



Education • Research • Consultancy

www.asmgroupp.edu.in

ASMGROUP OF INSTITUTES

presents

ASM Business Review

(The Bi-annual Refereed Journal)

ISSN No. 0974-9136

Volume -8

Number -2

July 2019

Business Strategies Practices and Innovations



ASM GROUP OF INSTITUTES: IBMR | IIBR | IPS | IMCOST | CSIT | GEMS | GJS | EMPROS

All rights reserved.

The views expressed in the articles are those of the contributors and not necessarily of the form of Articles, Case Studies, Research Papers or Book Reviews, No part of this publication may be reproduced or transmitted in any form or by any means, or stored in any pieval system of any nature without prior written permission. Application for permission for other use of copyright material including permission to reproduce extracts in other published works shall be made to the publishers. Full acknowledgment of authors, publishers and source must be given.

Although every case has been taken to avoid error of omissions, this publication is being sold on the condition and understanding that information given in this journal is merely for reference and must not be taken as having authority of or binding in any way on the authors, editors, publishers and sellers who do not owe any responsibility for any damage or loss to any person. A purchaser of this publication or not, for the result of any action taken on the basis of this work. All disputes are subject to Pune jurisdiction only.

Printing by:



Success Publications

Radha Krishna Apartment, 535, Shaniwar Peth,

Opp. Prabhat Theatre, Pune - 411030.

Contact - 9422025610, 8390848833, 020-24433374, 24434662

Email- marketing@sharpmultinational.com

Website- www.sharpmultinational.com

Published by : Audyogik Shikshan Mandal

For,

ASM Group of Institutes

Address- Survey No 29/1+2A'C' Wing Opp. Central Mall,

Near PCMC building, Pune Mumbai Highway, Pimpri, Pune-411019.

From the Editor's Desk

This is the Second issue of Volume Eight of “ASM Business Review”, the referred research journal of the ASM group of Institutes.

ASM Group of Institutes is committed for qualitative research in academics. And this ASM Business Review is a product of its commitment. Audyogik Shikshan Mandal has been playing a pioneering role in the field of creative education ever since its inception in 1983. With a mission “Excellence in Management Education, Training, Consultancy and Research for success”, ASM is marching towards excellence having more than 65,000+ alumni working at all levels of management in all types of industries.

The ASM Business Review is a medium created by ASM to demonstrate the research skills of authors. It is a strong communication link between industry and academia and aims to work as a catalyst for knowledge sharing between various sections of society. ASM Business Review provides a platform for academic scholars and champions from industry to come together for common cause of developing innovative solutions to various problems faced by society and business entities. The present review is a medium to faculty members, research students and they like to present their research findings before the wider audience. The opportunity to publish their research results would provide ample motivation to this type of scholars. The previous issue of the Review received encouraging response from the academic and corporate community as well. Research articles accepted and printed herein are subject to objective editorial processing and are peer reviewed.

ASM Business Review looks forward as a strong link and partner for society and industry to develop workable solution for day to day problems. We believe our success is a team work of various contributions to this journal. ASM BUSINESS REVIEW is always committed to excel academic research and consultancy.

Dr. Satish N. Pawar
Editor in Chief

EDITORIAL BOARD

Editor in Chief

Dr. Satish N Pawar
Director Research, ASM group of Institutes

Executive Editor

1) Dr. D.D. Balsaraf
Senior Professor, Computer Science & Information Technology, Chinchwad, Pune.

2) Dr. Sudhakar Bokefode
Director, Institute of Professional Studies, Chinchwad, Pune.

3) Dr. Bharat Kasar
Director, CAMP Education Society, Rasiklal M Dhariwal Institute of Management Nigdi, Pune.

4) Dr. Lalit Kanore
Dean, Institute of Professional Studies, Chinchwad, Pune.

5) Dr. Sham Bachhav
Professor, Institute of Business Management & Research, Chinchwad, Pune.

Advisor

1) Dr. Asha Pachpande
Director, Institute of Business Management & Research, Chinchwad, Pune.

2) Dr. S. B. Mathur
Director, Institute of International Business Research, Chinchwad, Pune.

3) Dr. Sudhakar Bokefode
Director, Institute of Professional Studies, Chinchwad, Pune.

Publisher

Dr. Sandeep Pachpande
Chairman, ASM Group of Institutes.

Place of Publication

Audyogik Shikshan Mandal
CTS No. 4695, Opp. Central Mall,
Old Pune Mumbai Highway, Pimpri,
Pune- 411018 (India)
Website: www.asmgroupp.edu.in
Email : admission@asmedu.org

CONTENTS

Sr. No.	Title of the Paper	Name of the Author	Page No
1.	Acquisition Strategy of Indian IT Companies	Prof. Deepak Motiramani	6
2.	A Study on Consumer Perception towards General Insurance	Dr Satish N Pawar Mr. Abhay Singh	19
3.	Competency Mapping: A Tool of Appraisal	Dr Amey A Choudhari Dr M S Jagnade	29
4.	The analysis of Financial Operations of Tata Motors, Pune Plant	Dr Amey A Choudhari Dr M S Jagnade	42
5.	Consumer Behavior for Cab Services in Pune	Dr Nilesh Anute	52
6.	Recent Trends In Commodity Markets In India	Dr.Sunanda Jindal	56

Acquisition Strategy of Indian IT companies

Dr. Deepak Motiramani

Prof. Institute of Business Management & Research

Prof. Dipali Krishnakumar

HoD Finance, SCMHRD

Abstract:

High growth industry like Information Technology (IT) is driven by high growth rate, massive expansion, and high valuations & is a matter of interest in booming economy. Mergers and Acquisitions play a greater role in expansion and valuations of companies become an interesting research topic.

In an attempt to understand the acquisition strategy of IT companies in India, We propose to analyze M&A deals in India, their valuations and comparative study with other industries.

The question we are trying to address is whether the companies grow due to acquisitions faster than the companies which do not acquire?

Indian technology companies are different from US technology companies as they are more service centric rather than being product centric. What impact does it make on their growth trajectory and the role acquisitions play in it? Hence we have chosen Indian Software companies which are listed publicly and which have done acquisitions locally as well as cross border acquisitions.

Keywords: Mergers, Acquisitions, Strategy, Software, Information Technology, India

Introduction

Mergers and Acquisitions are growth drivers for companies that use it as a strategic tool. In long term strategic initiatives acquisitions play crucial role for return to shareholders. An example in Pharma Industry in India is of Sun Pharmaceutical which has grown with 13 acquisitions in the industry and is looking for more. A curiosity arose while researching the acquisitions in Software Industry. Especially since valuations in Software/ Information Technology/Internet space are quite different than other industries.

To analyze the data we took help from Bloomberg database and fetched the data of Acquisitions by Indian IT companies in past 10 Years from 2003-2013. This included only listed companies and acquisitions where deals were completed.

Further we looked at FY 2012-2013 financial ratios of firms which made acquisitions in the 10 year period. We then segregate the companies into two sub sets. One of the companies which made acquisitions and second which did not made acquisitions.

The financial ratios such as Total Return YTD, Rev -1 Yr Gr CY, Norm ROCE, Return On Invested

Capital, EBITDA Return & Return on Working Capital.

T test is proposed to be conducted on two sub sets of acquiring and non-acquiring companies. The objective of the study is to compare the growth trajectory of acquiring versus non acquiring companies based on these financial ratios and draw a conclusion if the mergers and acquisitions really help companies in faster growth.

Though this approach would be used for any industry we have limited the scope of the research only to software companies from India. The acquisitions done by these companies are global in nature.

Literature Review

In this section we review various reference papers, strategies of acquisition & theoretical models which have been referred to and discussion around this topic.

Lakha (1990) gave a perspective of Growth of Computer Software Industry in India around the time when policies were being liberalized for this sector. Post exits of IBM and Coca Cola due to government policies on foreign holding of companies in India, formation of Computer Maintenance Corporation, TCS and other IT companies is highlighted in this context. Author has pointed out reasons of software success rather than hardware success stories comparing other Asian economies. The reasons of India's software story are primarily Government Policy, Availability of technically trained & English speaking manpower and attractive markets in Western Economies for software services and products.

This paper gives reasoning as to how and why companies started body shopping activities, started getting grounds into large corporations through family and friends, started building trusts and started earning vital foreign exchange by software exports. Government policies favorable at that time including tax concessions on software exports and price advantage of human resources compared US, UK and Europe proved beneficial for the industry. The paper sites the reasons why economic planners and technocrats placed development of electronics industry on high priority. Import restrictions on computers and their trade off against export earnings (allowing companies earning in foreign exchange only to import computers) played significant role in the development of industry. Thus making exports a main feature of the industry.

The software policy document of the government issued in 1986 enunciated five basic objectives. These include thrust on Software Exports, Integrated development of software for domestic and exports market, simplification of procedures, firm base in national software industry and increase utilization of computers in decision making and enhancing efficiency.

Foreign Investments and Foreign collaborations started in 1984 helped acceleration of software industry. Easing of ownership regulations for foreign entities for exports, establishment of software technology parks and infrastructures, satellite links and tax sops were other criteria which helped sound foundation of the industry in India. Salary difference and foreign exchange parity in western countries and India were also main reasons for flourishing market for software companies from India and made business sense.

Hopkins (1987) did research on Acquisition Strategy and the Market position of acquiring firms. In this study he has highlighted three primary strategies as conglomerate, technology related and marketing related. According to this study the firms which focus on unrelated diversification through mergers and acquisitions are often located in unfavorable market positions, on the basis of the attractiveness of their industries and the competitive position within these industries. According to research the acquisitive growth is associated with decline in market position; one particular strategy the marketing- related strategy proves it otherwise and is associated with superior position. Firms utilizing this strategy found it favorable in market share and were profitable. Though no single strategy was responsible for market position, one strategy which worked was marketing related and the reason for the same is that they are operating in industry where marketing function is particularly important. The industries where it's applicable were the industries where there are high barriers to entry than other industries.

The fifth Merger waves of US and UK are discussed by Gao Lin, Sundarsanam P.S.. (2003).

The mergers are characterized by high valuations of technology firms during this period and acted as trigger for the acquisitions. The value creation logic for these firms rested on real options such as new growth opportunities, managerial risk incentives and potential value destruction. Authors could establish a negative relationship between management shareholdings and post-acquisition performance of high tech acquisitions. High managerial ownership looks to reduce managers' risk aversion and encourage overinvestment in value diminishing high tech acquisitions. In this paper authors have focused on wealth gain of shareholders following acquisition of high technology targets. They have tracked post acquisition performance of acquirers over three years using various models.

To analyze a particular industry with the perspective of mergers and acquisitions we tried to draw a parallel from Danzon, Epstein and Nicholson (2007) wherein they have studied Pharmaceutical and Biotech Industries. The paper analyzed various determinants of mergers and acquisitions in pharmaceutical and biotech industries using data set from 383 firms during 1988 to 2001. There was characteristic of large firms where excess capacities on product expirations was the reason of creation of need for merger and in case of small firms it was primarily exit strategy due to poor financial performance. In these firms few marketed products; low Tobin's q and low cash sales ratios were noticed. Tobin's q is the ratio of market value to the book value of the firm's assets at the end of the financial year. The paper used multinomial logit model to test several competing hypotheses to explain firm specific merger. For both large and small firms, firms with relatively high merger propensity tend to have slow growth of sales, employees and research.

The Indian perspective in Software and IT-enabled services and their emerging strategies can be observed in Henley John (2006/2007). The paper discusses the reasons why outsourcing to India by US and European firms were used as strategies to reduce their costs and proved to be a competitive advantage for India. Most Indian firms operate in IT services segment and very few companies are in product segment. Some themes which are highlighted are acquisition strategy of Indian IT firms in US and Europe to establish credibility and market access. The IT companies used their talent strength to its advantage at low cost and were able to deliver world class services to major customers who outsourced their software development and IT enabled services to India. The paper discusses the origin and economics of outsourcing. The attractiveness of India as investment destination due to large pool of scientific and technical manpower, linguistic capability in English language, low labor cost and favorable time zone relative to United States proved beneficial.

There were certain disadvantages in India for software industry at that time including slow government decisions, power supply, internet connectivity and rigidity of Indian Labor laws. Body shopping emerged as a common practice by Indian firms in initial days of business from these countries but later they could match world class delivery of software services and products in offshoring model. Much of the work involved maintenance or legacy work due to Mergers and Acquisitions in US Financial services and Banking Industry.

A peculiar characteristic of Software/Information Technology industry was complementarities using software stacks for software industry acquisitions. In their paper Gao Silva Lucia and IyerBala (2006) have analyzed these characteristics which are somewhat similar to backward and forward integration in manufacturing. They have analyzed how complementarities in network industry like information technology affect merger and acquisitions. They have introduced and empirically validated the software stacks as a method to measure complementarities. The result findings found an inverse curvilinear relationship between abnormal returns and the distance between acquirers and targets in various layers of stacks. This is interesting characteristic of software industry and needs to be analyzed further for mergers and acquisitions synergies. The results prove that there is a value in mergers and acquisitions of firms that have complementary components of network systems.

The adjacent layer synergy earned is much higher than in same layer or in layers further away in stack.

There are various methods which are used to determine the post-acquisition value of the firms. This has been studied in details by Krishnakumar and Sethi (2011) in their paper methodologies used to determine mergers and acquisitions performance. They have tried to identify popular methods, their limitations and benefits and analyze if the research differs based on the methods used to analyze performance. In international scenario event studies dominate the performance research while in Indian scenario it is the accounting return which is more dominant. Authors have also analyzed other methods used including economic value added, residual income approach, innovative performance, questionnaire methods. Recently there is inclusion of newer approaches such as the data envelopment analysis and balance score card approach. Their contribution suggests that methods of evaluation used in developed markets may not work in emerging markets and that method selection can influence research conclusions.

Data and Methodology

For the purpose of research we selected software companies which are located out of India and are listed entities. These companies were identified using Bloomberg database and filtered on the basis of parameters given by us. These parameters were that the companies had to be from software industry, listed on Indian bourses and also included a separate database of companies which had acquired companies globally.

There were 241 listed software companies on Indian stock markets. In a period of 10 years 442 acquisitions were done in software industry and 69 companies had done the acquisitions whereas 172 companies had not acquired any companies. We segregated companies into two sets of these 69 (acquirers) and 172 (non-acquirers).

Primary Research Objective: To analyze Indian IT companies have grown because of acquisitions or was it an organic growth?

Research Approach:

We have used papers and articles for Literature Review from sources such as Google scholar, SSRN & JSTOR.

Data includes merger and acquisition deals done during period 2003-2013. This includes profitability and market share impact by these firms. The reference data is taken from Bloomberg database for past 10 years and Dealogic which is an aggregator of Indian Mergers and Acquisitions.

We then performed t-test on acquiring and non-acquiring companies data sets for different parameters. These parameters are Total Return YTD, Rev -1 Yr Gr CY, Norm ROCE, Return On Invested Capital, EBITDA Return & Return on Working Capital.

t-test is a measure of testing a statistical hypothesis of t-distribution to see if null hypothesis is supported. It is performed on two diverse sets of data for which statistics is available. The significance of data was tested for .05 level of confidence and the results are depicted in summary results which is as below:

Summary Results

Total Return YTD	Non-Significant
Rev -1 Yr Gr CY	Non-Significant
Norm ROCE	Significant
ROIC	Significant
EBITDA Return	Significant
Return on Working Capital	Non-Significant

Results**T-test for Total Return YTD for Acquiring and Non Acquiring Firms data**

t-Test: Two-Sample Assuming Equal Variances		
	Acq Total Return YTD	Non Aqu Total Return YTD
Mean	53.13056945	98.7986562
Variance	11852.04624	361627.1338
Observations	69	179
Pooled Variance	264941.3372	
Hypothesized Mean Difference	0	
Df	246	
t Stat	-0.626128072	
P(T<=t) one-tail	0.265905731	
t Critical one-tail	1.651071345	
P(T<=t) two-tail	0.531811463	
t Critical two-tail	1.969654176	
t-Test: Two-Sample Assuming Unequal Variances		
	<i>Acq Total Return YTD</i>	<i>Non Aqu Total Return YTD</i>
Mean	53.13056945	98.7986562
Variance	11852.04624	361627.1338
Observations	69	179
Hypothesized Mean Difference	0	
Df	206	
t Stat	-0.975414848	
P(T<=t) one-tail	0.165249274	
t Critical one-tail	1.652284144	
P(T<=t) two-tail	0.330498548	
t Critical two-tail	1.971546669	

Data Source: Bloomberg
t-test done using MS-excel data analysis

T-test for Revenue 1 Yr Growth for Acquiring and Non Acquiring Firms data

t-Test: Two-Sample Assuming Equal Variances		
	Acq Rev - 1 YrGr:CY	Non Acq Rev - 1 YrGr:CY
Mean	5.21528619	6.840927933
Variance	1362.944348	10187.87257
Observations	63	150
Pooled Variance	7594.765701	
Hypothesized Mean Difference	0	
Df	211	
t Stat	-0.124249244	
P(T<=t) one-tail	0.450618109	
t Critical one-tail	1.652107286	
P(T<=t) two-tail	0.901236219	
t Critical two-tail	1.971270646	
t-Test: Two-Sample Assuming Unequal Variances		
	<i>Acq Rev - 1 YrGr:CY</i>	<i>Non Acq Rev - 1 YrGr:CY</i>
Mean	5.21528619	6.840927933
Variance	1362.944348	10187.87257
Observations	63	150
Hypothesized Mean Difference	0	
Df	208	
t Stat	-0.171784635	
P(T<=t) one-tail	0.43188693	
t Critical one-tail	1.652212376	
P(T<=t) two-tail	0.86377386	
t Critical two-tail	1.971434659	

Data Source: Bloomberg
t-test done using MS-excel data analysis

T-test for ROCE for Acquiring and Non Acquiring Firms data

t-Test: Two-Sample Assuming Equal Variances		
	<i>Acq Norm ROCE</i>	<i>Non Acq Norm ROCE</i>
Mean	35.11110693	15.36385016
Variance	1323.255793	286.8858898
Observations	37	67
Pooled Variance	652.6635026	
Hypothesized Mean Difference	0	
Df	102	
t Stat	3.773841913	
P(T<=t) one-tail	0.000135062	
t Critical one-tail	1.659929976	
P(T<=t) two-tail	0.000270124	
t Critical two-tail	1.983495259	
t-Test: Two-Sample Assuming Unequal Variances		
	<i>Acq Norm ROCE</i>	<i>Non Acq Norm ROCE</i>
Mean	35.11110693	15.36385016
Variance	1323.255793	286.8858898
Observations	37	67
Hypothesized Mean Difference	0	
Df	45	
t Stat	3.120539234	
P(T<=t) one-tail	0.001574282	
t Critical one-tail	1.679427393	
P(T<=t) two-tail	0.003148564	
t Critical two-tail	2.014103389	

Data Source: Bloomberg
t-test done using MS-excel data analysis

T-test for Return on Working Capital for Acquiring and Non Acquiring Firms data

t-Test: Two-Sample Assuming Equal Variances		
	<i>Acq Return On Working Capital LF</i>	<i>Non Acq Return On Working Capital LF</i>
Mean	6.167346686	5.640941025
Variance	18377.54609	21311.33708
Observations	51	120
Pooled Variance	20443.35158	
Hypothesized Mean Difference	0	
Df	169	
t Stat	0.022025317	
P(T<=t) one-tail	0.491226872	
t Critical one-tail	1.653919942	
P(T<=t) two-tail	0.982453744	
t Critical two-tail	1.974100447	

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Acq Return On Working Capital LF</i>	<i>Non Acq Return On Working Capital LF</i>
Mean	6.167346686	5.640941025
Variance	18377.54609	21311.33708
Observations	51	120
Hypothesized Mean Difference	0	
Df	101	
t Stat	0.022696256	
P(T<=t) one-tail	0.490968671	
t Critical one-tail	1.66008063	
P(T<=t) two-tail	0.981937342	
t Critical two-tail	1.983731003	

Data Source: Bloomberg
t-test done using MS-excel data analysis

T-test for EBITDA Return for Acquiring and Non Acquiring Firms data

t-Test: Two-Sample Assuming Equal Variances		
	<i>Acq EBITDA Ret LF</i>	<i>Non Acq EBITDA Ret LF</i>
Mean	29.02198583	14.34046272
Variance	1410.019792	763.2727795
Observations	53	98
Pooled Variance	988.9831463	
Hypothesized Mean Difference	0	
Df	149	
t Stat	2.73803608	
P(T<=t) one-tail	0.003467098	
t Critical one-tail	1.655144534	
P(T<=t) two-tail	0.006934196	
t Critical two-tail	1.976013178	

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Acq EBITDA Ret LF</i>	<i>Non Acq EBITDA Ret LF</i>
Mean	29.02198583	14.34046272
Variance	1410.019792	763.2727795
Observations	53	98
Hypothesized Mean Difference	0	
Df	83	
t Stat	2.503446565	
P(T<=t) one-tail	0.007129314	
t Critical one-tail	1.663420175	
P(T<=t) two-tail	0.014258628	
t Critical two-tail	1.98895978	

Data Source: Bloomberg
t-test done using MS-excel data analysis

T-test for ROIC for Acquiring and Non Acquiring Firms data

t-Test: Two-Sample Assuming Equal Variances		
	<i>Acq ROIC LF</i>	<i>Non Acq ROIC LF</i>
Mean	14.99867327	6.327063932
Variance	224.7229052	85.84038356
Observations	41	88
Pooled Variance	129.5829101	
Hypothesized Mean Difference	0	
Df	127	
t Stat	4.028693698	
P(T<=t) one-tail	4.79812E-05	
t Critical one-tail	1.656940344	
P(T<=t) two-tail	9.59623E-05	
t Critical two-tail	1.978819535	

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Acq ROIC LF</i>	<i>Non Acq ROIC LF</i>
Mean	14.99867327	6.327063932
Variance	224.7229052	85.84038356
Observations	41	88
Hypothesized Mean Difference	0	
Df	55	
t Stat	3.412722265	
P(T<=t) one-tail	0.000606677	
t Critical one-tail	1.673033965	
P(T<=t) two-tail	0.001213354	
t Critical two-tail	2.004044783	

Data Source: Bloomberg
t-test done using MS-excel data analysis

Conclusion:

Parameter	t critical EV	t stat EV	t critical UV	t stat UV
Total Return YTD	1.97	-0.63	1.97	-0.97
Return 1 Yr Gr	1.97	-0.12	1.97	-0.71
ROCE	1.98	3.77	2.01	3.12
Return on Working Capital	1.97	0.02	1.98	0.02
EBITDA Return	1.98	2.73	1.98	2.50
ROIC	1.98	4.03	2.00	3.41

EV=Equal Variance , UV= Unequal Variance

The analysis covered t-test analysis of two data sets of acquiring and non-acquiring companies. The results of the t-tests are published above both for equal variance and unequal variance. Had all parameters performed the same way in t-test the conclusive evidence was visible that the growth of the company is due to acquisition or not. However it is observed that the significance of t-test results is there partially in case of ROCE, ROIC and EBITDA Return. This indicates that companies which made acquisitions had higher Return on Capital Employed (ROCE), higher Return on Invested Capital (ROIC) and higher EBITDA Return. However since the other parameters Total Return YTD, 1 Yr Growth and Return on Working Capital are insignificant, it shows that these parameters did not matter in case of companies which made acquisitions .Hence the acquisition by companies affects certain factors in long term performance which is mentioned as above.

References:

- 1.Lakha Salim (1990). Growth of Computer Software Industry in India. *Economic and Political Weekly*, Vol. 25, No.1, 49–56
2. Hopkins Donald H. (1987). Acquisition Strategy and the Market Position of Acquiring Firms. *Strategic Management Journal*, Vol. 8, 535–547
3. Gao Lin, Sundarsanam P.S.. (2003). Value creation of UK High Technology Acquisitions *Working Paper*, SSRN ID 493762 (Dec), 1-48
4. Danzon P.M., Apstein A., Nicholson S. (2007). Mergers and Acquisitions in the Pharmaceutical and Biotech Industries. *Managerial and Decision Economics* Vol. 28 No.4/5 (Jun-Aug), 307-328
5. Henley John (2006/2007). Outsourcing the provision of Software and IT-Enabled Services to India: Emerging Strategies. *International Studies of Management & Organization* Vol. 36 No.4 (Winter), 111-131
6. Gao S. Lucia, Iyer Bala (2006). Analyzing Complementarities Using Software Stacks for Software Industry Acquisitions. *Journal of Management Information Systems* Vol. 23 No. 2 (Fall), 119-147
7. Krishnakumar Dipali, Sethi Madhvi (2011). Methodologies Used to Determine Mergers and Acquisitions' Performance. *Working Paper* SSRN ID 1803922, 1-20

Appendix 1 – Sample Data for the list of companies with their financial details – Source : Bloomberg

EQY_FU ND_CRN CY	REL_IND EX															
LCL																
Ticker	Short Name	Mark et Cap	Pric e:D- 1	P/E	Total Return YTD	Reven ue T12M	EPS T12 M	Rev - 1 YrGr:C Y	Norm ROC E	Tot OpEx Rt	P/B	P/C F	ROA based on bottom EPS:Y-1	Return On Working Capital LF	EBIT DA Ret LF	ROI C LF
TCS IN Equity	TATA CONSUL TANCY	5.29 E+12	269 9.2	26.3 299	27.8715 9	8.59E +11	104. 0243	29.877 82	54.23 606	5800 57.2	9.62 210 8	28.9 427 9	29.77017	17.81632	53.884 39	38.9 022 6
INFO IN Equity	INFOSYS LTD	2.25 E+12	391 8.3	18.8 783 9	14.0651 6	5.2E+ 11	207. 38	11.170 19	28.78 661	3794 42.7	4.42 260 3		22.19685	9.253531		20.8 879 7
WPRO IN Equity	WIPRO LTD	1.43 E+12	580. 05	17.0 809 8	5.22363 2	4.48E +11	33.7 1	16.463 79	32.02 573	3502 97	3.88 526 1	15.7 965 5	15.15511	9.994488	30.747 67	18.7 887 6
HCLT IN Equity	HCL TECH	1.21 E+12	172 3	18.7 585 4	38.2907	3.29E +11	91.1 6913	28.677 23	#N/A N/A	2492 70	5.96 143 7		19.83494	23.91744	52.145 58	
TECHM IN Equity	TECH MAHIND RA LT	5.59 E+11	237 2.1	18.2 744 7	30.2552 2	1.88E +11	130. 25	173.98 7	75.10 297	1514 60	6.05 231 8	31.7 526 1	16.19518	118.6322	57.608 37	36.8 050 5
OFSS IN Equity	ORACLE FINANCI AL	2.72 E+11	321 3.95	19.8 830 7	11.1473 3	3.74E +10	161. 64	7.6949 36	#N/A N/A	2413 5.32	3.08 116 3	24.3 669 4	13.75321	20.7185	17.295 08	
MTCL IN Equity	MINDTRE E LTD	8.66 E+10	103 5.1	18.7 884 9	37.1657 4	3.33E +10	53.9 3993	28.310 39	#N/A N/A	2492 4	4.38 965 3	13.8 174 4	21.15334	12.32321	41.931 45	
MPHL IN Equity	MPHASIS LTD	8.63 E+10	410. 75		- 1.09241				#N/A N/A	#N/A N/A	1.68 396 2		11.23948			
PSYS IN Equity	PERSISTE NT SYS	5.72 E+10	143 0.65	20.9 949 1	47.9387 4	1.75E +10	66.8 4	28.940 71	24.77 222	1339 2.44	4.35 867		16.39768	11.44918	41.300 86	21.1 310 4
HEXW IN Equity	HEXAWA RE TECHNO L	5.46 E+10	181. 5	14.4 488 2	50.1233 6	2.29E +10	12.7	17.306 94	42.42 432	1810 9.9	4.58 848 2	15.1 228 4	21.61992	72.14199	42.691 62	30.9 768
CYL IN Equity	CYIENT LTD	5.01 E+10	446. 8	20.3 991 6	32.9030 6	2.21E +10	23.8	17.798 08	20.41 33	1867 9.95	3.42 208 7	20.5 759 9	15.33419	26.54089	28.198 83	16.7 992 5
ECLX IN Equity	ECLERX SERVICE S	4.17 E+10	137 7	16.3 143 1	33.1545 6	8.41E +09	85.1 4	27.320 32	61.97 436	5190. 08	7.11 700 2	20.0 344 9	32.26408	71.81167	69.117 28	48.2 405 8
KPIT IN Equity	KPIT TECHNO LOGIE	3.14 E+10	160. 3	12.5 407 9	- 5.90864	2.77E +10	12.8 7	20.343 32	40.90 118	2327 5.9	2.26 735 7		12.79282	13.12747	33.222 95	15.1 829 3
ZENT IN Equity	ZENSAR	2.74 E+10	623. 7	11.4 338 2	79.3309 2	2.32E +10	54.4	9.5096 21	39.51 599	#N/A N/A	2.87 925 1	11.9 501 4	14.15945	46.69534	43.287 51	23.5 298 7
YBRA IN Equity	YBRANT DIGITAL L	2.6E +10	54.5	11.6 056	610.560 6	1.67E +10	4.64	4.5172 72	10.21 03	1375 0.57	2.21 239 9		3.086608	30.08471	33.416 65	18.7 333 3
NITEC IN Equity	NIIT TECH	2.39 E+10	393. 7	9.98 295 3	11.3708 5	2.3E+ 10	38.1 3	14.031 64	22.89 387	#N/A N/A	1.74 533 2	15.2 949 6	14.88451	34.17017	30.029 38	18.8 903 6

Appendix 2: Sample data of Mergers and Acquisitions Source: Bloomberg

Deal Type	Announce Date	Target Name	Acquirer Name	Payment Type	Deal Status	Percent Sought
M&A	3/1/2013	MakeSense Technologies Pvt Ltd	Info Edge India Ltd	Cash	Completed	100
M&A	2/15/2013	Complex It Services ConsultoriaEmInformatica Ltd	Satyam Computer Services Ltd	Undisclosed	Completed	0
M&A	1/16/2013	NovaQuest LLC	Persistent Systems Ltd	Undisclosed	Completed	100
M&A	1/9/2013	Magnon Solutions Pvt Ltd	TBWA Group Of Cos	Undisclosed	Completed	100
M&A	1/2/2013	3Cap Technologies GmbH	Geometric Ltd	Cash	Completed	100
M&A	12/11/2012	ERP business of Nikko	R Systems International Ltd	Cash	Completed	100
M&A	12/2/2012	Digital Risk LLC	Mphasis Ltd	Cash	Completed	100
M&A	11/5/2012	AT Solutions Group LLC	Rolta India Ltd	Cash	Completed	100
M&A	10/25/2012	Firstsource Solutions Ltd	CESC Ltd	Cash	Completed	26
M&A	10/25/2012	Hotel Booking Solutions Inc	IBS Software Services Pvt Ltd	Undisclosed	Completed	33.9
M&A	10/17/2012	Pyxis Technology Solutions Ltd	Polaris Financial Technology Ltd	Undisclosed	Completed	100
M&A	10/12/2012	rCloud	Persistent Systems Ltd	Cash	Completed	100
M&A	9/28/2012	Alta Vista UAE	EdServSoftsytems Ltd	Undisclosed	Completed	100
M&A	9/17/2012	Comviva Technologies Ltd	Tech Mahindra Ltd	Cash	Completed	51
M&A	9/4/2012	Hutchison Global Services Pvt Ltd	Tech Mahindra Ltd	Cash	Completed	100
M&A	8/29/2012	Teligent Telecom AB	Altruist Technologies Pvt Ltd	Cash	Completed	100
M&A	8/7/2012	SEEinfbizPvt Ltd	AurionPro Solutions Ltd	Undisclosed	Completed	100
M&A	7/9/2012	Mindlogicx Infotech Ltd	SQL Star International Ltd	Stock	Completed	100
M&A	7/7/2012	Onlycart.com	Gripsell Technologies Pvt Ltd	Undisclosed	Completed	100
M&A	7/2/2012	EDURIX Business	HCL Infosystems Ltd	Cash	Completed	100
M&A	6/22/2012	Infostack Solutions Pte Ltd	Blue Star Infotech Ltd	Undisclosed	Completed	100
M&A	6/14/2012	Enline PLC	AurionPro Solutions Ltd	Undisclosed	Completed	100
M&A	5/9/2012	Prism Informatics Ltd	Private Investor	Undisclosed	Completed	8.91
M&A	5/8/2012	BPA Technologies Inc	ICRA Ltd	Undisclosed	Completed	0
M&A	4/30/2012	Wipro Promax Analytics Solutions Pty Ltd	Wipro Ltd	Cash	Completed	100
M&A	4/13/2012	AgilystInc	eClerx Services Ltd	Cash	Completed	100

A Study on Consumer Perception towards General Insurance

Mr. Abhay Kumar Singh

Student M.B.A

ASM's I.B.M.R

Email: abhay.singh7397@gmail.com

Mob: 7351790417

Dr. Satish N. Pawar

Director Research

ASM's I.B.M.R.

Email: satish.pawar@asmedu.org

Mob: 9766347359

Abstract:

The Indian Insurance industry is at the verge of growth at a rapid scale. Previously there were less number of players in the market who were capturing the entire market potential and a larger population size. But as per today's scenario, it can be seen that there are many market players in the market who are giving tough competition to other players and at the same time attracting the customers because of their attractive offers. These players are also giving tough competition to government held service providers and attracting their customers. In this paper we are mainly concerned with General Insurance sector and at the same time we are determining the customer's perception towards General Insurance i.e. is the general public aware about the term General Insurance or not. Since there are two major sectors of General Insurance provider in India so we are determining the customer's inclination towards which sector i.e. the government sector or the private sector and at the same time we are finding out the service gap between the services provided by the company i.e. expected service from the company and the perceived services from the company by the customers associated with the company. For this we are targeting the general public of Pune city and that too we are limited to Pimpri-Chinchwad area of Pune city.

Introduction:

The insurance industry in India has seen an array of changes in the past one decade. The economic scenario which emerged after globalization, privatization and liberalization has thrown a new challenge before the insurance sector. Now it has to be more competitive in order to meet the needs and demands of its customers. The reforms contributed to increase the awareness of the insuring public about the wider range of choice of insurance products and the price offered by the competing insurers in the market. The customers know well about their rights and remedies, availability of various grievance redressal mechanisms, progressive decontrol and desertification of pricing of insurance products, particularly in the non- life insurance segments. The technical know-how, expertise and wide experience of multinationals that have joined with the Indian companies have revolutionized almost all aspects of insurance industry in India. The insurance industry also provides crucial financial intermediation services, transferring funds from the insured to capital investment, which is critical for continued economic expansion and growth, simultaneously generating long-term funds for infrastructure development. Development of the insurance sector is necessary to support the structural changes in the economy. Today India is one of the fastest growing economies of the world. It is now Asia's third largest economy and has made inroads into the global top 10 in terms of Gross Domestic Product (GDP). The service sector has contributed significantly in India's growth story in the recent years. GDP originating from the service sector recorded a growth rate of 11 per cent in 2006-07 (Annual Report of IRDA, 2007). The contours of insurance business have been changing

across the globe and the rippling effect of the same can be observed in the Indian market as well. Insurance Industry is a growth-oriented industry. In India too, the industry has started to reveal the potential after liberalization and privatization of the sector. India is geographically large and has the world's second largest

population but it also has one of the lowest penetration rates for general insurance in Asia in terms of premium as a percentage of GDP. This situation reflects the fact that India's insurance market is still in its infancy, meaning good growth potential. Strong economic growth of India in the last decade combined with a population of over a billion makes it one of the potentially largest insurance markets in the future. The insurance industry in India is divided into 2 basic sectors – Life Insurance and Non-life Insurance (also called General Insurance and even called Property and Casualty or P&C). Both these sectors are governed by Insurance Regulatory and Development Authority (IRDA) of India which is a government body which frames the rules for the entire industry and all insurance companies have to abide by them. IRDA is the policy maker for the entire insurance industry in India and also serves as the custodian of consumers rights. As the name suggests life insurance companies cover the risks associated with the life of a person and non-life insurance companies cover other risks associated with our daily living like health, our vehicles, travel and home insurance to name a few. Non-life insurance sector also covers a lot of other risks in the corporate world – from simple office insurance to insuring entire factories and industrial equipment. Over a period of time life insurance policies have started incorporating an investment component along with the basic insurance cover so that your money grows while it remains invested with the insurance companies – details about these types of policies will be taken up in detail in the forthcoming posts in this series. But non-life insurance companies have so far been restricted to pure risk cover itself.

Objective of the Study:

To study customer awareness towards General Insurance.

To determine the customer perception towards Government owned General Insurance company and Private Owned General Insurance Company.

To study the service quality of Government & Non-Government General Insurance companies.

Review of Literature:

The data has been collected from various sources like journals, websites and reports to generate an idea which formed the basis of study. Meanwhile having an interaction with different people at different places helped the researcher a lot to collect the data and to carry out the work.

Dr. Mehul P. Desai; Ms. Nikita Kahar on the topic “Customer Satisfaction Towards The Services Provided By General Insurance Companies Within Surat City With Respect To Vehicle Insurance” concluded from the study that public insurance companies have to provide some extra facilities to insured people. The private players have to introduce new skim like AamAdmiBimaYojna. Micro insurance products must be promoted to provide the benefit of insurance to poor people of the society. In order to compete both private and public players have to focus on specific needs of insured. As the insurance sector is totally depends on insured, general insurance companies have to try fulfilling the expectations of policy holders.

T. Chandrashekhara; Dr. K. S. Sarala, in their study on “AN EVALUATION OF PERFORMANCE OF

SELECTED GENERAL INSURANCE COMPANIES IN INDIA” observes the performance of general insurance company in terms of premium better. But, still public general insurance companies need to gear up by adopting new strategies. The regulatory body (IRDA) has to understand the need, role and power of the both the regulator and insurance companies as one of the main objectives of the insurance regulators is to safeguard the interest of the policyholders as well as insurance companies of both public and private sector. Development of general insurance business in India, what has been done and achieved till now is only the good beginning. The regulatory body too needs to gear up its administration and regulatory machinery to have in place more

structured, systematic and effective approach to successfully find solution to more and more challenges and issues related to innovations.

Dr. AashishS.Jani in his paper on “A Study Of Consumer Perception About Service Quality Of Indian Non-Life Insurance Companies: Comparative Analysis between Governments Owned Non-Life Insurance and Privately Owned Non-Life Insurance” concluded that both Non-life Insurances are appearing to provide attention towards changing customer expectation with ever changing LPG Climate. Key areas of Strengths, observed in case of Public sector Non-life Insurance are; Better branch office location; Good reputation in market; Sound financial strength; Regular correspondence with agents by meetings; Accurate presentation of product line.

The area of significant improvement possible, applies to the following areas: Technical advancement of insurance; Employee's neat and clean appearances; Convenience in premium payment; Customer awareness programmes; Commitment and ethical behavior. On the other hand key areas of Strengths, in case of Private sector Non-life Insurance are: Better physical layout for business purposes; Error free information; Quick service; Availability of employees on time; Settlement of claims on time; Individual attention to customers; Effective investment advice and guidance. The area where improvements are required with reference to; Safety and security of investments; branch location; accurate information through media; diversified product line suitable to specific customers. Besides Health insurance, there is a big market available in different fields for Non-life insurance companies. In the changed LPG climate, Government is also providing incentives to grow insurance sector by increasing FDI limit; thus immense opportunities are waiting for all Non-life insurance companies, whether it is Public sector or Private sector. The need is to identify and fulfill customer's expectation in this changed scenario and the present study helps in understanding customer's perception towards better and improved service quality, which will also bring high returns to Non-insurance companies.

Indian Credit Rating Agency (ICRA) 2013, in its Paper titled —Indian General Insurance Industry- Industry Outlook and Performance Review has reviewed the performance of General Insurance Industry of India.

The Study has been conducted using both primary as well as secondary data. The primary data was obtained from the analysis done through direct questionnaire provided to the respondents. Information regarding the project was obtained from housewives, retired/VRS persons, unemployed youths, teachers, distributors, advisors and unit-managers. The information was obtained through the questionnaire and discussions held. The project undertaken was Descriptive in nature as it was trying to find out the perception and satisfaction level. Questionnaires were distributed among 100 respondents in Bangalore. The responses received, formed the basis of primary data required for the study. Data collected was completed, classified and tabulated for analysis.

Literature was extracted from various sources which include journals, websites and books which formed the basis of secondary data required for the study. Interaction with people of the Industry helped in describing the potential segment of people insurance in Bangalore. The study has been conducted using both primary as well as secondary data. The primary data was obtained from the analysis done through direct questionnaire provided to the respondents. Information regarding the project was obtained from housewives, retired/VRS persons, unemployed youths, teachers, distributors, advisors and unit-managers. The information was obtained through the questionnaire and discussions held. The project undertaken was Descriptive in nature as it was trying to find out the perception and satisfaction level. Questionnaires were distributed among 100 respondents in Bangalore.

The responses received, formed the basis of primary data required for the study. Data collected was completed, classified and tabulated for analysis.

The study has been conducted mainly by using the primary data and generating the idea about how to conduct the research was developed by reading the above journals and books. The primary data was mainly obtained by conducting a survey through the means of a structured questionnaire which was provided to the respondents directly and through online means. The target population was the general public with whom the researcher met and basically asked the public about having knowledge. The research carried out was descriptive in nature and the researcher was trying to find out the customer perception towards general insurance, customer's inclination towards government sector or private sector and to determine the service gap between the customer's expectation towards the service and customer's perception about the received service. Questionnaire was distributed among 320 respondents in Pimpri- Chinchwad area of Pune and the received responses formed the basis of primary data required for the study. The data was collected completely and was tabulated to carry out the analysis part.

Data Analysis& Interpretation:

GENDER:

S.No.	Particulars	No. of Respondents	Percentage of Respondents
1	Male	172	54%
2	Female	148	46%
Total		320	100%

Interpretation: Out of the total respondents of 320, it was found out that 54% of the respondents are male while 46% of the respondents are female.

OCCUPATION:

S.No	Particulars	Total Population	Percent of Respondents
1	Government Job	158	49%
2	Private Job	78	24%
3	Business	60	19%
4	Home-Maker	25	8%
Total		320	100%

Interpretation: From the data given above it is clear that 49% of the total respondents are having government jobs and thus this may lead to have a higher income of these groups and so they prefer to have a general insurance for their asset's safety. The second highest respondents were the private job people who have a source of income but not in a definite way which leaves them with less priority towards General Insurance. The least are the people with business or the home-makers who are least interested.

KNOWLEDGE TOWARDS GENERAL INSURANCE

S.No	Particulars	No. of Respondents	Percentage of Respondents
1	Yes	279	87%
2	No	41	13%
Total		320	100%

Interpretation: The data above indicates that out of 320, 87% of the respondents have knowledge towards General Insurance while the remaining 13% do not have knowledge regarding General Insurance. There is a high awareness ratio as compared to the non-awareness ratio as from the data it has been found out from the survey that some of the public are illiterate or they do not have any idea about it as they mainly focus on the Life Insurance only which could be the main reason.

CORRECT MEANING OF GENERAL INSURANCE

S.No	Particulars	Total Respondents	Percent of Respondents
1	Covering all risks and Liabilities	150	47%
2	Life Cover	53	16%
3	Health Cover	99	31%
4	None	18	6%
Total		320	100%

Interpretation: From the data it can be concluded that 47% of the of the respondents know the term General Insurance correctly while the rest do not have complete knowledge about General Insurance. This could be because there might be lack of knowledge among the respondents and for this the company has to take several measures so as to clear the doubt that is occurring in the mind of respondents.

SECTOR PREFERENCE:

S.No	Particulars	No. of Respondents	Percentage of Respondents
1	Government Owned	220	69%
2	Private Owned	100	31%
Total		320	100%

Interpretation: The data above shows that a majority of the population i.e. 69% prefers Government sector for insurance be it any kind of insurance while 31% of them prefer private general insurance companies. There might be the reason that in the above interpretation it has been found out that maximum public is in government sector and so they will surely prefer Government sector and will less prefer private sector because of the trust issues.

GENERAL INSURANCEIS FOR:

S.No	Particulars	Total Respondents	Percent of Respondents
1	Vehicle	114	36%
2	Home	71	22%
3	Health	109	34%
4	Office	26	8%
Total		320	100%

Interpretation: From the data it can be concluded that majority of people prefer General Insurance for Vehicle as there might be the issue of knowledge that all the insurances related to non-living things come under the term General Insurance. But there are several terminologies that are now used which separate different things so people might get confused over it.

CHANNEL TO PURCHASE POLICY:

S.No	Particulars	Total Respondents	Percent of Respondents
1	Online	112	38%
2	Branch Walk-ins	47	15%
3	Bank Assurance	82	26%
4	Agents	69	21%
Total		320	100%

Interpretation: From the data it can be concluded that out of 320 respondents, 38% of the population go for online mode of taking policy as this is trending in now-a-days while 26% of them population go through Bank Assurance to take policy as these might be the public who are in Government sector. 21% of the respondents take policy through agents and least go through branch walk-ins.

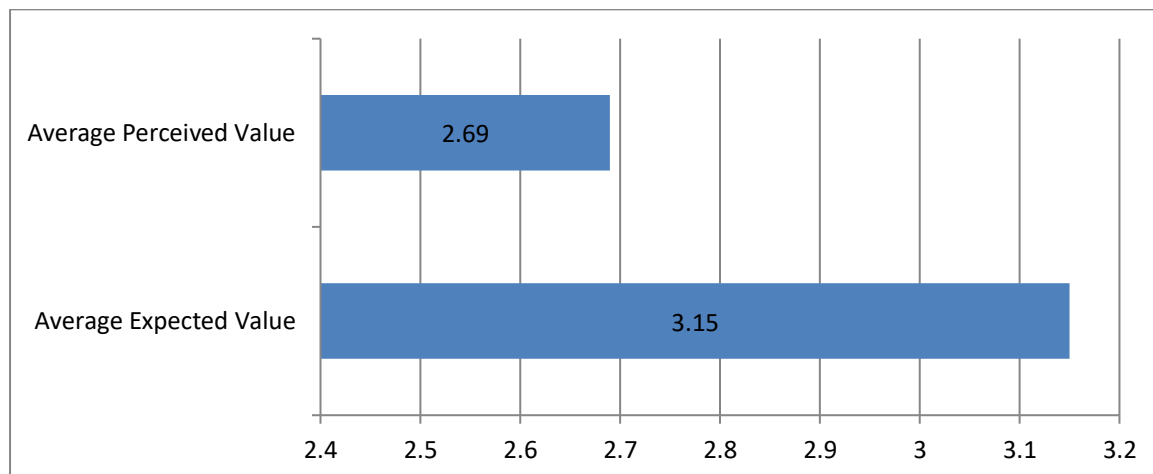
Determining the Service Gap:

The Service Gap analysis is also conducted through questionnaire provided to the respondents during the time of survey. This questionnaire includes the statements to analyze the service gap between the expected service and the perceived service which were designed on the (Reliability, Assurance, Tangibility, Empathy, Responsiveness) parameters of SERVQUAL Model. The scaling method was done on Likert Scale ranging from 1 to 5 where 1 means Strongly Disagree and 5 means Strongly Agree.

1: Strongly Disagree; 2: Disagree; 3: Neutral; 4: Agree; 5: Strongly Agree
--

1. Analysis on Reliability Basis:

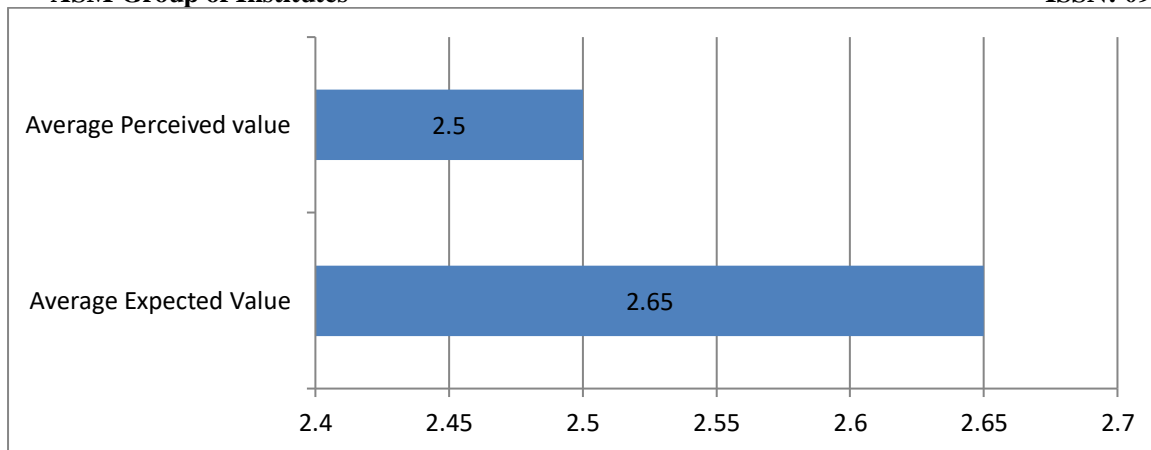
Total Respondents	320
Average Reliability Value(Expectation)	3.15
Average Reliability Value(Perception)	2.69



Interpretation: The average value of expectations and the average value of perception in terms of Reliability show that the expected value for reliability is higher as compared to that of the perceived value of reliability. This shows that the customer is not able to trust over the company depending upon the perceived value.

2. Analysis on Assurance Basis:

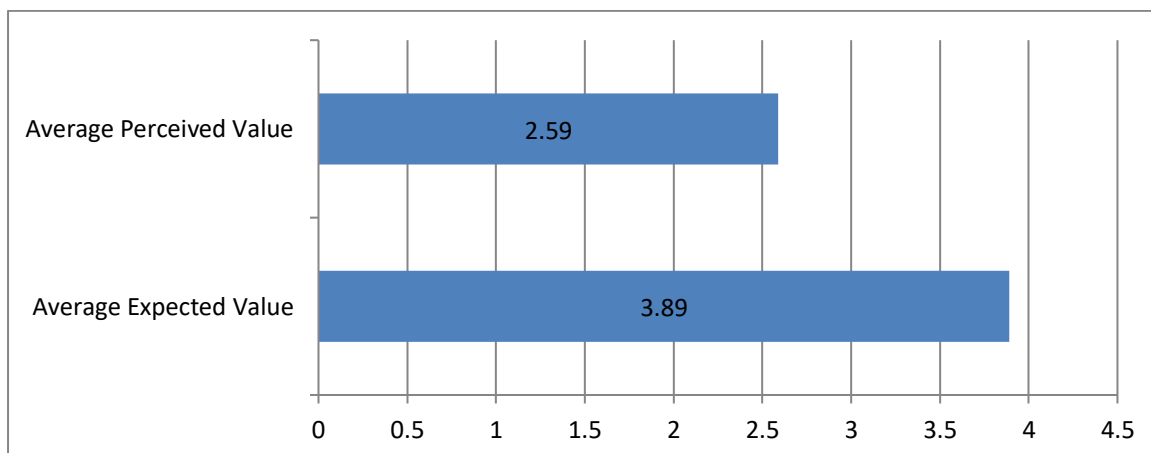
Total Respondents	320
Average Assurance Value(Expectation)	2.65
Average Assurance Value(Perception)	2.55



Interpretation: The average Assurance value for expectation is higher than that of the average assurance value of perception. This clearly shows that the company is not fulfilling its assurance responsibilities in some aspects be it the politeness of the employees of the company towards the customers coming to the company, customers doing transaction with the employees, or in terms of support by the company to the employees or employees support to the customers.

3. Analysis on Tangibility Basis:

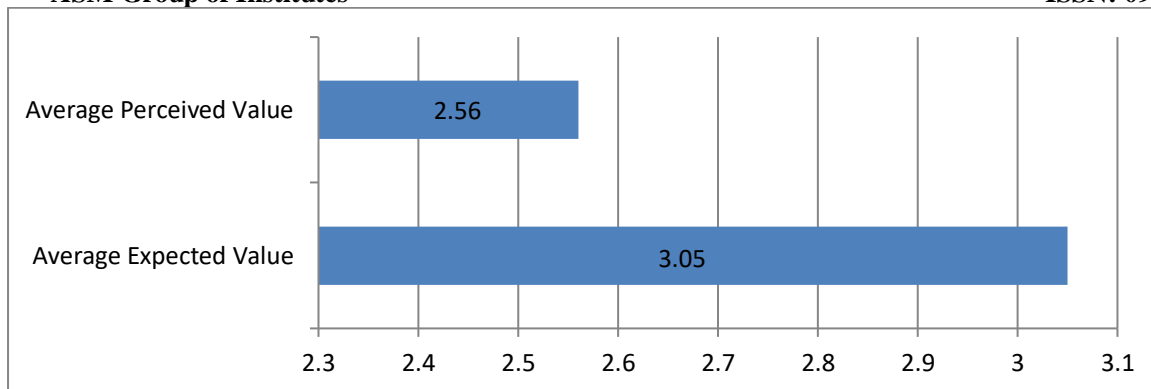
Total Respondents	320
Average Tangibles Value(Expectation)	3.89
Average Tangibles Value(Perception)	2.59



Interpretation: The average expected value in terms of Tangibility is higher and the perceived value is lower or near about to neutral. This may be because the company is not updated or is not using the modern technologies or in terms of appearance. Since the response is neutral, then it can be said that consumers cannot rely on the company in terms of tangibility as the facilities might not be appealing or up to the mark.

4. Analysis on Empathy Basis:

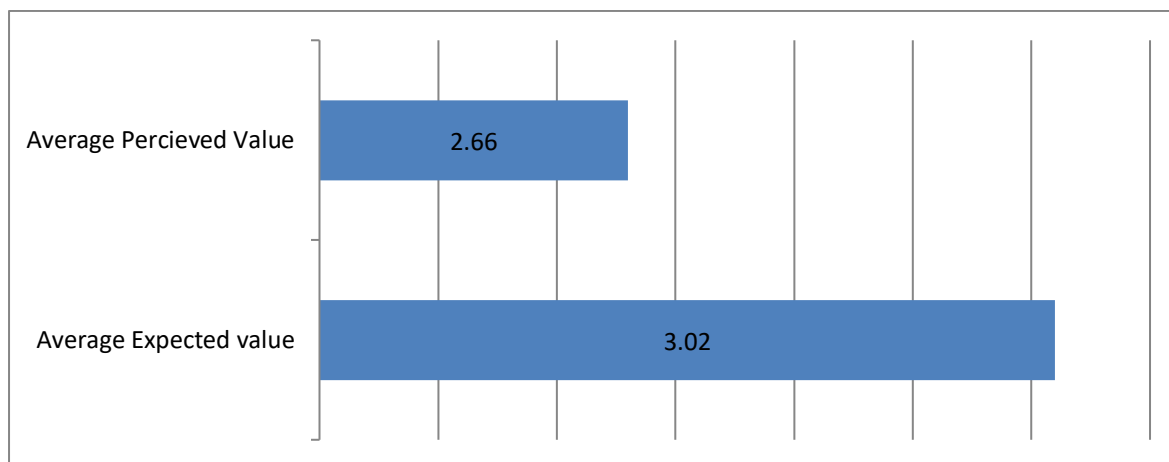
Total Respondents	320
Average Empathy Value(Expectation)	3.05
Average Empathy Value(Perception)	2.56



Interpretation: As per the values obtained of the empathy parameter, the expectation value is high as compared to that of the perceived value i.e. it can be said that the customers are not or least enjoying the services provided by their company or it can be said that the employees and the company are not giving proper attention to its customers. Also the company does not or might not know the needs of its employees.

5. Analysis on Responsiveness Basis:

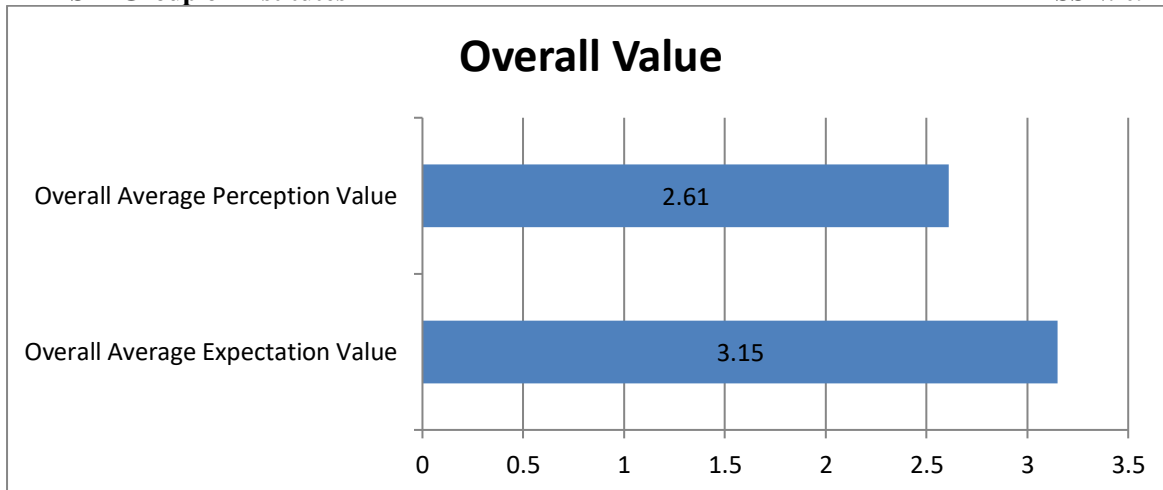
Total Respondents	320
Average Responsiveness Value(Expectation)	3.02
Average Responsiveness Value(Perception)	2.66



Interpretation: The average value of responsiveness for expectation is high as compared to that of the perception. This simply shows that the company is lacking somewhere in terms of response delivery to the customers i.e. they are failing or lacking in terms of service and related promise to be performed. Also there can be trust issues between the customer and the employees of the company in some or the other aspects.

6. Overall Analysis:

Total Respondents	320
Overall Average Expectation Value	3.15
Overall Average Perception Value	2.61



Interpretation: The average value of Expectation is high and the average value of Perception is low which shows that the customers who are associated with the General Insurance products of a company are not at all happy with the services provided by the company due to several reasons like trust issues or the promises made. The reason for this perception value is that the company is not concerned about the customers associated with the company.

Findings:

The researcher has tried to determine the consumer perception towards General Insurance and it has been found out that the respondents have knowledge towards general Insurance.

It has been determined that most of the respondents prefer Government owned General Insurance companies (69%) instead of private owned General Insurance Companies (31%) just because of the name Government owned or might be due to their government jobs.

Upon studying the service gap, it has been determined that the average expected value is high for each of the service while the average perceived value is low.

The customer when goes to a company then he has many expectations from the company but at the same time no company is able to full fill all the needs and requirements of the customers to 100%. This might be the reason for this gap between the expectations and perceptions.

Suggestions:

The Private owned companies should focus more towards the customers to attract the customers and as their main competitors are the government sector companies and most people prefer for governmental policies rather than going for private policies just because of safety.

Normal public has a higher trust level on Government sector as compared to private sector companies and thus private companies should build trust among the customers.

The private companies should make the public aware that they are also backed by IRDA to protect the rights of the customers as they might not have idea about it that to protect their money and to refund their money IRDA is there always.

The data obtained while analyzing the service gap shows higher difference between the expected value and the perceived value. So it can be suggested that both the sectors (the Government and the private ones) should focus on how to fill this gap as it is the responsibility of the company to fill this gap and make a positive mindset among the customers.

Conclusion:

Here the researcher has tried to determine the consumer perception towards general insurance and from the study it has been determined that a majority of respondents have knowledge about General Insurance and also they have knowledge about its terms and conditions. The respondents were mainly the Government sector employees (69%) and hence it was found out that they were inclined towards Government owned policies while those who were from private sector jobs were inclined to both the sectors. It has also been determined that the maximum source through which the general public purchases the policy is the online means as it is trending now-a-days and least are purchasing through branch walk-ins. The main thing which the policy holder prefers before taking a policy from a company is its claim settlement ratio and hence this is the main factor considered.

The researcher has done analysis to determine the service gap between the services of both the sectors using the SERVQUAL Model and it has been found out that there are larger differences between the expected services of the customers from the company and the perceived services of the customer from the company.

References:

Dr. Mehul P. Desai; Ms. Nikita Kahar on the topic "Customer Satisfaction Towards The Services Provided By General Insurance Companies Within Surat City With Respect To Vehicle Insurance".
T. Chandrashekhara; Dr. K. S. Sarala, in their study on "AN EVALUATION OF PERFORMANCE OF SELECTED GENERAL INSURANCE COMPANIES IN INDIA"
Dr. Aashish S. Jani in his paper on "A Study Of Consumer Perception About Service Quality Of Indian Non-Life Insurance Companies: Comparative Analysis between Governments Owned Non-Life Insurance and Privately Owned Non-Life Insurance"
Indian Credit Rating Agency (ICRA) 2013, in its Paper titled —Indian General Insurance Industry- Industry Outlook and Performance Review

Bibilography:

R. Srinivasan, Services Marketing, Prentice Hall Of India Private Limited, New Delhi.
Rajendranargundkar, Services Marketing: Text & Cases, Tata Mcgraw-Hill Publishing Company, New Delhi, 2008
Zeithaml, Parasuraman & Berry, Delivering Quality Service, The Free Press, Macmillan. 2008

Competency Mapping: A Tool of Appraisal

Dr Amey A Choudhari

Professor, MBA Department,
ISPM's Rajarshi Shahu College of Engineering,
Pune – 33, India E Mail ID: ameychoudhari@gamil.com

Dr M S Jagnade

Professor, G.W.Arts and Commerce,
Nagbid, Chandrapur, Maharashtra, India

Abstract:

In the phase of globalization it becomes necessary to monitor all the processes in manufacturing and service organization. Optimization of the production and the increase in the profitability are of vital importance. This can be achieved either by cutting the cost or boosting the efficiency of the system. The kin objective of Human Resource Management (HRM) is to develop and monitor the Human Resource (HR) to achieve common organizational goals. In modern era the non-skilled and semi-skilled jobs are getting replaced with high-skilled specific jobs worldwide. There is good amount of the change in the HR functions, organizational culture and overall management attitude. Industry started preferring versatile multi-skilled persons for their functioning. One should know the core competencies of every strategic business units (SBU) for flawless day to day monitoring and also for planning. Competency mapping is the precise method of understanding the key competencies of every SBUs and effectively implementing the same in various operations. This can be achieved though implementation in work assessment, training and development and recruitment. Competencies are the expertise developed in the work and strengths of the SBUs. An extrovert organization shall have well defined roles of their employees and competency areas of every employee with concerned departments. Process of competency mapping indentifies strength and weaknesses of each employee, better realization of strengths, and to give acceleration to their career development in future for overall development of organization and apparently the employees. Competency mapping test can be done for all existing employees, new identified employees, job seekers and students. Competency mapping is a precision tool in the area of behaviour and performance of any individual. Requirements for 'center of excellence,' amongst all employees like, knowledge, experience, expertise skills and positive attitude can be mapped and developed through the process of competency mapping. Core competency development is the key area for six sigma implementation in quality and efficiency management.

Keywords: *Globalization, Efficiency, Human Resource Management, Versatile Multi-Skilled, Core Competencies, Monitoring, Planning, Strategic Business Units, Competency Mapping, Center of Excellence, Six Sigma.*

Introduction:

Global competition has highlighted the importance of efficiency and affectivity of every organization in meeting global challenges like scarcity of key resources, increasing cost of operations and excellence demanded by global consumers. Challenge is to manage the equilibrium for better

profits. Human Resource Management (HRM) is most important area responsible for efficiency and affectivity of an organization. The organizational goals are to be achieved with due consideration of

individual goals of employees. The conflict is to be resolved, in-time, between two for development of both counterparts. It is difficult to record excellent financial and operational progress without having healthy personal relations. Globalization is replacing un-skill job requirements with semi-skill and semi-skill with high-skill jobs. Industries are preferring candidates with high-skills and versatile personalities for their recruitments. This process has increased the need of competency mapping process for existing and future employees. There is good amount of the change in Indian industries in HR functions, organizational culture and overall management attitude. Now a days, the scope of HRM is enhanced in India.

Competencies are the expertise developed in the work and strengths of the SBUs. An extrovert organization shall have well defined roles of their employees and competency areas of every employee with concerned departments. Process of competency mapping identifies strength and weaknesses of each employee, better realization of strengths, and to give acceleration to their career development in future for overall development of organization and apparently the employees. The developed organizations have extensive competency mapping system implemented for the monitoring and decision making. It is equally important to have well identified list of competencies and developed key competencies as expertise area of each SBU. The process of competency mapping starts with analysis of each employee including strength, weaknesses, opportunities and threats analysis (as a tool), developing the core strength of employee, providing boost for improving weaknesses, knowledge gaining and sharing for overall development.

Globalization has inculcated the phase of competitions in India. Organizations with high efficiency and effectively will only be serving in global market. Organizations include manufacturing and service providing agencies. Their challenges defer as per the nature of job they perform. Key factors and area if competencies differ and their measures to improve the efficiency and effectiveness differs. It has become to enhance the skill sets of all employees. The detail study of skill sets possessed by employee will help to understand the level of preparation and to upgrade the skill set they have. The weakness of an employee can be identified for further improvement by providing trainings. Organizations are more concerned in adopting new ways in improving efficiency. In the next step of development the organizations have preferring an employee having core skills instead of multi skilled employee. Organizations want to know the present level of skills of their employees so that they can improve. Competency approach includes formulation of the policy, linking the policies with concern departments, implementation. Competency mapping is the part of good HR policies to be implemented, by putting together the organization and the individual employee's goals. The conflict is to be avoided to provide hassle free environment.

Competency mapping process includes mapping the key areas of work and the core skills developed by the employees as per requirement. The gap between the required skills can be identified by mapping the available skills with required skills. Role of each employee should be well defined and listed with areas of core competencies, so that; the tasks can be allotted suitably. Not only existing employee is but also forthcoming employees and students before their joining can face the competency mapping process. Positively the students and forthcoming employees can improve their skills by joining specific training program. The broad view companies do the due exercise while selecting students during their campus placement drive. Type of skills required changes as per the nature of the job. Competency mapping is the most effective technique in identifying the skills and behavior of an individual employee.

References:

Arya Chanakk in his 3000 years old world famous book “Arthashastra”, mentioned the terminology of competency mapping in social and economic problem solving. He has elaborated competency mapping models, different human aptitude theories, human behavior theories, importance of skills, knowledge, logics and implementation of the same.

Woodruff (1991) in his paper on “competency mapping – different phases” explained three tiers of concept competency. One is the competency often refer to a employee having various behavioral perspectives and skill sets having behind his successful image in an organization. Two is the competence referred to the work, which mean the exact area of work where the employee has achieved competence. Third is competencies referred to combination of above.

Albanese (1998) in his book defined the concept of competencies as individual characteristic contributing towards effective managerial performance.

Hayes (1978) in his comprehensive research elaborated competency in simple form. Competencies are the blend of known skills of employees, their massive knowledge in the area of work, characteristics, social values linked for better performance.

Dr. Srinivasa A. Rao, training, research head, BITS-Pilani, Dubai explained the term competency. According to him it includes talent management process; conducting awareness workshops; talent segmentation process; competency mapping and developmental training exercise; preparation for its implementation.

Competency: An employee with proper dimensions of behavior supporting his competent performance. Competency is process of underlying characteristic of each employee which is collateral to effective performance expected by organization in given situation.

Problem Statement:

It is necessary to study the difference between job competency expectations possessed by the manufacturing organizations for existing employees and the competency levels required for existing form of working. Precise work competencies required to be identified and communicated to every decision maker in the manufacturing organization.

Present research includes the correlation of the employer work competency expectations with the existing work competency level of the employees. This will give improved chance for efficiency enhancement, minimization of wastages, development of multiple skill sets through which employer and employees will get satisfaction of excellence.

In order to ascertain competency expectations, due competency in work for a manufacturing organization, supervisors and operations managers were asked to rate the significance of particular work competencies for their employees. The competencies include generic knowledge, employs’ abilities (skills) and attitude towards work. The operation managers were asked to list the necessary competency to employees work and they were also asked to decide the necessary levels of competencies in the particular area.

Scope of the research:

Present study includes the study of the skill levels of the employees, so that required training can be given.

This is attempting to identify the multi skilled employees.

A replicated model can be adopted for solving problems of other departments also.

Significance of the research:

Competency Mapping is most demanded instrument in growing industries taking global challenges and equally proved important. The perspectives, where techniques of Competency Mapping can be adopted are as follows:

- Correct identification of training needs will boost the efficiency of the employees.
- The gaps can be bridged between actual yield and the desired yield.
- Developed competencies are also useful for individual career development of employees.
- Adoption of Competency Mapping process keeps prepared employees for future challenges.
- Enable employees to change the approach of work.
- Work assignment in accordance with core competencies can be adopted for better results and SBU can stand tall based on their competencies.

Task of the competency mapping will help individual employees to identify the areas of work where competencies required and accordingly they can develop their skills which are useful in their career planning.

Attributes of the term Character¹⁹:

Knowledge and skills are the initial factors which can be developed over the time. Attitude, motive & behavior are at second level and comparatively challenging to develop.

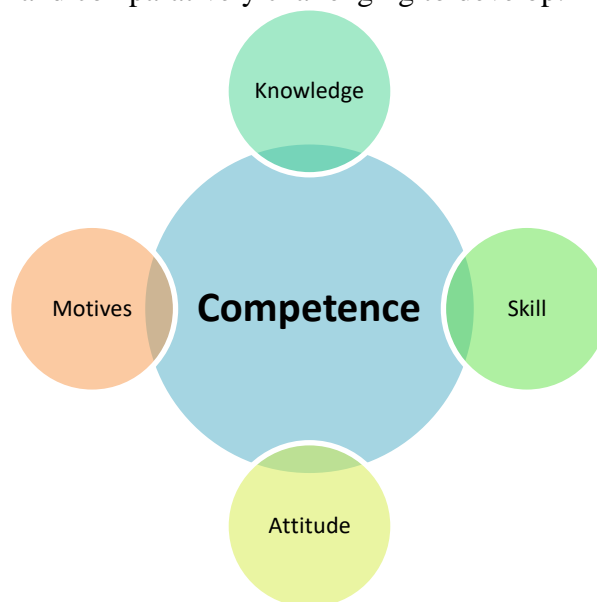


Figure: 1

Process:

- Professional organization gives emphasis on the individual career development through which organizational growth can be achieved.
- Training, Learning and development are the core areas for development.

Table: 1 Table showing view points of Competence and Competency

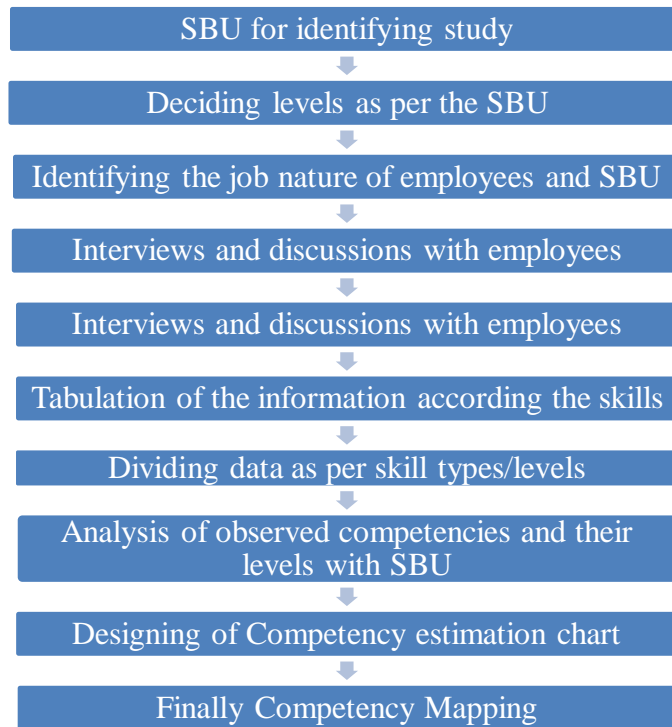
Competence	Competency
Based on the results	Based on employees' behaviour
Elaborates the future of the job	Elaborates future of the person
Includes skills and knowledge require to perform	Includes basic character of employee, helpful for better performance
Not transferable, since it includes individual skills	Transferable by association
Measured in individual performance	Measured in team/group performance
Process oriented	Result oriented

Objectives:

1. To measure the technical competency of the present employees in selected industries of Pune.
2. To provide a model for general competency estimation model for any industry.
3. To find out requirement of training in selected industries.
4. To recommend based on the learning and observations of present research.

Hypotheses Statement:

- H(a)- Industry environment has significant effect on individual employee's competency.
H(b)-Technical competency has significant effect on individual employee's competency.

Stages in the process of competency mapping:**Figure: 2****11. Methodology:**

The researcher has observed existing system of work, nature of individual employees' work group work in selected industries in Pune. Conducted semi structured interviews of employees and the management people to understand their strengths and weaknesses. Also, Questionnaire used is method for collection of data from employees. ANOVA is used for testing of Hypothesis and the conclusion is drawn accordingly.

12. Sampling:

A sampling tool of census survey was used for collection of data from employees. Entire population of 1050 respondents is taken for analysis.

13. Design:

1050 employees, from different departments and SBUs are considered. 1050 respondents include employees working at different levels of production, warehouse, maintenance and service departments of industries.

14. Primary data:

The primary data is collected by issuing Questionnaire to 1050 employees of various industries and SBUs in Pune. 1050 respondents include employees of various level and various groups.

15. Secondary data:

Secondary data is collected from the company manuals and records. Also, semi structured interviews are conducted for employees and senior management persons.

16. Limitations:

Inherently the researcher expects some problem in the data collection and sampling. Considering the time frame and the availability of the recourses, it seems justifiable to carry the present research with adoptable conclusions. This is to list out the limitations, for better understanding, as under.

- New employees may find little understanding of the questionnaire, since they are not aware about all the present practices in new organization.
- Reluctant approach of few respondents in sharing unbiased information.
- Time availability of the respondents for filling up the questionnaire was found insufficient.
- The employee respondents are not the ultimate decision makers in all given situations.

17. Analysis:

17.1 Cross-sectional study of Gender wise Competence of the respondents:

The researcher has compared the competence of the male and female respondents

Table:2 Table showing Gender wise Competence according to their Skill Type					
Gender	Unskilled	Semi-skilled	Skilled	Multi-skilled	Total
Male	38	87	188	287	600
Percentage	6.33%	14.50%	31.33%	47.83%	100%
Female	35	55	194	166	450
Percentage	7.78%	12.22%	43.11%	36.89%	100%
Total	73	142	382	453	1050
Percentage	6.95%	13.52%	36.38%	43.14%	100%

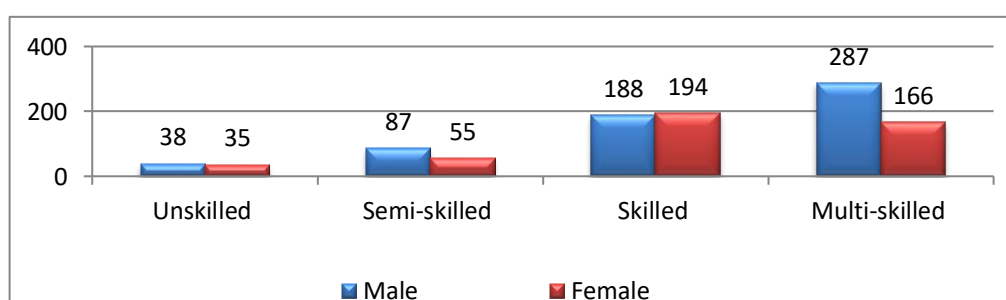


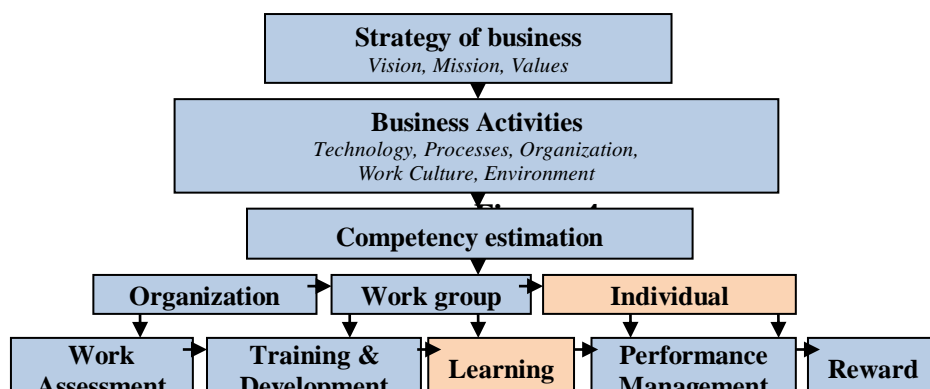
Figure: 3

Interpretation:

The researcher has observed that industries are appointing skilled and multi-skilled employees more than appointing semi-skilled and unskilled employees. 36.38% of total employees are skilled employees and 43.14% are multi-skilled. Employees have developed multiple competencies to cope up the needs of the industries. Multi-skilled employees are in comfortable zone as far as their employability is considered.

17.2 Competency Model designed²²:

The researcher has designed the competency mapping model for the estimation of any core industry. Dr. Arthur Andersen has given the model for competency mapping; the researcher has extended the model to next level. The model can be used for better understanding of processes and its emergence from basic management concept. Also present model gives clear understanding the concept of competency mapping.



17.3 Training requirement in selected industries:

Researcher has compared the five parameters for understanding the training requirements of employees. Cross-sectional study helped to understand exact requirement.

Table: 3 Table showing Training Requirements							
Gender	Level of Skills	Weekly Training	Monthly Training	Half Yearly Training	Annual Training	Not Required	Total
Male	Unskilled	16	12	8	2	0	38
	%	42.11%	31.58%	21.05%	5.26%	0.00%	100.00%
	Semi-skilled	37	18	16	12	4	87
	%	42.53%	20.69%	18.39%	13.79%	4.60%	100.00%
	Skilled	22	35	38	42	51	188
	%	11.70%	18.62%	20.21%	22.34%	27.13%	100.00%
	Multi-skilled	10	16	20	85	156	287
	%	3.48%	5.57%	6.97%	29.62%	54.36%	100.00%
Female	Unskilled	15	10	8	2	0	35
	%	42.86%	28.57%	22.86%	5.71%	0.00%	100.00%

	Semi-skilled	21	15	11	5	3	55
	%	38.18%	27.27%	20.00%	9.09%	5.45%	100.00%
	Skilled	22	35	38	47	52	194
	%	11.28%	17.95%	19.49%	24.10%	26.67%	99.49%
	Multi-skilled	2	25	34	40	67	166
	%	1.20%	15.06%	20.48%	24.10%	40.36%	100.00%

The researcher has classified the 1050 respondents in two major classes – Male and Female. Further each class sub divided into four levels of skills, such as Unskilled, Semi-Skilled, Skilled, Multi-Skilled. The requirement of training is divided in to five categories, like Weekly Training, Monthly Training, Half Yearly Training, Annual Training, Not Required

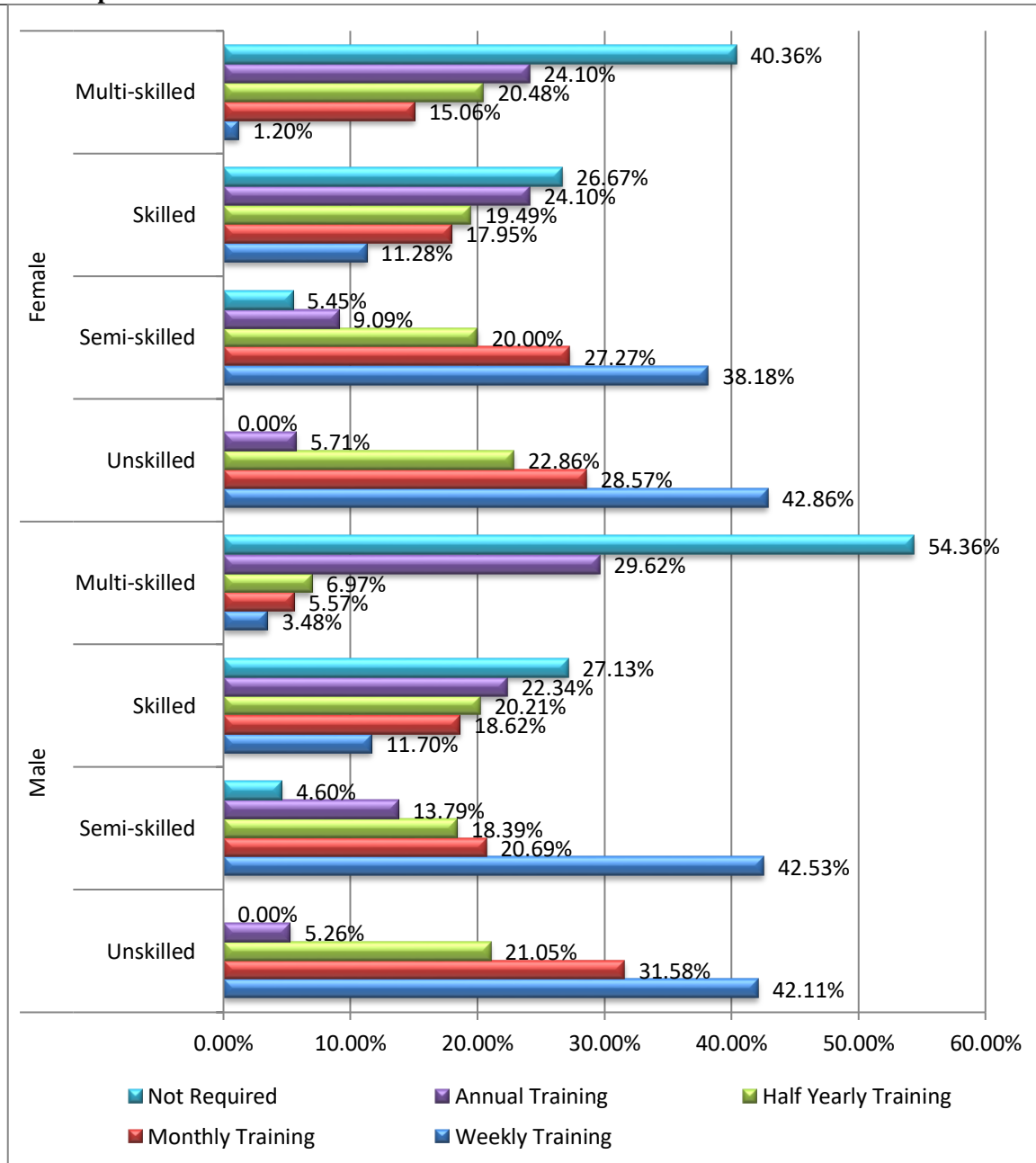


Figure: 5

Interpretation:

The cross-tabulation reveals clearly that the multi-skilled employees have very less requirement of training. They have already developed set of skills and competencies. Whereas the unskilled employees required more trainings than skilled and multi-skilled workers.

18. Hypothesis testing:

Ha- Industry environment has significant effect on individual employee's competency.

H0- Industry environment has no significant effect on individual employee's competency.

18.1 Hypothesis 1:

Researcher has adopted variance analysis. For testing employee's competency against environment the selected independent variable is "in-time completion of job". In manufacturing industry in-time completion of job is most important thing to measure the competency of employee. Researcher has selected this point for comparison. The dependent variables were related to the levels of efforts that employee put.

The dependent variables are:

- In-time completion needs more efforts
- In-time completion needs best skills
- In-time completion is challenge
- In-time completion gives motivations

Table: 4 Table showing the responses given for in-time completion

Particulars	Sum of Squire	df	Mean Squire	F	Sig.
In-time completion needs more efforts	35.884	4	8.971	8.757	<.001
In-time completion needs best skills	49.694	4	12.42	9.315	<.001
In-time completion is challenge	42.649	4	10.66	9.521	<.001
In-time completion gives motivations	56.762	4	14.99	13.33	<.001

Interpretation:

The significance of variables is less than the acceptable limit of .005. Hence, the alternate hypothesis H(a) is accepted and null hypothesis H(0) is rejected. From analysis it is clouded that "Industry environment has a significant effect on the individual employee's competency.

18.2 Hypothesis 2

H(b)-Technical competency has significant effect on individual employee's performance.

H(0)- Technical competency has no significant effect on individual employee's performance.

Researcher has used ANOVA for testing this hypothesis the independent variable is the same as in Hypothesis 1 and the dependent variables selected are

- Depends instructions regularly
- Use of own tested skill sets

Table: 5 Table showing the responses given to skill and dependency

	Sum of Squire	df	Mean Squire	F	Sig.
Depends instructions regularly	58.219	4	14.555	11.46	<.001
Use of own tested skill sets	50.578	4	12.645	15.16	<.001

Interpretation:

Significance level is ≤ 0.005 which is within the acceptable range. Hence, we accept the alternate Hypothesis H(b). and rejects the null Hypothesis H(0). This made us infer that technical competencies cannot be compromised in manufacturing industry.

19. Recommendations:

Periodic Competency mapping process will reveal weak areas of SBUs and their employees. Training can improve the competency of the individual employee and the work group. The competencies have important role in achieving the targets and overall efficiency of employee can be enhanced. Competence is also important in the career path of an individual. Researcher strongly recommends adoption of periodic competency mapping process and training process.

20. Conclusion:

Competency of employee is the lifeline of the manufacturing industry. Competency mapping model gives the clear outline for better understanding. Skilled and Multi-Skilled employees are more proffered by industries, because of their versatility. Competence is equally important in individual's career development and to achieve required employability. In this regard, industry environment is also one of the important parameter and it has significant effect on individual employee's competency. Technical competencies have significant effect on individual employee's competency. Competency mapping is ongoing process and continuous monitoring, training and development is required.

References:

1. The Handbook of Competency Mapping: Understanding, Designing and Implementing Competency Models in Organizations by Seema Sanghi
2. Competency based HRM: A strategic resource for competency mapping, assessment and development centres by Ganesh Shermon
3. Dr. Arthur Andersen's model of competency: www.google.co.in/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=Arthur+Andersen+model+of+competency.
4. Vikram Singh Chouhan and Dr. Sandeep Srivastava, Competency Mapping For HR Professionals In IT Industry, The International Journal of Management, ISSN 2277-5846, Vol 2 Issue 3 (July, 2013)
5. Vikram Singh Chouhan & Sandeep Srivastava, Competency Mapping Model for HR Professionals In India, International Journal of Human Resource Management and Research (IJHRMR), ISSN 2249-6874, Vol. 3, Issue 1, Mar 2013, 113-118
6. Dr. Muna Kalyani, Competency Mapping Process in Current Scenario: A Need for Sustainable Growth, International Journal of Research in Humanities and Social Studies, Volume 3, Issue 3, March 2016, PP 18-28, ISSN 2394-6288
7. Prof. (Dr.) Ritu Gandhi Arora, Relationship between Organization Strategies and Employee Competency Mapping Practices, working paper, Institute of Management. Faridabad
8. Prof. Lakshmi Narayana. K. and Dr. K. Gayathri Reddy, A Study on Competency mapping of the employees in Textile Manufacturing Companies with reference to Bangalore city, Acme Intellectuals International Journal of Research in Management, ISSN 2320 – 2939, Vol- 6 No. 6 Apr 2014

9. Competency Based Training Needs Identification and its Impact on Individual and Organizational Performance – A Case Study, BVIMSR, Research Centre, C.M. Siddique, International Journal of Human Resource Management, 15:1, 219-244, February 2004
10. Mrs. B. R. Celia and Mr. M. Karthick, Competency Mapping Of Employees in the Power Sector with Special Reference to Chennai, ZENITH, International Journal of Multidisciplinary Research, Vol.2 Issue 1, January 2012, ISSN 2231 5780
11. Dr. B. Sripirabaa, Y. Benazir and V. Devipriya, Investigating the Competency Mapping Among the Operators in an Auto Component Organisation, International Journal of Informative and Futuristic Research, IJIFR/ V2/ E2/ October 2014
12. Dr. Jamnean Jountrakul, Competency Based Skills Development: A Case Study of a Dock Station Management Company in the Logistics Industry in Thailand, Rattana Bundit University (RBAC), Thailand
13. Josh Bersin, The Role of Competencies in Driving Financial Performance, Bersin & Associates, International Journal Human Resource Management, ISSN: 1748-8583 June 2006
14. <http://www.hinduwebsite.com/history/kautilya.asp>
15. <https://www.ncbi.nlm.nih.gov/pubmed/27145013>
16. The Practice of Social Research by Earl R. Babbie, Wadsworth, 13th Edition
17. Business Research Methods by William G. Zikmund, Barry J. Babin, Jon C. Carr, Mitch Griffin, Cengage Learning, 8th Edition
18. <https://www.practo.com> › Chennai › Ophthalmologist/ Eye Surgeons › Anna Nagar
19. Research Methods for Social Work by Allen, Earl R. Babbie, Cengage, 7th Edition
20. Research Methodology by C.R.Kothari, New Age International Publication, 2nd Edition
21. Research Methodology Dr. C. R. Kothari, PHI Publication, 5th edition
22. www.anbhf.org/pdf/moore_crampton.pdf

The Analysis of Financial Operations of Tata Motors, Pune Plant

Dr Amey A Choudhari

Professor, MBA Department,
Rajarshi Shahu College of Engineering, Pune – 33, India
E Mail ID: ameychoudhari@gmail.com

Dr M S Jagnade

Professor, G.W.Arts and Commerce, JSPM's
Nagbid, Chandrapur, Maharashtra, India

ABSTRACT

Tata Motors is one of the reputed automobile companies¹ in Asia and their Indica plant in Pune is collaboration with international reputed Merchandise Benz and German Robotic and automation solutions. The paint shop "C" unit is having capacity of 1500 Cars² per year. The researcher has found worth considering the availability of secondary data of paint shop "C". Pragmatic and precise conclusion and be drowned by applying various financial ratios. Financial ratio is a functional tool which empowers the researcher to check the financial health. Present research has considered the data of last five years of Paint Shop. Research objective is focused to get pragmatic results of the profit earnings, cost of goods sold and overall financial health of Paint Shop unit "C". The researcher has given some suggestions based on the inference statistics of Paint Shop "C".

Keywords – Ratio Analysis, Efficiency, Effectiveness, Balance Sheet

I. INTRODUCTION

Tata Motor's Indica is the one of the oldest unit of Tata Motors, started in 1998 with Paint Shop "C" as a first step in reestablishing tie-up with the giant Merchandise Benz³. There is automation and robotic tie-ups with German Robotic and automation solutions Corporation, South Berlin Germany. Previous CEO of Tata Motor Mr Ratan Tata with the recent CEO Cyrus Mistry has developed the Paint Shop further in the decade after. Till 2010 Paint Shop "c" was one of the most automated and advanced paint shop in Asia. Tata Motors as a holding company of SBU Indica Paint Shop "C" as one of the best resource to solve the technical problems in other Paint Shops all over India. The

¹ Bhaktavatsala Patra, C. (20 February 1993). "Structural Configurations and Strategic Investments: Indian Automobile Industry". Economic and Political Weekly. Mumbai, India: Sameeksha Trust. 28 (8/9): M29.

² Suresh Rangarajan (Head-Corporate Communications), Tata Motors Limited, in annual publication, pp 88.

³ TOI article: Mercedes exits 6-decade old pact with Tata Motors, Nandini Sengupta, T N N, 14 May 2013

expert team of “C” plant has contributed lot in setting up of Tata Plant in China in the year 2008. Paint Shop is providing server to Tata Indica and as a high capacity SBU provides 20% of their services to other vendors.

II. RATIO ANALYSIS

A traditional method of analysis which is most proven and used by decision makers is Ratio Analysis.⁴ It is a Fundamental Analysis Technique⁵ to pip in to the company health in short duration of time. With this one can compare two variables over the period. There are some ratios prominently used by the decision makers.

III. IMPORTANCE OF USE OF RATIO ANALYSIS

1. To compare heavy figures with other ones
2. For predicting and scheduling
3. A tool to justify financial decisions
4. To compare yield and efficiency
5. To get exact level of strength of business and weaknesses

IV. REVIEW OF LITERATURE

Smith J P and Marks N W⁶

Ratio analysis is the one of the primary tool to understand and compare consolidated data. Ratio is the physical tool to initiate any decision or corrective action in any organization. It is a wide accepted tool for the analysis of Borrowed Capital and Returns on Investments.

Eva Chokolola⁷

The business is more depending on the borrowed money. Businesses having high ratio / more than 1 ratio are more towards the bankruptcy when they are unable to make payments in time. In such case new financiers also show reluctance in providing funds to the Business. A borrowing is not always bad but it helps in saving taxes.

⁴ Thomas, J., Evanson, R. V. (1987), an Empirical Investigation of Association between Financial Ratio Use and Small Business Success. *Journal of Business Finance & Accounting*, 14(4), pp 555-571

⁵ Osteryoung, J., Constand, R., Nast, D., (1992) Financial Ratios in Large Public and Small Private Firms. *Journal of Small Business Management*, 30 (3), pp 35-46.

⁶ Smith J P and Marks N W (Spring 2010), “Signaling Firm performance through financial Statement Presentation, An Analysis Using Special Items”, *Contemporary Accounting Research*, Vol. 27, Issue 1, pp.289-332.

⁷ Eva Chokolola (1968) “Financial Ratios, Discriminate Analysis and The Prediction of Corporate Bankruptcy” Volume 23, September 1968, pp. 586-609.

V. RESEARCH METHODOLOGY

V. RESEARCH METHODOLOGY

The researcher has used data analysis to find out the correlation between various financial variables. The secondary financial data used for functional analysis of ratios⁸. The data of Paint Shop “C” is exclusively made available by plant in charge (Cost and Finance). Data is not publicly available. The tools of ratio analysis are applied on five year data that is 2014-2019 till end of Feb 2019.

VI. OBJECTIVE

An objective is to apply tools of ratio analysis to check the health of Paint Shop “C” and provide suggestions for improvement.

VII. ANALYSIS

CURRENT RATIO

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

TABLE SHOWING CURRENT RATIO

Year	Current assets (Rs)	Current liabilities (Rs)	Ratio	Inference
2014-2015	80514736.68	50419848.80	1.60	Current assets are 1.6 times to Current Liabilities in 2014-15. It is doubled (to 3.25 times) in 2018-19. The liquidity position is improved during this period.
2015-2016	335958761.00	77549390.46	4.33	
2016-2017	312395488.40	120184885.90	2.60	
2017-2018	457962717.60	120232322.80	3.81	
2018-2019 (up to Feb 2019)	448720580.20	137865661.20	3.25	

Source: Secondary data

⁸ Prasanta Paul (2011) “Financial Performance Evaluation - A Comparative Study of Some Selected NBFCs” Volume 5, Issue 5, May 2011.

2. ABSOLUTE LIQUID/CASH RATIO

$$\text{Absolute Liquid Ratio} = \frac{\text{Absolute Liquid Assets}}{\text{Current Liabilities}}$$

TABLE SHOWING ABSOLUTE LIQUID RATIO

Year	Absolute liquid asset (Rs)	Current liabilities (Rs)	Ratio	Inference
2014-2015	98419.44	50419848.8	0.002	Absolute Liquid Assets are 0.002 times to Current Liabilities in 2014-15. It is increased to 0.2417 times in 2018-19. The liquidity position has improved during this period.
2015-2016	203146.04	77549390.46	0.0026	
2016-2017	143326.62	120184885.9	0.0012	
2017-2018	4028841.72	120232322.8	0.0335	
2018-2019 (up to Feb 2019)	33328169.82	137865661.2	0.2417	

Source: Secondary data

3. ACID TEST RATIO

$$\text{Acid Test Ratio} = \frac{\text{Current Assets less Inventory Stocks}}{\text{Current Liabilities}}$$

TABLE SHOWING ACID TEST RATIO

Year	Current Assets Less Stock (Rs)	Current liabilities (Rs)	Ratio	Inference
2014-2015	30094887.88	50419848.80	0.6	Current Assets Less Stock are 0.6 times to Current Liabilities in 2014-15. It is increased to 2.25 times in 2018-19. The liquidity position has improved during this period.
2015-2016	258409370.60	77549390.46	3.33	
2016-2017	192210602.50	120184885.90	1.6	
2017-2018	217730394.90	120232322.80	2.81	
2018-2019 (up to Feb 2019)	310854919.00	137865661.20	2.25	

Source: Secondary data

4. INVENTORY STOCK TURNOVER RATIO

$$\text{Inventory Stock Turnover Ratio} = \frac{\text{Sales}}{\text{Inventory}}$$

TABLE SHOWING INVENTORY TURNOVER RATIO

Year	Sales (Rs)	Inventories (Rs)	Times	Inference
2014-2015	361802851.6	50648324.82	7.14	Inventory Turnover Ratio is 7.14 times in 2014-15. It has increased to 17.96 times in 2018-19. The use of Inventory is increased more than two times in the period where the efficiency is increased. More sales with fewer inventories are achieved.
2015-2016	514709060.9	71975206.5	7.15	
2016-2017	593054281.8	149070242.5	3.98	
2017-2018	516903044.5	32364346.98	15.97	
2018-2019 (up to Feb 2019)	906652436	50479194.98	17.96	

Source: Secondary data

5. DEBTORS TURNOVER RATIO

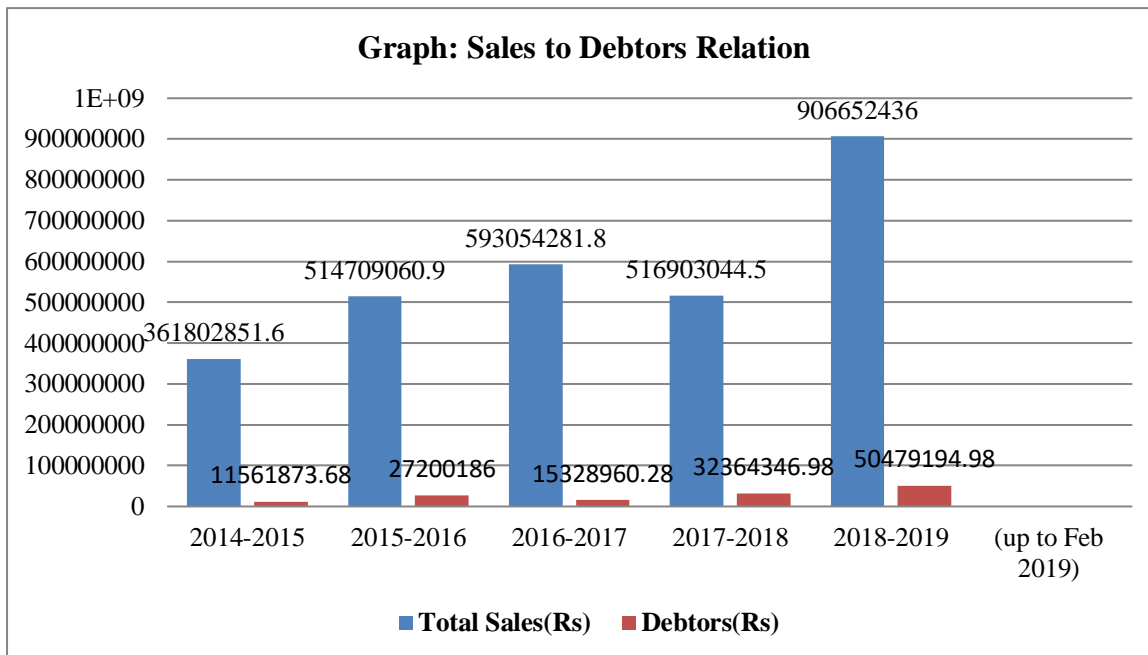
$$\text{Debtors Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Debtors}}$$

TABLE SHOWING DEBTORS TURNOVER RATIO

Year	Total Sales (Rs)	Debtors (Rs)	Times	Inference
2014-2015	361802851.60	11561873.68	31.29	Debtors Turnover Ratio is 31.29 times in 2014-15. It has reduced to 15.97 times in 2017-18. The position is improved and the debtors are reduced.
2015-2016	514709060.90	27200186.00	18.92	
2016-2017	593054281.80	15328960.28	38.69	
2017-2018	516903044.50	32364346.98	15.97	
2018-2019 (up to Feb)	906652436.00	50479194.98	17.96	

2019)

Source: Secondary data



VIII. INTERPRETATION

1. Current assets are 1.6 times to Current Liabilities in 2014-15. It is doubled (to 3.25 times) in 2018-19. The liquidity position is improved during this period.
2. Absolute Liquid Assets are 0.002 times to Current Liabilities in 2014-15. It is increased to 0.2417 times in 2018-19. The liquidity position has improved during this period.
3. Current Assets Less Stock are 0.6 times to Current Liabilities in 2014-15. It is increased to 2.25 times in 2018-19. The liquidity position has improved during this period.
4. Inventory Turnover Ratio is 7.14 times in 2014-15. It has increased to 17.96 times in 2018-19. The use of Inventory is increased more than two times in the period where the efficiency is increased. More sales with fewer inventories are achieved.
5. Debtors Turnover Ratio is 31.29 times in 2014-15. It has reduced to 15.97 times in 2017-18. The position is improved and the debtors are reduced.

IX. SUGGESTION

The company should concentrate on the financial performance of the company. Tata Motors may use some steps to control the financial ratio to make extra profits. It is suggested to the company to improve the status of its absolute liquid asset and dater turnover ratio. Zero inventory of raw material concept can be adopted. The Company should reduce the burden of excessive Debtors also by booking prompt debit note to other SBUs of Tata Motors.

X. CONCLUSION

Present research is containing the comparison between various financial variables using ratios in Tata Motors Paint Shop “C”. This analysis reveals liquidity position of SBU. On the basis of the results interpretation has made and some general suggestions are given. It is strongly recommended to enhance the performance of the company to grab other opportunities. This analysis is communicated and suggestions are well taken by the management and factory In Charge. They have started the concept of the “Zero inventory for raw material” and shifted entire stock of the Paint and Spare parts to its supplier from 2nd March 2019. There is Work-In-Process stock only which is 12.25% of their previous stock. The Company has reduced Sundry Debtors by entering real time debit note to other SBUs of Tata Motors. Also has started getting advance funds from third party vendors.

APPENDICES

Balance Sheet as on 31st March 2014-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019 (up to Feb 2019)

PARTICULARS	2014-2015	2015-2016	2016-2017
1.SOURCE OF FUNDS			
(a) Shareholders fund			
i) Share capital	52696000	52696000	52696000
ii) Reserve and surplus	3951798.86	223621868.9	223621868.9
(b) Loan fund			
i) Secured loans	1019310.92	13389260.2	15538172.42
ii) Unsecured loans	556260230.4	436825247.8	369447175
TOTAL	613927340.1	726532376.9	661303216.3
2. APPLICATIONS OF FUNDS			
a)Fixed Assets			
i) Gross Block	422227687.9	437703464.6	448160970.7
ii) Less: Depreciation Reserve	210423074.4	233799854.4	265230093.3
iii) Net Block	211804613.6	203903610.3	182930877.4
iv) Capital Work-In-Process	13631908.46	#VALUE!	5553176.46
TOTAL	225436522	203903610.3	188484053.8
b) Investment	200	200	200
c) Current Assets, Loans &Advances			
i) Inventories	50648324.82	71975206.5	149070242.5

ii) Sundry debtors	11561873.68	27200186	15328960.28
iii) Cash and bank balance	98419.44	203146.04	143326.62
iv) Other current assets	16884656.14	12553963.42	11892364.22
v) Loans Advances	1721462.6	208351799.3	33565245.36
vi) Inter-sub unit office current a/c			
vii) Inter- unit office current a/c		15674459.78	102395349.4
TOTAL (A)	80514736.68	335958761	312395488.4
LESS (-)			
Current liabilities Provision			
i) Current liabilities	50419848.8	77549390.46	120184885.9
ii) Provision	62202494	71130600	69589722
iii) Inter sub office current a/c	-	210132	-
TOTAL (B)	112622342.8	148890122.5	189774607.9
Net current assets/liabilities (A-B)	32107606.12	187068638.6	122620880.5
Miscellaneous expenses			
Inter unit current a/c	70732693.4	-	-
d) Profit & loss a/c			
(Balance as per annexed a/c)	491330917.6	335559928	350198082
TOTAL	613927340.1	726532376.9	661303216.3

BALANCE SHEET AS ON 31ST MARCH 2017-2018 & 2018-2019 (UP TO FEB 2019)

PARTICULARS	2017-2018	2018-2019 (up to Feb 2019)
I.EQUITY AND LIABILITIES		
1. Shareholders' funds	-	-
a) Share capital	52696000	52696000
b) Reserve & Surplus	491269183.5	340205086.7
SUB TOTAL (1)	438573183.5	287509086.7
2.Non current liabilities		
a)Long term Borrowings	1813543613	1334156615
b)Deferred tax Liabilities		
c)Other Long term liabilities		
d)long term provisions	68917330	68595100
SUB TOTAL (2)	1882460943	1402751715
3.Current liabilities		
a)Short term borrowings		
b)Trade payable	30231714.48	64355262.64

c)Other current liabilities	80296650.28	71209756.52
d)Short term provisions	9703958	2300642
e) Inter-sub unit office current a/c		
f) Inter- unit office current a/c		
SUB TOTAL (3)	120232322.8	137865661.2
TOTAL (1+2+3)	1564120082	1253108289
II.ASSETS		
1.Non current asset		
a)Fixed assets		
i) Tangible assets	284831988.8	277350683.6
ii) Intangible assets		
iii) Capital WIP	794234173.1	419565327.2
iv) Intangible assets under development		
SUB TOTAL (a)	1079066162	696916010.9
b) Non Current investment	200	200
c) Deferred Tax assets (net)		
d) Long term loans & advances	27067002.98	106961166.4
e) other non Current assets	24000	510332
SUB TOTAL (1)	1106157365	804387709.3
2.current assets		
a) Current investment		
b) Inventories	231199601.5	256137971.2
c) Sundry debtors	32364346.98	50479194.98
d) Cash and bank balance	4028841.72	33328169.82
e) Short term Loans Advances	11479311.96	6326231.22
f) Other current assets	16652597.12	13977145.12
g) Inter-sub unit office current a/c		
h) Inter- unit office current a/c	162238018.4	88471867.84
SUB TOTAL (2)	457962717.6	448720580.2
TOTAL (1+2)	1564120082	1253108289

REFERENCES

1. I.M Pandey .Financial Management, 9thEdition ,Vikas Publishing House Pvt Ltd,Vol.23,pp.320-328.
2. Baty J. : Management Accountancy, Ed. 1975, p. 431
3. Hunt P, Williams C. and Donaldson G. : Basic Business Finance
4. Text and Cases, Ed. 1971, p. 116.
5. Kuchhal S. C. : Financial Management, p. 60.
6. Helfert Erich A. : Techniques of Financial Analysis, Ed. 1957, p. 57.

WEBSITES

1. www.tatamotors.com
2. www.tatamoterspaintshop-3.com
3. <http://greenbusinesscentre.com/energyaward2017presentations/Auto%20Engg/14%20Tata%20Motors%20Pune.pdf>
4. <http://greenbusinesscentre.com/energyaward2017presentations/Auto%20Engg/07%20Tata%20Motors%20Pantnagar.pdf>
5. <https://www.tatamotors.com/wp-content/uploads/2016/11/18070456/TML-Capabilities.pdf>
6. https://www.unglobalcompact.org/system/attachments/18468/original/Sustainability_Report_2010-11.pdf?1352266330
7. Tata Motors Sustainability Report 2015-16_15 Oct.cdr <http://corp-content.tatamotors.com.s3-ap-southeast-1.amazonaws.com/wp-content/uploads/2015/10/15092832/tml-sustainability-report-2015-2016.pdf>
8. https://www.hsbc.co.in/1/PA_ES_Content_Mgmt//content/website/pdf/corporate/equities/tata_motor_right_lof.pdf
9. http://timesofindia.indiatimes.com/articleshow/20039460.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
10. <https://www.tatamotors.com>

Consumer Behavior for Cab Services in Pune

Dr Nilesh Anute

Professor, MBA Department,
NBN Sinhgad School of Engineering,Pune.

Abstract:

The objective of this research paper is to study consumer behavior for cab services. A survey method was used to collect the data from 180 respondents by using well structured questionnaire. The researcher has used descriptive research design and non probability convenience sampling method for this study. The findings of this study will be helpful to various cab service providers in the city.

Introduction:

People started using cab services over traditional transport service like buses and autos. This has given boom to the business of cab service providers. Now days OLA, UBER, MERU, Wings, NARI cabs are leading the market. Every cab service provider is trying to implement new systems, new policies, offers and discounts to attract and to retain the customers. Pune city has a huge market potential in the country for taxi services after Delhi and Mumbai.

The consumer buying behaviour process:-

- **Problem Recognition** in this stage, a consumer realizes or recognizes that their desired state is different from their actual condition.
- **Information Search** in this stage, a consumer recognizes their need (or want) and sets forth to find a solution.
- **Evaluation of Alternatives** in this stage, a consumer has a good idea of what they want; now they are looking at the option that exists.
- **Purchase Decision** in this stage, more importantly, consumers are making the decision to move forward with the purchase or not. The actual problem that was recognized is solved
- **Post Purchase Decision** in this stage deals with customers' actual experience, either the consumer is satisfied or dissatisfied from the services.

Research Methodology:

Statement of the Research problem

It becomes necessary to study consumer behaviour while using various cab services. As working professionals are the major segment using cab services, it becomes necessary to study their behaviour.

Objectives of the study

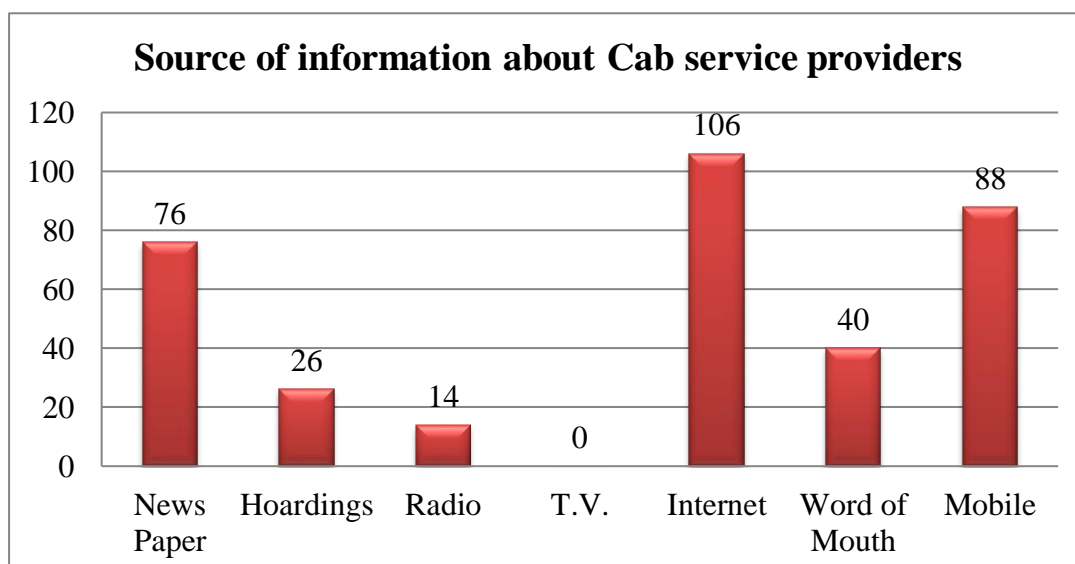
1. To study the factors affecting consumers decision while choosing cab service provider.
2. To do comparative analysis between cab service providers in Pune city.

Methods of Data collection:

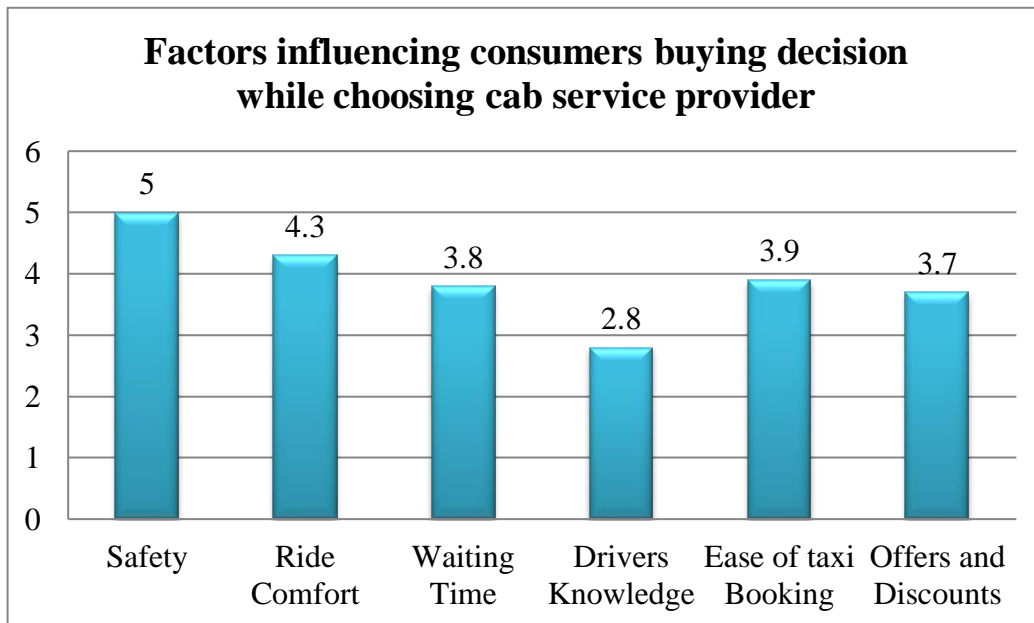
- **Primary Data** - Primary data was collected having face to face conversation using the questionnaire prepared.
- **Secondary Data** - All relevant secondary data is collected from various sources like Internet, Books, Magzines, and Articles etc.

Research design:

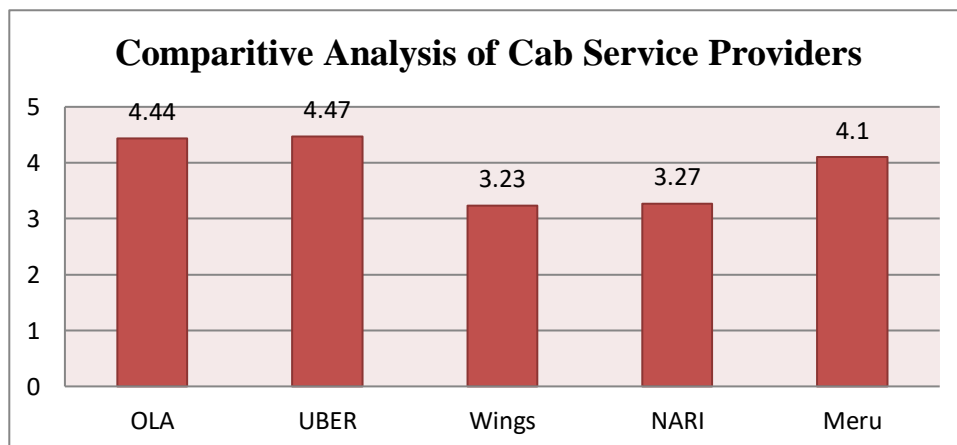
Type of Research Design	Descriptive Research Design
Population	Working Professionals in Pune city
Sampling Technique	Non Probability Convenience Sampling
Sampling Area	Pune City
Sample Size	180 Customers (working professionals)
Primary Data	Well structured questionnaire
Secondary Data	Research papers, Articles, Books, Journals etc.

Tabulation & Data Analysis
Sources of Information about Cab services and various offers
 (Multiple responses)
**Factors affecting consumers decision while choosing cab service provider**

(1-Not at all important, 2- Somehow important, 3- Moderate Important, 4-Important, Extremely important)



Comparative Analysis



Findings

- Safety and ride comfort are extremely important factors for working professional while choosing cab service provider.
- Comfort and fast service are the major reasons for working professionals to use cab services over traditional transport service.
- It is observed that, for working professionals when it comes to brand name and ease of taxi booking OLA is first preference, in terms of price, trustworthiness, offers and ride comfort Uber is the first preference, and when it comes to safety Meru is the first preference.
- Uber (Mean 4.47) is most popular cab service provider for working professionals closely followed by OLA (Mean 4.44).

Bibliography:

Books

- Rampal M. K. and Gupta S.L. (2005), “Services Marketing Concepts, Applications and Cases”, Galgotia Publishing Company, New Delhi, Third Edition
- Kotler Philip and Armstrong Gary (2005), “Principles of Marketing”, Prentice Hall of India Pvt. Ltd., New Delhi, Eleventh Edition

Websites

- www.iosrjournals.org
- www.researchpublish.com
- www.wikipedia.com
- www.slideshare.com

RECENT TRENDS IN COMMODITY MARKETS IN INDIA

Dr.Sunanda Jindal

Assistant Professor

ASM Institute of Business Management and Research, Chinchwad, Pune Maharashtra

ABSTRACT :

Organized commodity derivatives in India started as early as 1875, barely about a decade after they started in Chicago. and, many feared that financial derivatives fuelled unnecessary speculation and were detrimental to the healthy functioning of the markets for the underlying commodities. The study undertaken below has been outlined on the theme of the commodity markets functioning in India. The paper has been indicates, Overview of the commodity market, commodity market development, challenges faced by the commodity market and commodity market participants

Keywords: Commodity Market; Forward Market; Market Development, Hedgers, Speculators, Arbitrageurs.

INTRODUCTION

The existence of the commodity market in India dates back to ancient times. These markets influence the dynamics of production and resource allocation in the primary sector, along with pricing system of this market. The turnover of the commodity market in our country has grown potentially in a short span of time. This market established a link between the present and future production and consumption cycles thereby facilitating the inter-temporal smoothing of prices. At present the Indian commodity market adopts a two-tier structure for the mechanism of the system, currently there are 19 exchanges market working at country level in our country, out of which six markets are the prime regulators. They are Multi Commodity Exchange (MCX) Mumbai, National Commodity and Derivatives Exchange (NCDES) Mumbai, National Multi-Commodity Exchange (NMCEX) Ahmadabad, Indian Commodity Exchange, the ACE Derivatives Exchange and the Universal Commodity Exchange. The commodity markets in India are regulated by the Forward Markets Commission of India established in 1953.

LITERATURE REVIEW

Bhaskar Goswami, Isita Mukherjee (2015) in the paper “How attractive is the Commodity Futures in India?” compared the return on commodity futures with common stocks, long term government bonds, treasury bills , rate of inflation and detailed that high returns are generally associated with high risk in line with the general theory of risk-return. The standard deviation on real rates of return of commodity futures are same as the standard deviation on nominal rates of return. Results suggest that thought common stocks gave higher return but provided poor hedging during inflation.

Shunmugam and Debojyoti Dey (2011) in the paper “Taking Stock of Commodity Derivatives and their Impact on the Indian Economy” attempted to give a comprehensive view of all the research studies on commodity derivatives market. The paper focussed mainly on the impact of spot markets and the eco system on the commodity derivatives market. It discussed that commodities have performed well in the markets and the benefits are reaped by various stakeholders. It is suggested that the next step would be institutional support to be given so that commodities can develop further. This could be in the form of allowing new products like options, indices and other intangibles which would attract the risk adverse investors.

Sunanda Sen, Mahua Paul (2010) in the paper “Trading in India’s Commodity Future Markets” attempted to study the development of commodity futures market and the official policies on future trading. It is observed that future trading in agricultural products neither resulted in price discovery nor in less volatility in food prices. Also explained that future markets in commodities seem to provide new avenues of speculation to traders. The link between commodity futures and trading in financial markets had been explained.

Golaka CNathand Thulasamma Lingareddy (2008) in the paper “Commodity Derivative Market and its Impact on Spot Market” studied the impact of futures trading in three commodities which were banned by government to understand if seasonal/cyclical fluctuations in these commodities prices have been affected by the introduction of futures in those commodities. Results show that the future trading has not helped in reducing the seasonal/cyclical fluctuations in prices.

K.G. Sahadevan (2012) in the paper “Commodity Futures and Regulation- A Vibrant Market Looking for Powerful Regulator” elucidated that the present legal and institutional framework is inadequate for the effective regulation of fast growing commodity markets in India. Results explain that an active regulator is indispensable in the formative stage of markets, particularly to ensure they have the best practices and procedures for trading, margining, clearing, market monitoring and surveillance, risk control, settlement and delivery. It is stated that regulator can act as the line of defense against manipulation.

COMMODITY MARKET

The **commodity market** is a market where traders buy and sell commodities. Commodities are raw materials or primary agricultural products. In other words, things that farmers, mining companies, and oil and gas companies produce or extract. The commodity market is similar to the equity market. However, in the equity market, people buy and sell shares.

Usually think of a “commodity” as something homogeneous , standardized easily defined. In reality , this isn’t the case commodities are often very heterogeneous , hard to standardize , hard to define.

A commodity market facilitates trading in various commodities, it may be a spot or a derivatives market. In spot market, commodities are bought and sold for immediate delivery, whereas in derivatives market, various financial instruments based on commodities are traded.

Data Sources and Methodology of the Study**Primary Data:**

Information was collected through the discussion, interviews with the Commodity Market intermediaries such as Trading Members, , Employees of Stock Exchanges and other categories of Investors.

Secondary Data:

The secondary data was collected from various libraries where the records are stored, visits to various government organizations, the exchanges and intermediaries, from international and national websites, from published data sources such as various reports, periodicals, journals, books, magazines, research articles, newspapers, annual reports, published research papers etc. For the sake of evaluation of performance of Commodity Derivative in India, the data available in the SEBI's Annual Reports, RBI Bulletins, Stock Exchange Annual Reports, Stock Exchange, SEBI and World Federation of Exchange's Websites etc was used extensively.

Objective of the study

The present study aims to understand the current status of commodity markets in India with special focus on commodity market. The study is done with major objectives as stated below:

- To study the origin and Development of Indian Commodity markets.
- To study the commodity risk management.
- To study the commodity market participants and investment benefits.

Need for the study

Commodity market trading has been for long looked up on as a very risky venture, and investors, especially retail small-time investors never looked at them as viable option. For long, equity shares have been the most preferable investment option. One of the most deterring aspects of investment in Commodity market is the lack of proper knowledge and also the perceived risk associated with. This along with the high amounts of margin required to trade-in deters the investors.

Scope of the Study

The study will be related to buying and selling of Commodity of Commodity and its impact towards the perception of investor who are willing to trade in Shivamogga District. Within the limited time an effort has been put to study the problems and prospects of Commodity market. In-fact, Commodity market itself is a wide concept to cover every aspects of it in a single study. Hence, this study is covering only the aspects such as investors' awareness about Commodity market, their attitude towards usage of Commodity, and their risk perception and so on.

Statement of the Problem

When investing for a long and a short term there may be differences in fundamental analysis and technical analysis. Because calculation of fundamental analysis in commodity market is difficult this depends upon the supply and demand for the resources. The highlight of the study is to appropriate use of technical analysis in order to facilitate the investors in decision making.

Need for the Study

Commodity markets are where raw or primary products are exchanged. Commodity market is of two types i.e., Hard (Non-Agricultural) and Soft (Agricultural) commodities. Here hard commodities are typically Nonagricultural or natural resources (Gold, Silver, Copper, and Natural Gas) and Soft Commodities are the agricultural commodities (Coffee, Corn, Wheat, Sugar). The problem faced by the participants in the market is to predict the price movement of the commodity and to take the right decision when to enter and exit the market to make a maximum profit.

Scope of the Study

- (a) Studying the commodity price movements in the market.
- (b) To help commodity market investors.
- (c) Helps in buying and selling strategy by recognizing the trend reversals in a former stage.
- (d) To help investors in decision making.

Limitations of the Study

- (1) Study is confined only to the commodity market in Indian context.
- (2) The study of this analysis was mainly based on historical data.
- (3) The study is analysis was India's Major Commodity Exchanges

India's Major Commodity Exchanges

- **MCX (Multi Commodity Exchange)** : Is the world's No.3 commodity exchange and ranks the 1st in gold and silver futures in the world . it ranks 2nd in copper and natural gas futures and is placed at the world's top 3rd position in crude oil futures.
- **NCDEX**: No.1 Agri Exchange in India, the NCDEX offer EFP (Exchange for Physicals) facility in 18 contracts traded on the exchange platform, which help market participants in addressing their counterparty and business risks inherent in the bilateral transactions in the physical market.
- **NMCE**: Rank No.3 in India after MCX and NCDEX. it is India's top listed of coffee and rubber contracts and seeks to broaden in the currency derivatives and spot markets.
- **ACE**: Offers multi commodity futures trading.

Commodity trading in India is done on the MCX (Multi Commodity Exchange of India) with trading allowed only in commodity, futures. Different commodities have different cycles & many commodities are independent of equity market sentiments. Unlike equity markets commodity markets are not prone to manipulation.

The Indian government has made almost all commodities eligible for futures trading. Several national and regional exchanges have been set up to facilitate this for retail investors. The national multi-commodity exchanges operating in India are as follows:

- Multi Commodity Exchange of India Ltd. (MCX)
- National Commodity and Derivatives Exchange Ltd. (NCDEX)
- National Multi-Commodity Exchange of India Ltd. (NMCEIL)
- Indian Commodity Exchange Ltd. (ICSE)
- ACE Derivatives and Commodity Exchange

Participate in Commodity Trading in India.

Hedgers: These are users of the commodity in question & are trying to lock in profit at a specified price. Let us explain with an example, say a factory purchases 1000 tons of Aluminum for its own use. The manager is afraid of a sharp fall as it would affect the value of their inventory; hence they short sell aluminum futures on MCX. In case aluminum prices fall, the short sale would turn protect the value, and in case aluminum prices rise, the short position would be unprofitable, but the value of the aluminum would increase,

Speculators : These are people who take positions opposite the hedgers, unlike hedgers their aim is to make money from market movements . They buy or sell commodity futures without owning the underlying asset and aim to magnify gains using leverage or margins. For example, you feel that gold will rise in the near future, you can buy physical gold & store it but you would have to pay 100% to the shopkeeper & incur a storage charge. Whereas on MCX, you could take a Gold future contracts by paying only 5% to 7% of the contract value of gold.

Arbitrageurs

The traders who buy and sell to make money on price differentials across different markets are the arbitrageurs. Arbitrage demands the simultaneous sale and purchase of the same commodities in different markets. Arbitrage continues to the prices in different markets in line with each other.

Commodity Risk Management

According to E. **Kalaivani, Dr. A. Lakshmi** “An Overview of the Commodity Risk Management to the Business Process” studied the impact of commodity risk on business process. It discussed the Commodity Risk Management (CRM), categories of the commodity, and types of commodity risk, commodity and foreign exchange risk. The business’s financial performance or position will be adversely affected by fluctuations in the prices of commodities. Consumers of commodities such as airlines, transport companies, clothing manufacturers and food manufacturers are primarily exposed to rising prices, which will increase the cost of the commodities they purchase.

According to Nidhi **Aggarwal, Sargam Jain and Susan Thomas** “Do futures markets help in price discovery and risk management for commodities in India?” examined the price discovery and hedging effectiveness of commodity futures. They concluded that while the commodity future markets were reformed so that futures markets could be substituted for commodity price risk management through price controls by the government, government interventions are the most significant barrier to futures providing good hedging effectiveness against commodity price risk.

According to **Golaka C. Nathand T. Lingareddy** “Commodity derivatives contributing for rise or fall in risk” studied the impact of introduction of future trading on spot prices of commodities. The study found that volatilities of rupee gram and wheat prices were higher during the period of futures trading than that in the period prior to introduction as well as after the ban of futures contracts.

BENEFITS OF COMMODITY FUTURES MARKETS

The authentic price discovery and efficient price risk management are the Foremost objectives of the futures exchange. The benefits of the commodity futures Markets are as follows:

- Price Discovery
- Price Risk Management
- Import and Export competitiveness
- Predictable Pricing
- Control over unfavorable price fluctuations for farmers/Agriculturalists
- Credit accessibility
- Improved product quality

MULTI COMMODITY EXCHANGE LIMITED (MCX)

This study being on commodity futures, it has considered one of the leading player, namely, Multi Commodity Exchange of India Limited (MCX), for the purpose of collection of data. MCX is the India's first listed commodity futures exchange that facilitates online trading, and clearing and settlement of commodity futures transactions in India. Thus it offers a platform for risk management. The MCX started operations in November 2003 that operates within the regulatory framework of the Forward Contracts (Regulation) Act, 1952.

MCX offers trading in altered commodity futures contracts across segments, including bullion, ferrous and non-ferrous metals, energy, Agri-based and agricultural commodities. The Exchange concentrates on rendering commodity value chain participants with neutral, secure and transparent trade mechanisms, and formulating quality parameters and trade regulations, in accordance with the regulatory framework. The Exchange has an extensive national reach, with over 2100 members, operations through more than 400,000 trading terminals, spanning over 1900 cities and towns across India.

FUNCTIONS OF MULTI-COMMODITY EXCHANGE

India's first listed exchange, the Multi Commodity Exchange of India Limited (MCX), is a commodity futures exchange that facilitates online trading and clearing and settlement of commodity futures transactions. Hence, MCX provides a platform for risk management. MCX functions within the regulatory framework of the Forward Contracts Regulation Act, 1952 and regulations there under. Offering trading in more than 50 commodity futures contracts throughout segments, including bullion, ferrous and non-ferrous metals, energy, and agricultural commodities, MCX concentrates on providing commodity ecosystem participants with neutral, secure and transparent trade mechanisms, and formulating quality parameters and trade regulations, in accordance with the regulatory framework. The Exchange has an encompassing national reach, with over 2100 members, operations through more than 400,000 trading terminals spanning over 1770 cities and towns across India.

RECENT DEVELOPMENTS IN THE INDIAN COMMODITY MARKET

The advent of economic liberalization helped the cause of laying emphasis on the importance of the Indian commodity market. In 2002-03, the Government of India recently allowed the re-introduction of commodity futures trading in India. Together with this, three screens based (MCX, NCDEX & NMCE) nation-wide multi-commodity exchanges were also permitted to be set up with the approval of the FMC. Commodities futures contracts and the exchanges they trade in are governed by the Forward Contracts (Regulation) Act, 1952. The FMC is responsible for regulating and promoting futures trade in commodities. But the amalgamation of FMC, the erstwhile commodities regulatory body, with capital markets watchdog SEBI came into effect today, marking the first major case of two regulators being merged. The FMC was merged with the SEBI with effect from 28th September, 2015 to achieve convergence of regulation of Securities Market and Commodity Derivatives Market and to increase the economies of scope and scale for the exchanges, financial firms and other stakeholders. Currently in India today, there are 6 national commodity exchanges, viz. MCX (Mumbai), NCDEX (Mumbai), NMCE (Mumbai), ICEX (Mumbai), ACE (Ahmadabad), and UCX (Mumbai), regulate forward trading in 113 commodities. Besides, there is Sixteen Regional Commodity specific exchanges recognized for regulating trading in various commodities approved by the Commission under the Forward Contracts (Regulation) Act, 1952.

Commodity trading is separate from the trading of other securities. In India, there are separate exchanges for commodity trading. In its history of commodity derivatives & futures market has witnessed several developments since 2002-03 in India. There has been tremendous growth in commodity market in terms of volume of trade, number of products on offer participants and technology. Commodity markets provide liquidity and facilitates to hedge against future price risk. It helps buyers and sellers of agricultural products to quickly manage their trade at a fair price. Commodity trading also offers a chance for financial leverage to hedgers, speculators and other traders. The growth of Commodity market of India will lead to further development in the field of electronic warehouse receipts which may facilitate seamless nationwide commodity spot market. Commodity market regulator FMC was merged with the SEBI on September 28, 2015. SEBI has all necessary infrastructures to regulate the commodities market, but some feel it lacks knowledge of the commodities market. The merger will increase the economies of scope and scale as there are strong commonalities between all kinds of trading.

CONCLUSION

The analysis emphasized on the commodity market which gave a real time experience in this field and thereby the study could reflect positively from the investors' perspective.

The last five years' price movements of Commodity market show that the investors are satisfied by the reasonable returns from the commodity market. Investors can make substantial returns only if investments are made in a disciplined manner. An investor should always analyze the market by using the analytical tools for investments purpose. And also investment is the risk and return game. When the investor ready to accepted the risk in that circumstances investors earn the profit. Investors can succeed in their investment only when they are able to select the right commodity at right time. The investors should closely watch the situation like market price, economy, returns and risk associated with the commodity before taking the decision to invest. Thus, utilizing the investment opportunities available in the commodity market will help in maximizing the returns. Finally, as per

the present trend and the analysis it can be concluded that, in commodity market there is the high possibility of getting good returns, therefore it can be suggested that the investors can invest in the commodity market.

REFERENCES:

1. S. Praveena and K. Mahendran. Business Development Strategies for Trading in Agricultural Commodities-A Case of Leading Commodity Brokerage Firms. International Journal of Management Research and Review 2012; 2(1): 100-113.
2. Sreeram A, Yeluripati A, K. Geetika Sri, Chakravarthi A. L, and Kumar Ch. N. "An Analysis of Commodities Market Impact on Equity Investment", IRJA-Indian Research Journal 2015; 2(1).
3. K. Nirmala, Munilakshmi R.A, and Sandhya V. "Price Discovery in Commodity Markets: A Study of Indian Cardamom Market in Multi Commodity Exchange", Indian Journal of Accounting 2015; XLVII (1): 92-97.
4. Dr. Shree Bhagwat, Angad Maravi, Ritesh Omre, and Deepak Chand "A Study of Historical Background of Indian Commodity Market", EPRA International Journal of Economic and Business Review 2015; 3(3):32-43.
5. Dr. Shree Bhagwat, Angad Maravi, Ritesh Omre, and Deepak Chand "Commodity Futures Market in India: Development, Regulation and Current Scenario", Journal of Business Management & Social Sciences Research (JBM&SSR) 2015; 4(2):215- 231.
6. Dr. Shree Bhagwat and Angad Singh Maravi "The Role of Forward Markets Commission in Indian Commodity Markets", International Journal of Research-GRANTHAALAYAH 2015; 3(11):87-105.
7. Prasannakumaran C, and Rajeswari V. "Challenges and Prospects of Agricultural Marketing in India-A Thematic review", International Journal of Advanced Multidisciplinary Research (IJAMR) 2015; 2 (9):37-41.
8. Pandey P. "A Study on Performance of Indian Commodity Futures Market - In the Commodity Exchanges Perspective", Protagonist International Journal of Management and Technology (PIJMT) 2015; 2(3):1-11.
9. Dr. Shree Bhagwat, and Angad Singh Maravi "Commodity Exchanges in Commodity Markets of India: An Analytical Study of National Commodity Exchanges", International Journal of Management and Social Sciences Research (IJMSSR) 2015; 4(12):1- 13.
10. P. Prakash, and S. Sundararajan "An Empirical Analysis on the Relationship between Gold and Silver with Special Reference to the National Level Commodity Exchanges, India", International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC) 2014; 2(8):2224-2233.
11. Dr. Shree Bhagwat, Ritesh Omre, Deepak Chand (2012) "Development of Financial Derivatives Market in India and its Position in Global Financial Crisis", International Journal of Scientific & Engineering Research 2012; 3(12).

12. Dr. Shree Bhagwat, Ritesh Omre, Deepak Chand “An Analysis of Indian Financial Derivatives Market and its Position in Global Financial Derivatives Market”, *Journal of Business Management & Social Sciences Research (JBM&SSR)* 2012; 1(2):45-59.
13. Choudhry, M. (2004). <http://www.yieldcurve.com/Mktresearch/LearningCurve/BondFutures.pdf>. *YieldCurve.com - the site dedicated to fixed income and the global debt capital markets*. Retrieved January 9, 2013,
14. <http://www.yieldcurve.com/Mktresearch/LearningCurve/BondFutures.pdf> Culp, C. L. (2010). OTC-Cleared Derivatives: Benefits, Costs, and Implications of the Dodd-Frank Wall Street Reform and Consumer Protection Act. *Journal of applied finance*, (2), 1-27.
15. Delong, J. B., Shleifer, A., & Summers, L. H. (1990). Positive feedback Investment strategies and destabilizing rational speculation. *Journal of finance*, 45(2), 379-395.
16. Fitch Ratings (2004). Fixed Income Derivatives---A Survey of the Indian Market. Retrieved from www.fitchratings.com
17. Gulati, D. (2012). Relationship between Price and Open Interest in Indian Futures Market : An Empirical Study. *Pacific Business Review International*, 5(1), 27-35.
18. Inoue, T., & Hamori, S. (2012). Market efficiency of commodity futures in India. *Institute of developing economics*, 1-16.
19. Jecheche, P. (2012). Basics of futures and forward contracts discussed from a risk management perspective. *Journal of Comprehensive Research*, 1-19.
20. Kuprianov, A. (1996). Short-term interest rate futures. *Economic Review*, 12-26.
21. Punithavathy Pandiyan-2013, Security Analysis and Portfolio Management, Himalayan Publishing House, 13th edition.
22. S.C. Gupta-2014, Fundamentals of Statistics, Himalayan Publishing House 7th edition.
23. <http://www.alphacommodities.co.in/>
24. <http://www.mcxindia.com/>
25. <http://www.nseindia.com/>
26. <http://www.investopedia.com/articles/technical/052201.asp>
27. <http://money.rediff.com/bse>
28. <https://en.wikipedia.org/wiki/Gold>

* * * * *

