ROE (%)	24.6	23.1	23.0	22.9
ROCE (%)	20.1	21.4	21.6	23.5

Source:- www.sharekhan.com

DIVI's LABORATORIES

DEMONETISATION: No structural impact

NEAR-TERM IMPACT: Demonetisation will have no and Healthcare sectors, as demand are unlikely to be affected due of its total revenues coming from the international operations.

EARNINGS ESTIMATES: No changes in estimates for the price target.

STOCK PERFORMANCE: The stock has corrected ~17 high of Rs1,380.

DIVI's LAB

Market cap	Rs 31,190cr
52-weeks high/low	Rs 1,380/Rs918
NSE volume(No of shares)	3.6lakh
BSE code	532488
NSE code	DIVISLAB
Promoter's share (%)	52.1

VALUATION SUMMARY

PARTICULARS	FY2015	FY2016	FY2017E	FY2018E
Net sales	3,114.9	3,776.4	4,256.1	5,178.5
EBIDTA margin (%)	38.8	39.7	40.0	40.3
Net profit(Rscr)	865.5	1,111.9	1,225.6	1,519.0
EPS(Rscr)	32.6	41.9	46.2	57.2
P/E(X)	36.0	28.1	25.4	20.5
EV/EBITDA(x)	25.8	20.8	17.5	14.0
ROCE (%)	29.8	30.8	32.3	32.9
ROE (%)	24.8	25.9	26.3	26.7
ROE (%)	15.7	18.0	24.5	22.8

Source:- www.sharekhan.com

CONCLUSION:

The Demonetisation measure is welcomed by the majority

of the people as 93 percent of the respondents in the Modi app voted in favor. Though, the real people suffering are standing in the queue and are mostly poor. The recent accouchements of the Arun Jaitley that the proceeds of tax collected during the demonetisation drive will be used for the welfare of the poor is a welcome measure though earlier, LPG direct benefit transfer was used to divert the subsidies of the rich to offer 2 crore free LPG connections to the poor. Overall, demonetisation is a bold step towards good governance and transparency.

The demonetisation undertaken by the government is a large shock to the economy. The impact of the shock in the medium term is a function of how much of the currency will be replaced at the end of the replacement process and the extent to which the currency in circulation is extinguished. While it has been argued that the cash that would be extinguished would be "black money" and hence, should be right fully extinguished to set right the perverse incentive structure in the economy, this argument is based on impression rather than on facts. While the facts are not available to anybody it would be full hard to argue that this is the only possibility.

It is likely that there would be a spurt in the banking deposits. While interpreting the phenomenon, however, one has to keep in mind that a large part of their deposits

BIBLIOGRAPHY

Author :- Dr Kavita Rao, Dr Sachidanand Mukharjee, Dr Sudhanshu Kumar, Mr D.P Sengupta, Suranjali Tandon and Sri Hari Nayudu, NIPFP, New Delhi. Title:- Demonetisation: Impact on economy.

Web address or Url- <http://www.nipfg.org.in/publication/working-papers/1772/> Date of publication :- 14 November 2016.

Author :- Anischakravarty, lead economist, Deloitte
Title :- Demonetisation.

Web address or Url- <http://www.quora.com>, www.bloomberg.com, www.investopedia.com/terms/d/demonetisation, www.en.m.wikipedia.org/wiki/2016-indian-bank-note-demonetisation.

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SIGNIFICANT ROLE OF DATA MINING IN FINANCE AND BANKING SECTOR

Pratibha Sharma*

ABSTRACT:

Data mining is emerging as a very useful tool for providing valuable information from large databases and enabling managers and business executives to make hard core decisions in a much easier and effective manner. It is a process of analyzing the data from various perspectives and summarizing it into valuable information. This paper defines what data mining is and how does it works. It then focuses on some broad area of application, like market segmentation, direct mail marketing, customer churn, fraud detection, portfolio management trading and risk management where data mining techniques can be used in banks and other financial institutions to enhance their business performance.

KEYWORDS: *Data Mining, Banks, Financial Institutions, Risk Management, Portfolio Management, Market segmentation and analysis, direct mail marketing, customer churn, fraud detection*

INTRODUCTION

Since 1980's the whole concept of banking has been shifted to centralized databases, online transactions and ATM's all over the world, which has made banking system technically strong and more customer oriented. The organizations which have right information available at the right time will rule the system. The right information will be converted in to knowledge and this acquired knowledge will help the bank to survive, grow and capture the new markets and they can provide better customer oriented services and hence can retain their existing customers. Almost every organization today is recognizing the importance of utilizing data mining in their business. Data mining is emerging as a very useful tool for providing valuable information from large databases and enabling managers and business executives to make hard core decisions in a much easier and effective manner. Not only data mining helps to extract useful knowledge from large amount of data but it is also helping in declining various costs like cost of computation power and also reduces time for decision making and knowledge discovery.

Data mining is primarily used today by organizations with a strong consumer focus - retail, financial, communication, and marketing organizations. It enables these organizations to determine relationships among "internal" factors such as price, product positioning, or staff skills, and "external" factors such as economic indicators, competition, and customer demographics [13]. Data mining is becoming

strategically important for banking sector as well. It analyzes the data from various perspectives and summarizes it into valuable information. Data mining assists the banks to look for hidden pattern in a group and discover unknown relationships in the data. Today many banks are employing data mining for their proper functioning, the list includes: Bank of America, First USA Bank, Headlands Mortgage Company, FCC National Bank, Federal Home Loan Mortgage Corporation, Wells Fargo Bank, Nations-Banc Services, Mellon Bank N.A., Advanta Mortgage Corporation, Chemical Bank, Chevy Chase Bank, U.S. Bancorp, and USAA Federal Savings Bank. [11]

WHAT IS THE DATA MINING

Data Mining is the process of extracting knowledge hidden from large volumes of raw data. The knowledge must be new, not obvious, and one must be able to use it. Data mining has been defined as "the nontrivial extraction of implicit, previously unknown, and potentially useful information from data [1]. It is "the science of extracting useful information from large databases"[6]. Data mining is one of the tasks in the process of knowledge discovery from the database [10]. Generally, data mining (sometimes called data or knowledge discovery) is the process of analyzing data from different perspectives and summarizing it into useful information - information that can be used to increase revenue, cuts costs, or both. Data mining software is one of a number of analytical tools for analyzing data. It allows users to analyze data from

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many different dimensions or angles, categorize it, and summarize the relationships identified. Technically, data mining is the process of finding correlations or patterns among dozens of fields in large relational databases.

Data mining technology can generate new business opportunities by:

AUTOMATED PREDICTION OF TRENDS AND BEHAVIORS: Data mining automates the process of finding predictive information in a large database. Questions that traditionally required extensive hands-on analysis can now be directly answered from the data. A typical example of a predictive problem is targeted marketing. Data mining uses data on past promotional mailings to identify the targets most likely to maximize return on investment in future mailings. Other predictive problems include forecasting bankruptcy and other forms of default, and identifying segments of a population likely to respond similarly to given events.

AUTOMATED DISCOVERY OF PREVIOUSLY UNKNOWN PATTERNS: Data mining tools sweep through databases and identify previously hidden patterns. An example of pattern discovery is the analysis of retail sales data to identify seemingly unrelated products that are often purchased together. Other pattern discovery problems include detecting fraudulent credit card transactions and identifying anomalous data that could represent data entry keying errors.^{4]}

FOR EXAMPLE: A bank searching for new ways to increase revenues from its credit card operations tested a non intuitive possibility: Would credit card usage and interest earn increase significantly if the bank halved its minimum required payment? With hundreds of gigabytes of data representing two years of average credit card balances, payment amounts, payment timeliness, credit limit usage, and other key parameters, the bank used a powerful data mining system to model the impact of the proposed policy change on specific customer categories, such as customers consistently near or at their credit limits who make timely minimum or small payments. The bank discovered that cutting minimum payment requirements for small, targeted customer categories could increase average balances and extend indebtedness periods, generating more than \$25 million in additional interest earned.

DATA MINING TECHNIQUES:

The various techniques of data mining are:

CLUSTERING

Clustering can be said as identification of similar classes of objects. This is the technique of combining the transactions with similar behavior into one group, or the customers with same set of queries or transactions into one group. Classification approaches can also be used as effective mean of distinguishing groups. So clustering can be used as preprocessing approach for attribute subset selection and classification [1]. For Example: The customer of a given geographic location and of a particular job profile demand a particular set of services, like in banking sector the customers from the service class always demand for the policy which ensures more security as they are not intending to take risks, like wise the same set of service class people in rural areas have a the preferences for some particular brands which may differ from their counterparts in urban areas.

ASSOCIATION

Association and correlation is usually to find frequently used data items in the large data sets. It is the technique of finding patterns where one event is connected to another event. This type of findings help businesses to make certain decisions regarding pricing, selling and to design the strategies for marketing, such as catalogue design, cross marketing and customer shopping behavior analysis [8]. However the number of possible Association Rules for a given dataset is generally very large and a high proportion of the rules are usually of little value.

FORECASTING

Regression technique can be adapted for predication. Regression analysis can be used to model the relationship between one or more independent variables and dependent variables. In data mining independent variables are attributes already known and response variables are what we want to predict [8]. Unfortunately, many real-world problems are not simply prediction. For instance, sales volumes, stock prices, and product failure rates are all very difficult to predict because they may depend on complex interactions of multiple predictor variables [1, 8]. Therefore, more complex techniques (e.g., logistic regression, decision trees) may be necessary to forecast future values. This technique of data mining will help in discovering patterns from which one can make reasonable predictions.

CLASSIFICATION

Classification is the most commonly applied data mining technique, which employs a set of pre-classified examples

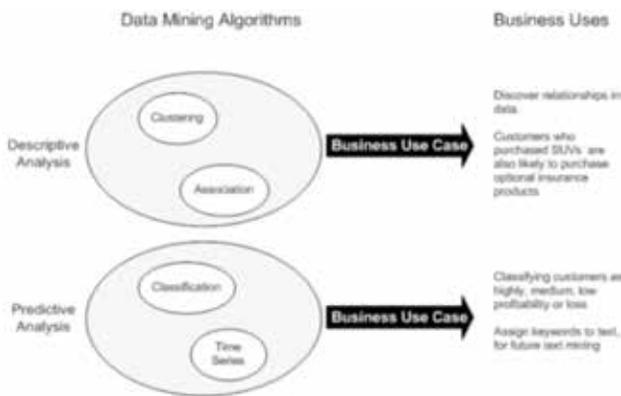


Fig: Usage of Data Mining Algorithms in Analysis

DATA MINING AND MARKET RESEARCH:

The American Marketing Association defines marketing research as the “systematic and objective approach to gathering marketing information which -- when processed, analyzed and interpreted -- will help identify problems and opportunities that allow for better-informed, lower-risk decisions.”

In business, Market Research is typically focused on learning more about consumers, customers, competitors and market trends at large.

Depending on the source of information, Market Research is classified as either primary or secondary. Primary research uses information from original sources; that is, a Market Researcher collects data that have not been previously collected or published. Secondary research refers to collecting data from published sources such as information released by government agencies, and reports and publications available in a public library.

Primary research is classified as either qualitative or quantitative. Examples of qualitative research are focus groups and in-depth personal interviews. The most common form of quantitative research is a survey that uses a questionnaire to collect data. The name qualitative research implies that its findings are not quantifiable. The research process is quite often a discussion in which the researcher poses open-ended questions to participants. . Qualitative research defines issues, substantiates perception and identifies behavior. For instance, results of focus groups involving the users of a consumer product can clarify issues surrounding brand loyalty, and reveal users’ likes and dislikes. Findings of personal interviews with corporate purchasing agents can aid the understanding of the criteria business firms use to select suppliers. Quantitative research relies on survey questionnaires that

are often responses to multiple-choice items or ratings on a scale. These surveys are typically conducted as personal interviews, telephone interviews, mail surveys, or web-based surveys. Results from these surveys are then analyzed to generate averages, ranges and percentages.

When analyzing customer or consumer information, Market Research has many uses. Market segmentation studies provide information about the characteristics shared by customers. Purchasing power and buying habits studies uncover the financial strength and economic attributes shared by the target market. Psychological market studies reveal information regarding the perceived opinions and values held and shared by consumers in the market. Marketplace studies can provide insight into competitor strengths and directions. Environmental studies can provide insight into economical and political circumstances that can influence internal productivity and operations.

WHERE DO DATA MINING AND MARKET RESEARCH FIT IN CUSTOMER INTELLIGENCE?

A corporate Customer Intelligence environment includes a wide range of technology-enabled processes for data collection, data storage, analysis and deployment. Typically, the customer intelligence environment is enabled by a large number of technology vendors, services providers and internal efforts. All of these efforts are brought together for the singular purpose of gaining a deeper understanding of the customer.

CUSTOMER DATA

Customers and Consumers alike provide information in the form of behaviors and attitudes. Consumer behaviors may be captured internally by sales patterns, channel usage, and campaign responses. Consumer behavior may also be collected externally through syndicated research, behavior assessment such as Nielsen, or attitudinal/lifestyle profiles such as Acxiom or Experian. In addition, consumer attitudes may be captured through either qualitative or quantitative Market Research.

DATA COLLECTION

Customer behaviors are directly collected through the major touch-points of the organization. These touch-points include call centers, point-of-sale systems, Web sites and other operational systems managed by the organization. Customer attitudes are being collected through commissioned Market Research studies as well as corporate web surveys, customer panels and emerging technologies for text analysis and customer voice analysis.

DATA STORAGE

Whether from customers, consumers or both, there are a growing number of data sources available that provide organizations with a myriad of behavioral and attitudinal information. In order to derive insights from the data, the data must be combined, managed and centrally accessible.



Fig: Customer Intelligence with Data Mining Environment

DATA STORAGE

Whether from customers, consumers or both, there are a growing number of data sources available that provide organizations with a myriad of behavioral and attitudinal information. In order to derive insights from the data, the data must be combined, managed and centrally accessible.

MONITOR

Monitoring is the process of identifying key indicators of business performance at various levels across the organization. These key performance indicators (KPIs) are typically accessed through executive dashboards. Critical KPIs may also be monitored by alerting agents that can send emails or calls when a defined threshold is crossed. Whether by human or machine,

REPORT

Upon identifying a potential threat or opportunity, enterprise reports are typically available to quickly determine the impact of the trend on business performance. Reports are useful for rapidly accessing business information.

However, they are not well suited for exploration due to their static nature.

EXPLORE

Given that the threat or opportunity has been shown to be relevant and substantial, exploration can begin in order to identify possible drivers of the trend. On-line Analytical Processing (OLAP) technology is a valuable tool for examining issues from several dimensions. With OLAP one can narrow the problem or focus the opportunity down to a manageable space. For example, if treadmill sales are on the decline, OLAP can help identify which regions and customer segments are most accountable for the trend. This exploration of the data can be classified as 'data mining' using the broadest definition of the term. However, manually finding important patterns in OLAP 'universes' may be like finding a needle in a haystack as the number of business dimensions grows. In such situations, automated Data Mining techniques may be employed to find hidden patterns.

RESEARCH

The origin of customer intelligence is Consumer research. Many hypotheses are generated daily within an active customer intelligence environment. These must be properly tested, especially those with strategic implications or costly tactical programs.

DEPLOY

These conclusions are the new findings that expand one's customer intelligence. They provide the confidence to plan and execute new programs to avoid the threats or capitalize on the opportunities at hand. Done properly, these programs are tested and evaluated prior to being deployed broadly into the operations of the organization.

WHERE SHOULD DATA MINING AND MARKET RESEARCH CONVERGE?

The convergence of Data Mining and Market Research can best be illustrated by examining the underlying research stages common to both disciplines. To this end, we define the underlying research processes as consisting of six distinct stages. These stages include:

- Define where the customer is articulated
- Capture where information is collected
- Store where information is managed and maintained

- Analyze where information is examined
- Understand where insights and conclusions are drawn
- Deploy where insights are operationalized throughout the organization

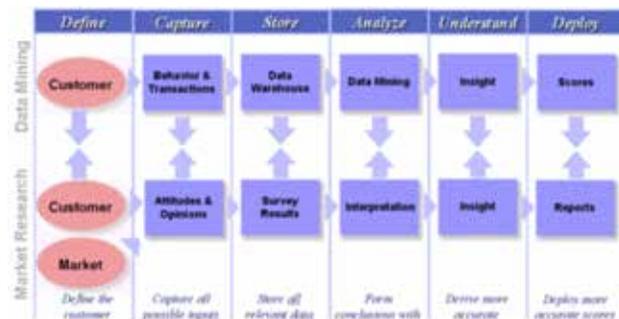


Fig: Relationship of data mining and market Research

APPLICATIONS OF DATA MINING IN FINANCE AND BANKING SECTOR AND MARKETING:

Data Mining can help by contributing in solving business problems by finding patterns, associations and correlations which are hidden in the business information stored in the data bases.

What Customer Data the industry needs to explore & Why?

1. What is the profile, taste and preferences, attitude of the customer and what is the purchasing behavior of the customer since the time he/she is with the bank? (Used to Cross sell the products).
2. What transactions does a customer do before shifting to a competitor? (To prevent shifting of customers)
3. Which products are often purchased together by the customers of which particular profile? (For target marketing)
4. What patterns in credit transactions lead to fraud? (To detect and deter fraud)
5. What is the profile of a high-risk borrower? (To prevent defaults, bad loans, and improve screening)
6. What services and benefits would current customers

likely desire? (To increase loyalty and customer retention)

7. Identifying the customers who are getting all types of services from your company? (Identifying 'Loyal' Customers)

Data mining has been defined as “the nontrivial extraction of implicit, previously unknown and potentially useful information from data. It is “the science of extracting useful information from large databases. A. Vasudevan, recommended the use of data mining techniques, data available at various computer systems can be accessed by a combination of techniques like classification, clustering, segmentation, association rules, sequencing, decision trees. Trends can be analyzed and predicted with the availability of historical data and the data warehouse assures that everyone is using the same data at the same Madan Lal opines that the banks in India and abroad have started using the techniques of data mining. Chase Manhattan Bank in New York, Fleet Bank Boston, ICICI, IDBI, Citi bank, HDFC and PNB in India are using data mining to analyze customer profiles to use them for their benefits. The banks of the future will use one asset which is knowledge for their existence and excellence. That is why the banking industry is recognizing the importance of information and has started using information technology not only to improve the quality of service, but also to gain a competitive advantage. The enormous amounts of data that banks have been collecting over the years can be effectively mined so that the bank executives can predict with increase accuracy, how customers will react to adjustments in interest rates, which customers will be likely to accept new product offers, which customers will be at higher risks for defaulting on a loan and how to make each customer relationship more profitable (Fabris 1998) [9].

The broad categories of application and uses of Data Mining and Business Intelligence Techniques in the banking and financial industry vertical may be viewed as follows:

PORTFOLIO MANAGEMENT

Risk measurement approaches on an aggregated portfolio level quantify the risk of a set of instrument or customer including diversification effects. On the other hand, forecasting models give an indication of the expected return or price of a financial instrument. Both make it possible to manage firm wide portfolio actively in a risk/return efficient manner. The application of modern risk theory is therefore with in portfolio theory, an important part of with

data mining techniques it is possible to provide extensive scenario analysis capabilities concerning expected asset prices or returns and the risk involved.

MARKET SEGMENTATION

Identify the common characteristics of customers who buy the same products from your company. Banks deal with various types of customers e.g., individuals, group of people, corporate entities, etc. who have their likes and dislikes. No bank can afford to assess the need of each and every individual customer separately. It is nearly impossible for banks to market all these categories of customers on a one-to-one basis, particularly if they simply rely on predictable socio-economic data like age and income as the base for dividing customers into segments. To overcome this problem, bank's marketing department use data mining for market segmentation strategy, which recognizes the wisdom of specializing to suit the need of a segment of the market rather than trying to address the requirements of each and every customer separately. Market segmentation divides the whole market into groups of customers who have the requirement of similar kinds of products and services. Each segment of the market may demand different products and require different marketing mix to address the demand. The bank should, therefore, develop the profile of different market segments. Then the targeted market segments should be selected based on their attractiveness. Once the bank has identified the market segments that it might address, the next steps will be positioning of the product into the targeted market segment

CUSTOMER RELATIONSHIP MANAGEMENT

In the era of cut throat competition the customer is considered as the king and it's the customer only who is ruling the whole show. The concept of selling a product to the customer is outdated and obsolete, now the objective is to reach to the heart of the customer and hence to develop a sense of belongingness for the organization. The huge data bases of various organizations are storing billions of data items about the customers. Data mining can be useful in all the three phases of a customer relationship cycle: Customer Acquisition, Increasing value of the customer and Customer retention [5]. Data mining technique can be used to create customer profiling to group the like minded customers in to one group and hence they can be dealt accordingly [8]. The information collected can be used for different purposes like making new marketing initiatives, market segmentation, risk analysis and revising company customer policies according to the need of the customers [9].

RISK MANAGEMENT

Banks manage risks relating to offering new customers credit cards, extending existing customers lines of credit, approving loans, amount of loan, lending rate, repayment period, loan defaults etc. For example: Bank executives by using data mining technique can reduce the risk of issuing credit cards by determining those customers who are likely to default on their accounts.

Banks also have the problem of predicting the credit-worthiness of new clients on the basis of historic data of past clients. The creditworthiness also influences the interest rate of a credit. A bank has data about clients to whom it gave credits in the past. The client data contain personal data, data describing the financial status and the financial behavior before and at the time the client was given the credit. The clients are divided into four classes. The first class contains all those clients who paid back the credit without any problems; the second class those who paid back with little problems; the third contains those who should only get a credit after detailed checks because substantial problems of payback occurred in the past; and the forth class consists of all those who did not pay back at all. Using this data table a prediction model is created in order to predict the probability for each class for new clients. By this way the combinations of attributes which are responsible for clients to have a high probability of not paying back will be identified by the prediction model too [18].

FRAUD DETECTION

In banking, fraud can involve using stolen credit cards, forging checks, misleading accounting practices, etc. Data mining can help to detect fraudulent actions by building a model using a fraudulent behavior that has been done in the past and then use data mining to identify similar behavior. Through the use of sophisticated data mining tools, millions of transactions can be searched to spot patterns and detect fraudulent transactions. Various techniques like decision trees (e.g. CHAID), machine learning, association rules, cluster analysis, neural networks and predictive models can be generated to estimate things such as probability of fraudulent behavior or the dollar amount of fraud.

In banking, the most widespread tool used to detect fraud is HNC's Falcon product .HNC monitors more than 160 million payment-card accounts to detect credit card frauds. They also claim a healthy return on investment. HNC was built using a neural network shell and is used by many banks like LLOYDS BANK to detect suspicious credit card transactions. According to Kuykendall "Flacon is used by 9 off the top ten credit card issuing banks,

where it examines the transactions of 80% of cards held in the U.S". Mellon Bank also uses data mining for fraud detection. [11]

DIRECT MAIL MARKETING

Identify which prospects should be included in a mailing list to obtain the highest response rate. In the banking sector, direct mail marketing has traditionally been very popular. The use of transpromo mail – where offers are included in transaction mail – has remained consistent through the economic recession. With many banks struggling to retain their customers, transpromo direct mail has played a critical part in their marketing efforts [15]. Banks can use data mining to analyze customer databases and develop profiles of individual customer preferences for products and services. They can offer those products and services that the customer really wants by directly mailing and cross –selling i.e. banks makes an attractive offer to its customer by asking them to buy additional product or service. For example home loan with insurance facility. With the help of data mining technique, banks are able to analyze which products and service are availed by most of the customers in cross selling and which type of consumers prefer to purchase cross selling products and so on. For example: During 2008, there was a 37% increase in banking direct mail pieces sent to manage current client relationships, including informational and loyalty mailings, renewal notices and upgrade offers. E-mail cross-selling also increased. Cross-sell e-mails tracked through Mintel Comperemedia's e-mail panel rose from a 2% share of banking e-mail in 2007 to a 5% share in 2008 [16].

CUSTOMER CHURN

High cost of customer acquisition and customer education requires companies to make large upfront investments on customers. However, due to easy access to information and a wide range of offerings, it is easier than ever before for customers to switch between service providers. This applies to all industry verticals such as banking, telecom, insurance, etc. customer churn, which is defined as the propensity of customers to cease doing business with a company in a given time period, has become a significant problem and is one of the prime challenges financial institutions worldwide are learning to face [6]

In banking domain, we define a churn customer as one who closes all his/her accounts and stops doing business with the bank. There are many reasons for a customer to close the account(s). For example, a person creates an account for a specific purpose and closes it immediately after the purpose is solved. Or a person is relocated and has to

move to another place and hence closes all the accounts. Or a customer may stop transacting with the bank just because of the unavailability of bank's ATMs in important places and hence close his/her accounts [6]. Banks can use data modeling techniques like fuzzy methods, predictive modeling can identify the customers that are likely to churn in the near future and then the bank executives can provide exciting offers to these customers which they cannot refuse for example, a mortgage customer may tell the lending bank about an existing auto loan from another bank. An agent of the bank can add this information to the customer's profile, and present back a pre-approved refinance of the auto loan. This will save the customer money by consolidating the existing mortgage and auto loan with one bank and also prevent the customer from searching service offerings from other banks.

H. Trading

For the last few years a major topic of research has been the building of quantitative trading tools using data mining methods based on past data as input to predict shorter movements of important currencies, interest rates, or equities. The goal of this technique is to spot times when markets are cheap or expensive by identifying the factor that are important in determining market returns. The trading system examines the relationship between relevant information and piece of financial assets, and gives you buy or sell recommendations when they suspect an under or overvaluation. Thus, even if some traders find the data mining approach too mechanical or too risky to be used systematically, they may want to use it selectively as further opinion.

CONCLUSION:

This article described that data mining can be a very powerful and helpful tool to extract important and useful information for banking sector from the historical as well as from the current data. Data mining can be used in various fields of banking like Market segmentation by which banks can segment their customers into different groups, direct mail marketing can help the banks to improve their marketing strategy and to increase their business, customer churn to increase the rate of retention of the customers, risk management to reduce the various risks like creditworthiness and fraud detection to reduce the number of fraudulent. Data mining has wide application domain in almost every industry where bulky data is generated and that is why it is consider as one of the most important and promising developments in Information Technology. Data mining techniques help companies particularly banking, telecommunication, insurance and retail marketing to build accurate customer profile based

on customer behavior. Thus; it is becoming a necessity in this competitive environment to analyze the data from data warehouse containing hundreds of gigabytes or terabytes of data.

REFERENCES:

1. Rene T. Domingo; Applying data mining to banking.
2. Vivek Bhambri, Dept. of Computer Sciences, Desh Bhagat Institute of Management and Computer Sciences, Mandi Gobindgarh, Punjab, India; Application of Data Mining in Banking Sector.
3. Amir M Hormazi, Information Systems Management; spring 2004; 21, 2; ABI/INFORM Global; Data Mining a competitive weapon: for banking and retail industries.
4. Doug Alexander Dea; Data Mining.
5. Beehive digital concepts Cochin for Mahatma Gandhi University Kottayam; Marketing strategies of the banking industry.
6. M Purna Chandar, Arijit Laha, and P Radha Krishna; Hyderabad; Modeling churn behavior of bank customers using predictive data mining techniques.
7. Cabena, P.Hadijinian, P.Stadler, R. Verhees and Zanasi; Prentice Hall, New Jersey; Discovering Data Mining: From Concept to Implementation.
8. Chopoorian, J.A., Witherell, R.Khalil, O.E.M and Ahmed; SAM Advanced Management Journal; Mind your business by mining your data.
9. Fabris, P.1998; Advance Navigation.
10. Kuykendall, L. September 1999; The Data mining tool box: Credit Card Management.
11. Ch08.fm Page 191 Monday, September 6, 1999 10:11 AM; Industry Applications of Data Mining.
12. David H. Pyle; University of California; Berkley; Bank Risk Management: Theory.
13. Data Mining: What is Data Mining? <http://www.anderson.ucla.edu>
14. <http://www.ekantipur.com/the-kathmandu-post/2010/03/01/Oped/Plastic-pollution/5702/>
15. <http://www.overnightprints.com/news/direct-mail-usage-in-banking-and-investment-industries-grows-956>
16. <http://www.dmnews.com/banks-increase-direct-marketing-to-customers/article/129580/>
17. <http://www.statsoft.com/textbook/fraud-detection/>
18. <http://www.easydatamining.com>.

A STUDY ON TOTAL QUALITY MANAGEMENT IN SBI AND ICICI BANK WITH EMPHASIS ON LUCKNOW REGION

Dr. Rekha Khosla* Dr. Shobhit Goel**

ABSTRACT:

Companies in every line of business are focusing on improving quality in order to be more competitive. In many industries quality excellence has become a standard for doing business. Companies that do not meet this standard simply will not survive. The importance of quality is demonstrated by national quality awards and quality certifications that are coveted by businesses. The term used for today's new concept of quality is Total Quality Management or TQM. The purpose of present investigation is to study the extent of TQM and organizational commitment in Private and Government sector banks. Apart from studying the extent of implementation of TQM in the two sectors and the organizational commitment of bank managers in respective sectors, the study aims at ascertaining the correlation between TQM and organizational commitment in Private and Government sector banks.

INTRODUCTION

Service organizations produce a product that is intangible. Usually, the complete product cannot be seen or touched. Rather, it is experienced. Examples include delivery of health care, experience of staying at a vacation resort, and learning at a university. The intangible nature of the product makes defining quality difficult. Also, since a service is experienced, perceptions can be highly subjective. In addition to tangible factors, quality of services is often defined by perceptual factors. These include responsiveness to customer needs, courtesy and friendliness of staff, promptness in resolving complaints, and atmosphere. Other definitions of quality in services include time—the amount of time a customer has to wait for the service; and consistency—the degree to which the service is the same each time. For these reasons, defining quality in services can be especially challenging.

Banking sector has adapted total quality management to enhance the value of their banks, financially and socially, and increase ROE in order to become more competitive in domestic and regional banking markets. The banks also, provide innovated banking services of high quality to retail and corporate customers, which meet their needs and exceed their expectations, in line with the latest developments in international finance

Quality affects all aspects of the organization and has

dramatic cost implications. The most obvious consequence occurs when poor quality creates dissatisfied customers and eventually leads to loss of business. However, quality has many other costs, which can be divided into two categories. The first category consists of costs necessary for achieving high quality, which are called quality control costs. These are of two types: prevention costs and appraisal costs. The second category consists of the cost consequences of poor quality, which are called quality failure costs. These include external failure costs and internal failure costs. The first two costs are incurred in the hope of preventing the second two. Prevention costs are all costs incurred in the process of preventing poor quality from occurring. They include quality planning costs, such as the costs of developing and implementing a quality plan. Also included are the costs of product and process design, from collecting customer information to designing processes that achieve conformance to specifications. Employee training in quality measurement is included as part of this cost, as well as the costs of maintaining records of information and data related to quality. Appraisal costs are incurred in the process of uncovering defects. They include the cost of quality inspections, product testing, and performing audits to make sure that quality standards are being met. Also included in this category are the costs of worker time spent measuring quality and the cost of equipment used for quality appraisal.

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External failure costs are associated with quality problems that occur at the customer site. These costs can be particularly damaging because customer faith and loyalty can be difficult to regain. They include everything from customer complaints, product returns, and repairs, to warranty claims, recalls, and even litigation costs resulting from product liability issues.

PRINCIPLES OF TQM

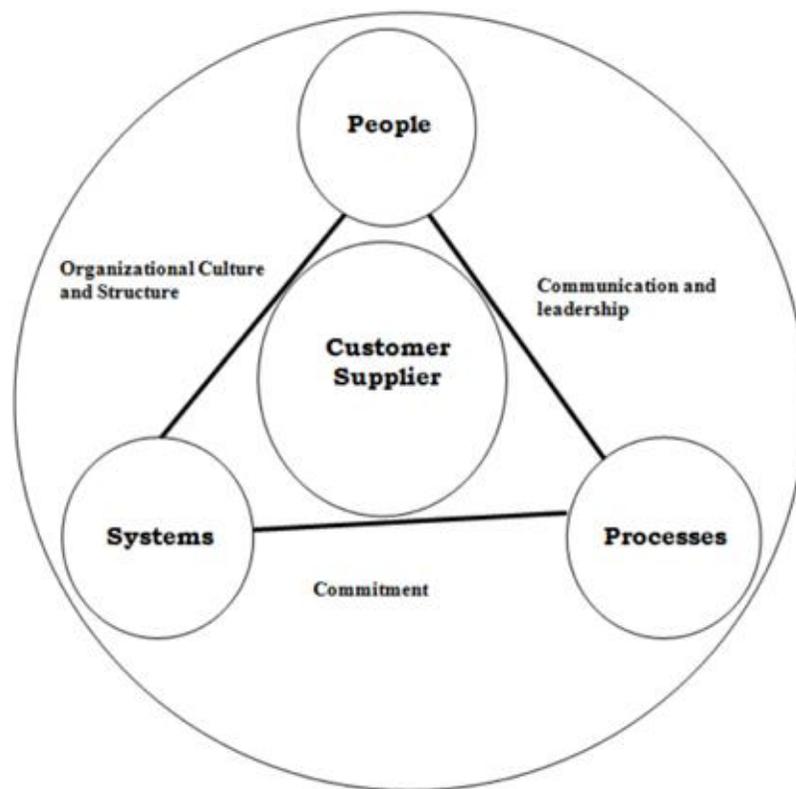
- Quality can and must be managed.
- Everyone has a customer and is a supplier.
- Processes, not people are the problem.
- Every employee is responsible for quality
- Problems must be prevented, not just fixed.
- Quality must be ensured.
- Quality improvements must be continuous

- Quality standard is defect free
- Goals are based on requirement, not negotiated
- Life, cycle costs, not front end costs.
- Management must be involved and fed.
- Plan and organize for quality improvement.

FACTORS AFFECTING TOTAL QUALITY MANAGEMENT (TQM):

The core of TQM comprises of:

- Customer – supplier interface, both externally and internally
- Commitment to quality and leadership
- Communication of the quality message.
- Cultural change
- Organizational structure



RESEARCH METHODOLOGY ADOPTED

RESEARCH OBJECTIVES:

- To study the difference in the extent of Total Quality Management (TQM) implementation in private and government sector banks.
- To find the difference between the dimensions of organizational commitment of managers in Private and Government sector banks.

HYPOTHESIS

- There will be the no significant difference in the implementation of various dimensions of TQM in private and Government banks.
- There will be no significant difference in the extent of TQM implementation in Private and Government banks.
- There is significant difference between the dimensions of organizational commitment of managers in Private and Government sector banks.

SAMPLE

The sample opted for the present study consists of 40 managers. Out of these 40 managers, 20 are from Government sector bank, the other 20 from private sector bank. The Sample Unit being manager.

TOOLS

TOTAL QUALITY MANAGEMENT (TQM): The Total Quality Management questionnaire by Steve Warwood and Hing Yee Tsang (2004) to be used. The questionnaire consists of 59 items grouped into 11 critical factors. These critical factors are as follows: (1) Customer Focus. (2) Continuous improvement. (3) Teamwork and involvement (4) Top management commitment and recognition. (5) Training and development (6) Quality systems and policies (7) Supervisory leadership (8) Communication within the company (9) Supplier partnership. (10) Measurement and feedback. (11) Cultural change.

SCORING: Each item is to be rated on a 5- point rating scale – Not important, less important, important, very important and crucial. The following scoring pattern was adopted:

Responses	Scoring
Not important	1
Less important	2
Important	3
Very important	4
Crucial	5

RELIABILITY: The internal consistency of the 11 critical factors has been estimated by using Cronbach's alpha. It ranges from 0.62 to 0.92

SCORING: Each item is to be rated on a five point rating scale – Strongly Agree, Agree, Sometimes, Disagree and Strongly Disagree.

ORGANIZATIONAL COMMITMENT

QUESTIONNAIRE: The organizational commitment questionnaire developed by Allen and Meyer (1990) to be used for measuring the level of commitment of the sample. The scale consists of 18 items.

Responses	Scores	
	True Keyed	False Keyed
Strongly Agree	1	5
Agree	2	4
Sometimes	3	3

Disagree	4	2
Strongly Disagree	5	1

RELIABILITY: Internal consistency of the three scales has typically been estimated by using coefficient alpha. The number of estimates obtained for the three scales range from a low of 20 for the normative commitment scale to a high of more than 40 for the affective commitment scale. Median reliabilities for the affective, continuance and normative commitment scales, respectively, are 0.85, 0.79 and 0.73 with few exceptions, reliability estimates exceeds 0.70.

METHODOLOGY

For the purpose of study, research to be conducted in 2 banks, one a private sector bank (ICICI) and other a government sector bank, State bank of India (S.B.I.). The questionnaire is administered on the managers, contacted individually over phone. Once their willingness to answer the questionnaires was received the questionnaires were e-mailed. They were instructed to read the instructions of the questionnaires carefully before they start attempting the questions and not to leave any item unanswered. It was assured that the information collected from them through e-mail would be kept confidential.

STATISTICAL ANALYSIS AND RESULTS

TABLE 1: MEANS, STANDARD DEVIATIONS AND T-VALUES BETWEEN THE TOTAL QUALITY MANAGEMENT (TQM) OF PRIVATE AND GOVERNMENT SECTOR BANK MANAGERS

S.No	Factors	Bank	Means	SDs	t- value	Significance
1	Customer Focus	Private	23.30	1.83	8.97	< 0.01
		Govt.	16.25	3.00		
2	Continuous improvement	Private	24.50	2.16	11.806	< 0.01
		Govt.	15.650	2.56		
3	Teamwork and involvement	Private	22.10	2.77	7.62	< 0.01
		Govt.	14.70	3.34		
4	Top management commitment	Private	23.85	3.36	9.7	< 0.01
		Govt.	14.60	2.58		
5	Training and development	Private	26.80	2.54	12.5	< 0.01
		Govt.	16.70	2.55		
6	Quality systems and policies	Private	22.75	2.26	9.50	< 0.01
		Govt.	17.05	1.43		
7	Supervisory leadership	Private	23.55	3.56	8.69	< 0.01
		Govt.	16.15	1.34		
8	Communication in company	Private	26.30	1.71	11.98	< 0.01
		Govt.	18.40	2.39		

9	Supplier partnership	Private	31.25	3.02	16.57	< 0.01
		Govt.	18.30	1.75		
10	Measurement and feedback	Private	22.60	1.60	16.70	< 0.01
		Govt.	14.40	1.50		
11	Cultural change	Private	22.65	2.43	9.96	< 0.01
		Govt.	15.50	2.09		
12	Total Quality Management	Private	268.45	15.92	17.67	< 0.01
		Govt.	177.70	16.53		

EXHAUSTIVE DELIBERATION OF TABLE-1

It shows the means, standard deviations and t-values for all the factors of total quality management.

- Customer focus**, the means for the private and government sector bank managers were 23.30 and 16.25 respectively. Also their respective SDs were 1.83 and 3.00. The t-value obtained was 8.97, which was significant at 0.01 level.
- Continuous improvement**, the mean scores were 24.50 and 15.65 for private and government sector bank managers respectively. Their respective SDs were 2.16 and 2.56. The t-ratio between the means of managers of the two banks on these dimensions was 11.806, which was significant at the 0.01 level of significance.
- Teamwork and Involvement**, the mean scores for private and government sector bank managers were 22.10 and 14.70 and their respective SDs were 2.77 and 3.34. The difference between the two sectors on this dimension was significant, as obtained t-value of 7.62 was significant at the 0.01 level of significance.
- Top management commitment and recognition**, the means for private and government sector bank managers were 23.85 and 14.70 and their SDs were 3.36 and 2.58. The t-ratio between the means of managers of the two banks was 9.7 which significant at 0.01 level of significance.
- Training and development**: The means were found to be 26.80 and 16.70 for private and government sector bank managers respectively and their respective SDs were found to be 2.54 and 2.55. The t-value found is 12.5 which is significant at 0.01 level of significance.
- Quality systems and policies**, the mean scores for the managers of private and government sector banks were 22.75 and 17.05 respectively and the SDs were 2.26 and 1.43. Also the t-value was found to be 9.50 which is significant at 0.01 level of significance.
- Supervisory leadership** has 23.55 and 16.15 as the mean scores for managers of Private and Government sector banks respectively. The SDs were 3.56 and 1.34 respectively. The t-value of 8.69 is significant at 0.01 level of significance.
- Communication in company**, the respective mean and SDs for the managers of public and private sector banks were 26.30 and 18.40 and 1.71 and 2.39 respectively. The t-value 11.98 is significant at 0.01 level significance.
- Supplier partnership** where the respective mean and SDs for the managers of public and private sector banks were 31.25 and 18.30. On the other hand the SDs were 3.02 and 1.75, respectively. The t-value of 16.57 is significant at 0.01, significance level.
- Measurement and Feedback**, the tenth factor had the mean scores of 22.60 and 14.40 for private and Government sector banks respectively. The SDs respective to them were 1.60 and 1.50. The t-value obtained was 16.70 which was significant at 0.01 level of significance.
- Cultural change**, the mean scores were 22.65 and 15.50 respectively for private and Government sector bank managers. The SDs were 2.43 and 2.09 respectively. The t-value of 9.96 was found to be significant at 0.01 level of significance.

Finally, the table shows the means, SDs and the t-value of an overall Total Quality Management dimension. The respective means of Private and Government sector banks were found to be 268.45 and 177.70, while the respective

TABLE 2: MEANS, STANDARD DEVIATIONS AND T-VALUES BETWEEN THE ORGANIZATIONAL COMMITMENT SCORES OF PRIVATE AND GOVERNMENT SECTOR BANK MANAGERS.

S.No	Factors	Bank	Means	SDs	t-value	Significance
1	Affective commitment	Private	24.20	3.59	1.67	>0.05
		Govt.	22.05	4.51		
2	Continuance Commitment	Private	14.60	4.19	7.94	<0.05
		Govt.	23.55	2.78		
3	Normative Commitment	Private	20.65	3.66	1.93	>0.05
		Govt.	18.45	2.42		
4	Organizational Commitment (Total)	Private	59.45	8.33	1.99	>0.05
		Govt.	64.35	7.19		

SDs were found to be 15.92 and 16.53. A look at the table shows that at the 0.01 level of significance, the t-value being 17.67, was found to be significant.

A perusal of Table-2 shows that for affective commitment, the mean scores of managers of government and private sector banks were 24.20 and 22.05 respectively. Their respective SDs were 3.59 and 4.51. The t-value between the means of managers of two banks was found to be 1.67, which was not significant at the 0.05 level of significance.

For continuous commitment the respective means and SDs for the managers of Government and private sector banks were 23.55 and 14.60 and 2.78 and 4.19. The table shows the t-value between the two banks as 7.94, which was significant at the 0.05 level of significance.

For the third factor, i.e., normative commitment, the respective means were 18.45 and 20.65 while their SDs were 2.42 and 3.66. The t-value between the means was 1.93, which was not significant at the 0.05 level of significance.

Finally the overall organizational commitment is compared between the two banks. The mean scores for government and private sector banks were 64.35 and 59.45 respectively. The respective SDs were 7.19 and 8.33. At the 0.05 level of significance, the difference between the two means was not found to be significant with a calculated t-value of 1.99.

The purpose of present investigation is to study the extent of TQM and organizational commitment in Private and Government sector banks. Apart from studying the extent of implementation of TQM in the two sectors and the organizational commitment of bank managers in respective sectors, the study aims at ascertaining the

correlation between TQM and organizational commitment in Private and Government sector banks.

DISCUSSION FOR T-RATIO OF TOTAL QUALITY MANAGEMENT

Table-1 shows means, SDs and t-values for different dimensions of Total Quality Management in private and government sector banks. These results show a consistent trend. The t-ratio for all the dimensions is found to be significant. In all these dimensions private sector banks are found significantly better than government sector banks. Thus hypothesis which states that there will be no significant difference in the implementation of various dimensions of TQM in private and Government banks is rejected by the findings of the study.

From Table-1 we can see that there is a significant difference in the customer focus dimension of TQM between the private and government sector banks. The significant difference signifies that customer 'focus' dimension of TQM is more important in the Private than Government sector banks. "Customer focus" covers the investigation of customer complaints, the specification of internal and external customer requirements and their satisfaction. It means that private sector banks are more responsive in the above mentioned aspects this is obvious from the cut throat competition of various private national and multi-national banks.

The second dimension i.e. continuous improvement also shows a significant difference between the banks. "Continuous improvement" dimension includes continuous improvement activities on the systems, process, continuous monitor of employee's performance, review on quality issues and identification of opportunities for improvement. The managers of Private and Government

banks perceived it differently. Continuous improvement was thought to be more important by managers of Private Banks than government banks. This could be attributed to the difference in company policies and practices as well as the variation in organization goals.

The third dimension is “Teamwork and involvement” which includes the participation of all employees in quality activities, implementation of quality improvement teams, team rewards and team works structures. Table-1 clearly shows a significant difference on this dimension between the managers of Private and Government banks. This could be due to the difference in organizational structure and organizational culture as well as on the interpersonal relations among the employees.

Top management commitment and recognition refers to the awareness and support of top management on the quality systems. It also includes recognition of quality improvement and employee contribution. For this factor Table -1 shows that the difference between two groups was significant. This implies that the Private Banks have higher levels of support and involvement from top management when compared with government banks. Also, the managers of Private Banks take an active role in all quality management activities than the managers from government banks.

For the fifth factor, training and development, it can be seen from Table-1 that Private sector bank managers and Government sector bank managers show significant difference. Training and development is related to the availability of training programmes to the employees. Private sector bank managers have a greater availability of training programmes than Government sector bank managers. These programmes are considered to be crucial by Private Banks as they help them cope up with global competition.

Quality systems and policies dimension of Total Quality Management includes quality systems such as ISO 9000 and QS-9000 and the quality awards such as MBNQA etc. Table-1 shows that there is a significant difference between the two groups on this dimension. Due to the difficulties on standardizing, defining and measuring service quality, Government Banks seem not likely to consider the quality system and policies. Private Banks try to overcome these difficulties for surviving in the global market.

The seventh dimension of Total Quality Management is supervisory leadership. It covers the leadership styles in the company, supervisors’ trustiness and helpfulness. For this factor also, the difference between the means of both the sectors was found to be significant. This implies that the

managers of the two sectors had different leadership styles and that the managers of Private sector banks perceived the employees to be more trustworthy than Government sector bank managers.

The next factor is communication in the company which refers to the cooperation between various departments or units within a company. Table-1 shows a significant difference between the two groups on this dimension. This means that the managers of Private sector bank accentuate cross-functional teamwork and problem solving activities than Government sector bank managers. Better communication for reducing misunderstanding and confusion of the requirements from internal and external customer, is of greater importance in Private sector banks.

The Ninth factor is the Supplier partnership. It covers the relationship and involvement with supplier, the supplier rating system and quality audits. It is clear from Table-1 that there is a significant difference between the means of Private and Government sector bank managers. It implies that Private Banks share better relationship with suppliers and have better “quality audits” than Government sector banks.

The tenth factor, measurement and feedback refer to the measurement of the performance of processes, performance in financial and non-financial terms and feedback provision. Table-1 shows a significant t-ratio between Private sector banks and Government sector banks. This implies that Private sector banks have better feedback provisions and at the same time better measurement of performance than Government sector banks.

The last factor cultural change refers to the company’s and employees cultural changes. It is seen clearly from Table-1 that there is a significant t-ratio difference better the Private and Government sector banks. This implies that Private banks are stronger culture organizations with clear-cut cultural values than Government sector banks.

Table-1 also shows that there is a significant difference in the overall TQM implementation in Private and Government banks. Total Quality Management is an integrative management philosophy aimed at continuously improving the performance of products, processes and services to achieve and surpass customer satisfaction. The results indicate that TQM implementation is more successful in Private sector banks than Government sector banks. This can be attributed to difference in the organizational structure, organizational culture and the organization policies and practices.

From the above finding it can be seen that the hypothesis “there will be no significant difference in the extent of

TQM implementation in Private and Government banks” is rejected.

DISCUSSION FOR T-RATIO FOR ORGANIZATIONAL COMMITMENT

Table-2 in the previous chapter shows the means, SDs and t-values between the organizational commitment scores of government and private sector banks managers. The first factor is affective commitment. It refers to the employee's emotional attachment to, identification with and involvement in, the bank. The table clearly shows that the difference between the managers of government and private sector banks on this factor was not significant. This means that in both the sectors managers show similar level of affective commitment. This suggests that in both the sectors managers feel equally committed to job characteristics of task autonomy, task significance, task identity and participatory management. This may be because of equal facilities particularly in terms of pay and other economic packages. According to Steers (1977) and Mottaz (1988) the reward situation created in an organization is intrinsically conducive to the development of affective commitment.

On the factor of continuance commitment, the Table-2 shows that the difference between the two groups was significant. This indicates that continuance component, which refers to commitment based on the costs that the employee associates with leaving the organization, is depicted by bank managers of both the sectors but differently. This implies that the cost that each group associate like tenure, age, career satisfaction, intent to leave etc are different in both sectors.

For the third factor, i.e. Normative commitment referring to the employee's feelings of obligation to remain with the organization, the difference between the two sectors found was not significant. This implies that in both the sectors the bank managers are instilled with a sense of moral obligation to reciprocate to the organization. According to Allen and Meyer (1984) it is original dependability which influences the development of normative commitment, indicating that bank managers, in both the sectors find themselves under obligation rather than an artificial relationship with the organization.

From the above findings it can be stated that the third hypothesis was partially accepted as one of the dimensions of OC i.e., continuance commitment was found to be significantly different. The third hypothesis was “There will be significant difference between the dimensions of organizational commitment of the managers of private and Government Sector banks.

LIMITATIONS AND SUGGESTIONS FOR FURTHER STUDY

Every study suffers from some limitations these limitations along with the suggestions for further study are as follows. Firstly the study is limited to Lucknow region only. Thus the study is based on small section of population hence a comprehensive study of the managers of same banks treated in the other parts of the country may be carried out. Secondly, only one public and one private sector bank was studied thus again generalizations cannot be made between the two banks. So a study including other similar may be conducted.

Thirdly, on the basis of quantitative method, we cannot fully grasp the reality prevailing in the bank that's why in further study; this method should also be supplemented with some other qualitative method for a better understanding. Fourthly, the present study was carried out only on managers. A similar study can be conducted on other employees also.

REFERENCES:

1. Allen, N.J. and Meyer, J.P. (1990) Commitment in workplace. London: Sage Publication, Inc.
2. Badri et al. (1995), A study of measuring the critical success factors of quality management, International Journal of Quality and Reliability Management, 12 (2) 36-53.
3. Becker, T.E. (1992). Foci and bases of commitment: Are they distinctions worth making? Academy of Management Review, 35, 552-556.
4. Black, S.A. and Porter, L.J. (1996), Identification of the Critical Factors of TQM, Decision Sciences. 27 (1), 1-21.
5. Brydges, and Richard, Ross. (1998). Total quality management: Bridging theory to practice. International journal of Humanities and Social Sciences, 58 (9-A): 3601.
6. Coyle, Shapiro and Jacqueline, A.M. (1999). Employee participation and assessment of an organizational change intervention: A three-wave study of total quality management. Journal of applied Behavioral Science, 35 (4), 439-456.
7. Dale et al., (1997), Managing Quality in manufacturing versus services: a comparative analysis, Managing

- Service Quality, 7, 242-247.
8. DeCottis, T.A. and Summers, T.P. (1987). A path analysis of a model of the antecedents and consequences of organizational commitment. *Journal of Applied Psychology*, 79, 370-380.
 9. Grube, J.A., (1990). Organizational commitment: A social information processing perspective. Unpublished doctoral dissertation, university of Wisconsin, Madison.
 10. Hunt, S.D. and Morgan, R.M. (1994). Organizational commitment: One of many commitments or key mediation construct?" *Academy of Management Review*, 37, 1568-1587.
 11. Huq. Z and Stolen. J. (1998), Total Quality Management contrasts in Manufacturing and Service Industries, *International Journal of Quality and Reliability Management*, 15, (2) 138-161.
 12. Lieb, P.S., (2000). Culture and performance appraisal systems: How does their relationship effect organizational commitment, job satisfaction and turnover intention? *Dissertation Abstract*, 61, 262.
 13. Marrow, P.C. 91983). *The theory and measurement of work commitment*. Greenwich: CT: JAI.
 14. Mottaz, C.J. (1998). Determinants of organizational commitment. *Human Relations*, 41, 467-482.
 15. Shim, W. And Steers, R.M. (1994). Mediating influence on the employees commitment job performance relationship. Unpublished manuscript.
 16. Silvestro, R. (1998), The manufacturing TQM and Service quality literatures: synergistic or conflicting paradigms, *International Journal of Quality and Reliability Management*, 15, (3), 303-328.
 17. Troy, K. and Schein, L. (1995), The quality culture: manufacturing versus services, *Managing Service Quality*, 5, (3), 45-47.
 18. Voss, C., Armistead, C., Johnston, B and Morris, B (1985), *Operations Management in Service Industries and the Public sector*, John Wiley and Sons.

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