

SPRING 2013  
VOLUME - 9

ISSN : 0973-1466 (Off line)  
ISSN : 0973-9262 (On line)  
Listed in Cabell's directory

# GURUKUL BUSINESS REVIEW (GBR)

*An International Refereed Management Journal of FMS, Gurukula Kangri Vishwavidyalaya, Haridwar.*

## CONTENTS

1- SOCIO-ECONOMIC CHALLENGES AND FINANCIAL CRISIS: SUSTAINABILITY IN SWAZILAND <i>Md. Humayun Kabir</i> .....	1
2- RECRUITERS' EXPECTATIONS VS. STUDENTS' PERCEPTIONS, DESCRIPTIVE APPROACH TO HOSPITALITY SKILLS IN OMAN <i>Sedat Yuksel</i> .....	8
3- A REVIEW PAPER ON SERVICE PROFIT CHAIN <i>Shilpy Singh, Yogesh Upadhyay, Shiv Kumar Singh &amp; P. Painuly</i> .....	16
4- AN ORGANIZATIONAL CULTURE FRAMEWORK FOR EFQM MODEL OF BUSINESS EXCELLENCE : A CASE STUDY OF HEEP, BHEL <i>Ashish Sinha</i> .....	26
5- IMPACT OF FIRM'S CHARACTERISTICS IN DETERMINING THE CAPITAL STRUCTURE: A STUDY OF OIL AND GAS INDUSTRY IN INDIA <i>Vikas Choudhary &amp; Anshu Bhardwaj</i> .....	41
6- A STUDY ON FACTORS AFFECTING TRAINING EFFECTIVENESS IN MANUFACTURING SECTOR : A STUDY WITH REFERENCE TO GOLD PLUS GLASS INDUSTRY LIMITED, ROORKEE <i>Vijit Chaturvedi &amp; D.S Yadav</i> .....	47
7- A STUDY OF SHAREHOLDER'S VALUE AND FINANCIAL VARIABLES OF INDIAN PHARMA INDUSTRY: AN EMPIRICAL ANALYSIS <i>Dharmendra S. Mistry, Saket Kumar Singh &amp; Shruti Singh</i> .....	56
8- THE IMPACT OF CEO'S ROLE IN DETERMINING SUCCESSFUL TQM IMPLEMENTATION: A CASE STUDY OF HEALTH SECTOR IN HYDERABAD AND SECUNDERABAD <i>Rambabu Pentyala</i> .....	64
9- A STUDY OF EFFICIENCY MEASUREMENT OF GENERAL INSURERS OF INDIA THROUGH THE APPLICATION OF DATA ENVELOPMENT ANALYSIS (DEA) <i>Kuldip S. Chhikara &amp; Sangita Rani</i> .....	69
10- INDIAN BANKS UNDERTAKING THE ROLE OF SOCIALLY RESPONSIBLE CORPORATE CITIZENS <i>Harish Handa &amp; Meera Mehta</i> .....	80
11- HEALTHCARE SERVICES IN INDIA: A JOURNEY OF LIFE LINE TO MEDICAL MARKET <i>Sunita Bharatwal &amp; S. K Sharma</i> .....	85
12- IMPACT OF CONSUMER BEHAVIOUR ON DECISION MAKING TOWARDS MOBILE PHONES IN INDIA <i>Rajul Dutt &amp; Atul Kashyap</i> .....	91
13- BANKING INFRASTRUCTURE IN BIMARU STATES <i>Bakshi Amit Kumar Sinha</i> .....	97



\*\*\*\*\*

**FACULTY OF MANAGEMENT STUDIES (FMS)**  
**(An ISO 9001 : 2008 Certified)**  
**GURUKULA KANGRI VISHWAVIDYALAYA, HARIDWAR-249404 (U.K.) INDIA**

# GURUKUL BUSINESS REVIEW (GBR)

## *Chief Patron*

**Surendra Kumar**

Vice-Chancellor, G.K.Vishwavidyalaya, Haridwar

## *Board of Editorial Advisors*

- |   |  |  |
|---|--|--|
| ★ <b>Bob Smith</b><br>ANU, Australia            | ★ <b>Elena Horska</b><br>NITRA, Slovakia | ★ <b>Ernesto Laporteza Bumatay</b><br>UOPD, Manila |
| ★ <b>S.C. Sharma</b><br>MOHE, Sultanate of Oman | ★ <b>M.R.Gharehbakloo</b><br>IAU, Iran   | ★ <b>Joseph Bonnici</b><br>CU, USA                 |
| ★ <b>Menzhong Zhang</b><br>NTU, Singapore       | ★ <b>Anand Kumar</b><br>BOB, UK          | ★ <b>S.K. Singh</b><br>BHU, INDIA                  |

## *Board of Reviewers*

- |  |   |                                   |
|--|---|-----------------------------------|
| ★ <b>S. Bhattacharya</b><br>IIT, Kharagpur   | ★ <b>S.K. Sharma</b><br>TITS, Bhiwani       | ★ <b>Anne</b><br>WUT, Romania     |
| ★ <b>Shailendra Singh</b><br>IIM, Lucknow    | ★ <b>Yogesh Upadhyay</b><br>ITM, Gwalior    | ★ <b>S.C. Dhamija</b><br>Haridwar |
| ★ <b>Sunita Singh Sengupta</b><br>FMS, Delhi | ★ <b>Panagiotis Tsigaris</b><br>TRU, Canada | ★ <b>Sedat Yuksel</b><br>Turkey   |

## *Editor*

**V.K. Singh**

## *Members*

- |                   |                    |                   |                      |
|-------------------|--------------------|-------------------|----------------------|
| <b>S.P. Singh</b> | <b>V. Paliwal</b>  | <b>S. Rana</b>    | <b>N. Pokhariyal</b> |
| <b>P. Madan</b>   | <b>A. Dangwal</b>  | <b>B. Arora</b>   | <b>V. Sangwan</b>    |
|                   | <b>R. Bhardwaj</b> | <b>P. Kumari</b>  | <b>D. Sharma</b>     |
|                   | <b>A. Arya</b>     | <b>P. Painuly</b> |                      |
|                   | <b>K. Pant</b>     |                   |                      |
|                   | <b>S. Dagar</b>    |                   |                      |

Copyright © 2013 by The Faculty of Management Studies, Gurukula Kangri Vishwavidyalaya.

All rights reserved.

The views expressed in the articles are those of the contributors and not necessarily of the Editorial Board.

The Editorial Board invites original, unpublished contributions in the form of articles, case studies or research papers.

No part of this publication may be reproduced or transmitted in any form or by any means or stored in any retrieval 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 acknowledgement of author, publishers and source must be given.

**Faculty of Management Studies (FMS)**

**Gurukula Kangri Vishwavidyalaya, Haridwar-249404, Uttarakhand (India)**

**Tele. & Fax : +91-01334-246699**

Visit us at : <http://www.gkv.ac.in>

Although every care has been taken to avoid errors or 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, whether a purchaser of this publication or not, for the result of any action taken on the basis of this work.



## FROM THE DESK OF THE EDITOR

Greetings and Best Wishes,

I take this opportunity to thank all contributors and readers for making Gurukul Business Review (GBR) an astounding success. The interest of authors in sending their research based articles for publication and over whelming response received from the readers is duly acknowledged. I owe my heartfelt gratitude to all the management institutes for sending us their journals on mutual exchange basis, and their support to serve you in better way.

We are happy to launch the 9<sup>th</sup> issue of our academic journal. The present issue incorporates the following articles :

- 1- Socio-economic challenges and financial crisis: sustainability in Swaziland.
- 2- Recruiters' expectations vs. Students' perceptions, descriptive approach to hospitality skills in Oman.
- 3- A review paper on service profit chain.
- 4- An organizational culture framework for EFQM model of business excellence : A case study of HEEP, BHEL.
- 5- Impact of firm's characteristics in determining the capital structure: A study of oil and gas industry in India.
- 6- A study on factors affecting training effectiveness in manufacturing sector : A study with reference to gold plus glass industry limited, Roorkee.
- 7- A study of shareholder's value and financial variables of Indian pharma industry: An empirical analysis.
- 8- The impact of CEO's role in determining successful TQM implementation: A case study of health sector in Hyderabad and Secunderabad.
- 9- A study of efficiency measurement of general insurers of India through the application of data envelopment analysis.
- 10- Indian banks undertaking the role of socially responsible corporate citizens.
- 11- Healthcare services in India: A journey of life line to medical market.
- 12- Impact of consumer behaviour on decision making towards mobile phones in India.
- 13- Banking infrastructure in BIMARU states.

As the editor, I also want to thank the authors, the editorial board and the reviewers for their contributions. For more information on our editorial or the journal statistics or call for papers or any other aspects of the journal, please visit our website at [www.gkv.ac.in](http://www.gkv.ac.in)

Thank you for your time and consideration. Be our partners and make this journal part of your life of ideas, thoughts and practice. Happy reading.

I remain,

(V.K. Singh)

# SOCIO-ECONOMIC CHALLENGES AND FINANCIAL CRISIS: SUSTAINABILITY IN SWAZILAND

Md. Humayun Kabir\*

## Table of Contents

- Abstract
- Keywords
- Introduction
- Objectives of the Study
- Research Methodology
- Data Analysis
- Discussion and Recommendations
- Conclusion
- References

## ABSTRACT

*The social development in Swaziland has been affected seriously due to financial challenges facing the country and its political infancy. Swaziland has a budget deficit of 14.3% of GDP and heavily relies on South African Customs Union revenue. Further, Swaziland found it difficult to attract Foreign Direct Investment in recent years. This study explores the social and economic challenges in Swaziland and contributes to the debate on a sustainable socio-economic environment. The study indicates that, in order to alleviate the socio-economic problems, the country needs to improve its agro-based economic sector since agriculture is the key driver of socio-economic development in many countries. 60% of Africa's arable land is still untapped that will be improved very soon because of global food demand, and Africa's GDP including Swaziland will look much better.*

**KEYWORDS:** Social Development, Economy, Sustainability, Swaziland.

## INTRODUCTION

The Kingdom of Swaziland is one of the world's last remaining monarchies (BBC News, 2011) and Africa's last absolute monarchy (Business Report, 2011). Swaziland, with 1.1 million citizens (World Bank Development Indicator, 2011), is a very small and land-locked country in sub-Saharan Africa. The Kingdom

is facing many socio-economic challenges such as HIV/AIDS, unemployment, and poverty including political and economical problems. Although Swaziland is categorized by the World bank as a lower middle income country (World Bank Development Indicator, 2011), most ordinary Swazis live in the abject poverty. The poverty level is 69.2% in Swaziland (World Bank Development Indicator, 2011) and the country has the highest rate of HIV infection in the world; approximately 220,000 people are living with HIV/AIDS pandemic [United Nations (UN), 2007:23]. According to the 2007 Census, unemployment rate is 40.6% [Central Bank of Swaziland (CBS), 2010/2011:43]. This study therefore intends to explore the social and economic challenges in Swaziland and to identify some strategies that could be implemented by the government in order to enhance a sustainable socio-economic environment. In the next sections, the study provides research questions, methodology, analysis, discussion along with a number of recommendations, and conclusions.

## OBJECTIVES OF THE STUDY

*This paper poses the following research questions:*

- What are the socio-economic and political challenges in the country that remained a serious source of concern?
- What are the credible signals that can be provided to the government for sustainability?

## RESEARCH METHODOLOGY

The study is based on the conceptual analysis and relied on secondary data. The study considers sustainability challenges in Swaziland from documentary evidence and one of the authors' viewpoint (Gobind and Ukpere, 2012). The author's viewpoint has been considered based on the author's work experience in Swaziland for more than 10 years. In the analysis, a comparative literature related to Swaziland's financial crisis, political environment, and other socio-economic challenges has been included. This method is consistent with other previous studies (see, Gobind and Ukpere, 2012; Kruger and Wellman, 1999).

---

\*Lecturer, Department of Accounting, Tshwane University of Technology, South Africa.

## DATA ANALYSIS

In this section, the study attempts to give a summary of recent financial crisis, political environment, and social development challenges in the country.

### ***Economic Challenges and Financial Crisis in Swaziland***

Swaziland's Gross Domestic Product (GDP) growth is 1.2% and per capita is US\$2,533 (World Bank Development Indicators, 2011). Swaziland received a ranking of 124 out of 183 countries on ease of doing business in accordance with World Bank's Doing Business Report for 2012 (World Bank, 2012). The country recently faces serious fiscal crisis with a budget deficit of 14.3% of GDP (Business Report, 2011; Vollgraaf, 2011). Government spends a big amount of money for civil servant salaries that accounts for almost 50% of total government spending (Vollgraaf, 2011). Swaziland's Wage Bill (civil servants salaries) is the highest in sub-Saharan Africa at 18% of the GDP (Times of Swaziland, 2011a). However, as recommended by International Monetary Fund (IMF), government agreed to cut 10% salary for Senate members and Parliament members and 5% salary for civil servants (Marais, 2011) though Ministry of Foreign Affairs Mr. Lutfo Dlamini said that government will not force civil servants to take salary cuts (Times of Swaziland, 2011c).

Swaziland exports almost 70% of its export products to South Africa and imports more than 90% from the same country (World Bank Development Indicators, 2011). Over 60% of Swaziland' revenue comes from South African Customs Union (SACU). For years, Swaziland relies heavily on SACU revenue which is unsustainable since SACU revenue is on the decline (it fell by 60% in 2010) due to the world wide recession of 2008/2009 that affected goods coming into the Southern African region (Vollgraaf, 2011). Swaziland economy is diversified into agriculture, forestry, and mining represent 13% of GDP; manufacturing accounts for 37% of GDP; and services constitute 50% of GDP (World Bank Development Indicators, 2011).

### ***Political Environment and Governance in Swaziland***

Swaziland has a dual governance system comprised of traditional system and western models system; the King (King Mswati III) is the head of both systems [African Development Bank (ADB), 2005]. The country also has a dual jurisdiction system of law that

consists of Roman-Dutch law and customary law (traditional Swazi law and custom) (www.state.gov; ADB, 2005). While, the customary law governs the traditional structures (Swazi National Courts), Roman-Dutch law governs the constitutional courts (High Court, Magistrates Courts, and Industrial Court) and political system (ADB, 2005). The national/central government and local government follow the western model (ADB, 2005). The Prime Minister is the head of the government appointed by the King. The King, who has a power over legislative, executive, and judicial, is the head of the State and the modern parliamentary system of government (ADB, 2005).

However, although the dual system of governance and law helps Swaziland to maintain the peace and stability (ADB, 2005), Swaziland faces serious political problems in recent years and has been receiving widespread criticisms in terms of democracy and freedom and role of the present King. The dual system of governance and political governance in Swaziland were considered an irrelevant discussion for decades, but now they are increasingly seen as an important discussion amongst the nation in order to identify necessary actions that could lead to achieve the country's envisaged goals effectively. For instance, there were mass protests on 19th March 2011 and 12th April 2011 against the government and the monarchy in Swaziland organized by teachers, students, workers unions, trade unions, and Civil Society Organizations (CSOs) including the banned political parties. Thousands of ordinary people were participated in the protests march. The nation is unhappy with the government's overall performance. As a result, the demands for democracy and freedom in the country and for an end to the monarchy became crucial national public interest issues. During the protests, with a strong national consensus, they all said that the time has arrived for changing and demanded that the entire Cabinet including the Prime Minister should resign immediately since the government has failed to deliver general services to the nations (Ndlovu, 2011). However, there is still no sign from the King for sharing the power after having mass demonstration in March and April 2011 though the nation is aggrieved and "feeling the pinch" (Masinga, 2011:3).

Further, the rise in the rate of corruption in Swaziland also shows that there is a problem in the country that needs to be addressed. The nation is losing trust on government due to corruption and mismanagement. The current Prime Minister (Dr.

Barnabas Sibusiso Dlamini) of Swaziland pointed out that according to Transparency International's most recent corruption perception index, the country is considered as the 79th most corrupt country in the world (Swazi Observer, 2010). According to Mo Ibrahim Foundation Report 2007, Swaziland was ranked 34th among 48 sub-Saharan countries in terms of safety and security, rule of law, transparency and corruption, participation and human rights, sustainable economic opportunity as well as human development (Maphalala, 2007). The Swaziland Finance Minister (Mr. Majozi Sithole) said that the country's economy is running down due to corruption particularly by civil servants (Sukati, 2010). These negative impacts imply that there is something else that the government has to do that it is not currently doing.

#### **Social Development Challenges in Swaziland**

Swaziland's high dependency on SACU

revenue is more likely to affect government's programmes with regard to social and economic development, particularly social development, in the country since SACU revenue is not stable and there is a downward slope in global economic trends. The IMF noted that Swaziland government continues to rely on SACU revenue heavily and maintain an unsustainable level of public expenditure (e.g. increasing civil service wage bill). The development growth in Swaziland have been affected seriously due to the implementation of poor policy in the early 1990s in the areas of allocation of social expenditures, public expenditure management, and macro-economic policy (World Bank Development Indicators, 2011). As a result, government is unable to meet its sustainable economic development goals which can adversely impact on the country's Millennium Development Goals (MDGs).

**Table 1: Swaziland Central Government Recurrent and Capital Expenditure (in Million)**

Expenditure	2007/08	2008/09	2009/10	2010/11	2011/12 Budget	Average % Share over past 5 years
<b>General Public Service</b>	<b>2,570.3</b> <b>(629.1)</b>	<b>3,398.1</b> <b>(627.9)</b>	<b>4,120.5</b> <b>(694.4)</b>	<b>3,034.3</b> <b>(776.9)</b>	<b>3,537.9</b> <b>(865.0)</b>	<b>44.3</b> <b>(29.2)</b>
• General Administration	1,824.5 (505.8)	2,431.0 (469.7)	2,561.5 (488.3)	1,553.7 (591.7)	2,057.9 (684.7)	27.7 (22.2)
• Public Order, Safety & Defence	745.9 (123.2)	967.1 (158.2)	1,559.0 (206.1)	1,480.6 (185.2)	1,480.0 (180.3)	16.6 (7.0)
<b>Social Services</b>	<b>2,147.9</b> <b>(245.7)</b>	<b>2,580.3</b> <b>(288.7)</b>	<b>2,810.2</b> <b>(356.0)</b>	<b>3,418.0</b> <b>(561.6)</b>	<b>3,342.6</b> <b>(535.8)</b>	<b>38.0</b> <b>(16.2)</b>
• Education	1,500.3 (55.9)	1,720.5 (115.9)	1,619.3 (113.5)	1,867.8 (182.3)	1,907.6 (176.2)	22.9 (4.6)
• Health	530.8 (65.7)	705.4 (106.7)	785.5 (136.6)	1,030.9 (251.8)	1,014.0 (242.4)	10.8 (6.1)
• Other Community & Social Services	116.8 (124.1)	154.4 (66.2)	405.4 (106.0)	519.2 (127.5)	421.0 (117.3)	4.3 (5.5)
<b>Economic Services: Agriculture, Industry &amp; Mining, Transport &amp; Communications</b>	<b>620.4</b> <b>(1,075.7)</b>	<b>1,064.4</b> <b>(1,555.5)</b>	<b>1,296.3</b> <b>(1,419.9)</b>	<b>1,197.0</b> <b>(1,116.3)</b>	<b>1,222.0</b> <b>(883.9)</b>	<b>14.4</b> <b>(54.6)</b>
<b>Public Debt Interest</b>	<b>183.6</b>	<b>265.5</b>	<b>238.2</b>	<b>243.4</b>	<b>318.3</b>	<b>3.3</b>
<b>Total</b>	<b>E5,522.2</b>	<b>E7,308.2</b>	<b>E8,465.1</b>	<b>E7,892.6</b>	<b>E8,420.8</b>	<b>100.0</b>
<i>Notes: E=Emalangeni (Swaziland local currency); 1US\$ = E7.32 (average rate during 2010) Figures in parentheses are capital expenditure</i>						

Although government is trying to implement corrective measures (e.g. developing Economic Recovery Strategy) in order to address the socio-economic challenges such as the impact of financial crisis, rising unemployment, high poverty levels, and the high HIV/AIDS (Weekend Observer, 2011:25), these challenges, to some extent, make difficult for Swaziland to meet the MDGs by the year 2015. Even the adequacy of international funding in Swaziland is not enough in terms of helping the country towards achieving MDGs because most of the projects financed by international funding in Swaziland are mainly related to agricultural, road construction, and urban development projects (Kabir, 2010). Educational and health related projects are not financed adequately by the international funding (Kabir, 2010). It is really surprising as the education and health should have been given more priority for Swaziland in order to achieve sustainable development and mitigate the impact of high HIV/AIDS pandemic.

The table shows that government spends more money on general public services (e.g. administration, safety and defence) than on social services (e.g. health and education), which implies that education and health have been given very low priority than other development projects. Recently government of Swaziland has decided to purchase heavy artillery worth E429 million (approximately US\$ 62 million) (Times of Swaziland, 2011b:3). The CSOs in Swaziland have condemned about the government's initiative with regard to arms deals and said that government should not spend tax payers' money to buy artillery whereas the normal people of the country is suffering for drugs, clean water, and quality education due to cash problem, poor governance, and corruption. Further, CSOs also said that Swaziland does not need for such an arms deal as the country is not under any kind of security threat (Times of Swaziland, 2011b).

## DISCUSSION AND RECOMMENDATIONS

The study reveals that Swaziland faces various challenges in terms of socio-economic development due to poor policy, miss management, corruption, lack of good governance, and insufficient law system. Particularly, the social development in Swaziland has been affected seriously due to financial challenges facing the country. The country's situation is worsened by poverty, HIV/AIDS pandemic, unemployment, food insecurity, and lower funds devoted to social services such as health care, education, and social policy. Government is struggling to provide basic services such as health, education, clean water, sanitation and others

because of its liquidity problems. The government faces a crisis over its inability to implement its policies to create jobs and provide the basic services. The overall socio-economic challenges including poor governance and insufficient law system have brought a negative impact on investment climate in the country including lost of investors' confidence. For instance, there is a fall in FDI from 7.84% of GDP in 2002 to 2.54% of GDP in 2010 (World Bank Development Indicator, 2011).

However, the sign of growth of Swaziland economy is "hard to miss" (Weavind, 2011:3). Swaziland received a positive ranking in the sub-Saharan Arica region which is 11 out of 46 economies in the region though the country's rank is low in the world economies (Shongwe, 2010). Mauritius received the first ranking in the sub-Saharan Arica region followed by South Africa, Botswana, Rwanda, and Ghana in accordance with the World Bank's Doing Business Report for 2011 (Shongwe, 2010). Swaziland political situation is generally stable compared to other part of Africa especially in North Africa where the uprisings are going on against autocracies. Although the demand for reforms in Swaziland is going on for many years, the country's monarchy system is still supported by many Swazis (Weavind, 2011) especially by those people living in rural areas. The crime rate is very little in Swaziland and there was no genocide in the country (Weavind, 2011). The investment climate in Swaziland is still favorable in many areas compared to other countries in sub-Saharan Africa. For instance, unit labor costs (labor costs as a percent of value added) are low in Swaziland and firms have few complaints regarding infrastructure and regulation [United Nations (UN), 2007]. As a way forward, the following recommendations can be taken into consideration for socio-economic development in Swaziland:

1. For a greater value of the country, government needs to pursue structural strategy to achieve sustainable development for the long run. Consequently, Swaziland needs to diversify its revenue sources and reduce its heavy reliance on SACU revenue for long run sustainability.
2. The country's GDP can substantially be increased by investing in the agriculture sector and mining sector. The government can attract investors to invest in the mining sector. Swaziland has a significant number of minerals reserves of coal, quarried stone, diamond, and gold. The major activities in the mining sector in

Swaziland are coal and quarried stone (CBS, 2010/2011). Coal and Quarried stone production increased by 12.5% and 50.7% in 2010 (CBS, 2010/2011:8). It should be noted that recently a company has obtained a license from the Swaziland government to open a gold mine and few applications from other companies are being considered to re-open other mines that were closed down long time ago due to operational problems. Government should not delay to engage in more mining.

3. As the Minister of Finance said during 2011/2012 budget speech that "government is committed to restart its 2004 privatization program" (Weekend Observer, 2011:26), government should not delay to resume it to attract new investment and to avoid the huge losses that are being incurred by some public enterprises due to miss management and corruption. Until 2004, total debt across all public enterprises represents 11.5% of total external debt in Swaziland (Ministry of Finance Swaziland, 2004:6). Moreover, Swaziland government has recently lost a sum of E147 million (US\$19.62) by six different ministries through corruption (Phinda, 2010). In terms of Swaziland economy, it is a huge loss to the country.

4. Furthermore, in order to alleviate the socio-economic problems and create sustainable employment opportunity in the country, there is need to support small and medium enterprises (SMEs) and agriculture sector through providing financial support and subsistence. For financial sustainability, government and financial institutions should carry out more microfinance operations in the rural areas since majority of the population reside in rural areas. Khadker (1998) says that the income and productivity amongst the poor can also be increased if the poor get access to financial services.

5. Swaziland have had requested South Africa for an emergency loan to solve the country's recent cash flow problem that will allow government to continue to operate and financing the public service including its projects. With some conditions (e.g. fiscal and governance reforms in Swaziland), South Africa has approved R2.5bn (US\$355m) financial bailout for Swaziland (www.bbc.co.uk). In addition, for South African own interest, South Africa is helping Swaziland financially to ensure that Swaziland's economy does not collapse (Redvers, 2012). However, Redvers (2012:3) stated that *"Going forward, there needs to be structural changes in Swaziland's economy to create sustainable growth. It is crucial that the loan is used*

*to develop key sectors of the economy and improve productivity, which would assist Swaziland in gaining a competitive advantage, attracting foreign direct investment and generating much -needed additional revenue"*.

6. The country needs to improve its agro-based economic sector since agriculture is the key driver of socio-economic development in many countries. Over 70% Swazis' incomes depend on the agriculture sector (Thompson, 2009:73). Further, the sugar industry is central to the economy of Swaziland, accounting for about 12% of national output, 35% of private sector wage employment and 11% of national wage employment (Thompson, 2009:77). 60% of Africa's arable land is still unused (Lushaba, 2010:21) that will be improved very soon because of global food demand. As a result, Africa's economy including Swaziland will look much better.

## CONCLUSION

Finally, the study concludes that Swaziland faces enormous economic and social problems. Thus, this study creates an agenda for extensive research to be carried out on how best the academics, government, and private organizations could develop the existing policies to enhance sustainable environment. Consequently, it raises the need for pressure from stakeholders to influence government for good practice. Walker (2007:3) stated that the strategies for improving the governance and other related issues that improve country's development path "are likely to be undermined" if the community groups do not demand accountability from their governments. With this respect, CSOs, as key stakeholders, can continue demand for improving health and social welfare and they can carry out their works in the fields where governments are unable to operate (Dlamini, 1997). It is worth noting here that CSOs in Swaziland are making significant contributions to the poverty discourse in the country and play a pivotal role in social development includes agriculture, education, social welfare, health, HIV/AIDS, water and sanitation, human rights and so on [Coordinating Assembly of Non-Governmental Organisations (CANGO), 2006). They play a key role in influencing national budget in order to enhance the national development by convening meetings across the country where they highlight the expectations of the national budget and demand for transparency in debating all budgets. Up to the end of year 2008, CSOs delivered services to nearly 500,000 Swazis which is about half of the population of the country (Masilela, 2009).



The study makes an important contribution to the knowledge of social development and economic challenges in Swaziland which could be used for academic, business leaders, and policy makers to develop future paths in order to alleviate the socio-economic problems. The study has significant practical implication for Swaziland and other developing countries. This study has provided an opportunity to Swaziland government and other developing countries to understand better the policies and implement them accordingly. The present study will motivate other developing countries, especially African developing countries, to develop policy in relation to good governance that will lead to sustainable economic growth.

## REFERENCES

- African Development Bank. (2005). *Kingdom of Swaziland: Country Governance Profile*. Operations Department, ONCB, ADB.
- BBC News. (2011). Swaziland Profile, BBC News Africa. Accessed on 30/12/2011 at <http://www.bbc.co.uk/news/world-africa>.
- Business Report. (2011). *Swaziland is near financial collapse: IMF*. Business Report. Accessed on 04/06/2011 at <http://www.iol.co.za/business/international/swaziland-is-near-financial-collapse-imf>.
- Coordinating Assembly of Non-Governmental Organisations. (2006). *Community Development Handbook*. CANGO, Swaziland.
- Central Bank of Swaziland. (2010/2011). *Annual Report*. Central Bank of Swaziland, Swaziland.
- Dlamini, S. (1997). *A celebration of ten years of CANGO seeking our way together: Coordinating assembly of non-governmental organisations*. Mbabane, Swaziland, September, 1-44.
- Gobind, J. and Ukpere, W. I. (2012). Accessing HIV awareness and prevention information: South African challenges. *African Journal of Business Management*, 6(50), 11999-12004.
- Kabir, Md. H. (2010). International funding and its adequacy towards achieving millennium development goals. *Presented at 8th International Conference on Accounting and Finance in Transition (ICAFT)*, September, 27-29, 2010, TUT Business School: Pretoria, South Africa.
- Khadker, S. R. (1998). *Fighting Poverty with Micro credit*.
- Kruger, S. J. and Wellman, J. C. (1999). *Research methodology for the business and administration sciences*. South Africa: Oxford University Press.
- Lushaba, A. (2010). *There is still hope*. Swaziland: Weekend Observer, December, 11-12, 21.
- Maphalala, I. (2007). *Swaziland ranked worse than Zimbabwe*. Swaziland: Times of Swaziland. October, 23, 2.
- Masilela, C. (2009). *NGOs deliver services to 500,000 Swazis*. Swaziland: Swazi Observer, November, 25, 15.
- Masinga, W. (2011). *PM is arrogant*. Swaziland: Swazi Observer, April, 12,3.
- Ministry of Finance Swaziland. (2004). *Privatization policy for Swaziland*. Swaziland: Ministry of Finance, Swaziland Government.
- Ndlovu, H. (2011). *Protesters call for premier, cabinet to go*. Swaziland: Weekend Observer, March, 19-20, 6-7.
- Phinda, S. (2010). *6 corrupt government ministries cost E147m*. Swaziland: Swazi Observer, June, 22,3.
- Redvers, L. (2012). *Reignited Swazi bailout raises hackles*. Mail & Guardian, South Africa, June, 29. Accessed on 07/18/2012 at <http://mg.co.za>.
- Shongwe, F. (2010). *SD receives low Doing Business ranking again*. Swaziland: Times of Swaziland, November, 5,31.
- Sukati, S. (2010). *Majozi can borrow E5 billion from Central Bank*. Swaziland: Times of Swaziland, November, 5, 3.
- Swazi Observer. (2010). *SD the 79th most corrupt country*. Swaziland: Swazi Observer, June, 22,3.
- Thompson, C. F. (2009). *Swaziland Business Year Book 2009*. Swaziland: Mbabane.
- Times of Swaziland. (2011a). *Problems with paying civil servant's salaries*. Swaziland: Times of Swaziland, February, 20,15.
- Times of Swaziland. (2011b). *Coalition condemns E429m arms deal*. Swaziland: Times of Swaziland, March, 17, 3.
- Times of Swaziland. (2011c). *No forced pay cuts*. Swaziland: Times of Swaziland, April, 7, 3.
- United Nations. (2007). *Swaziland: An assessment of the investment climate*. Financial and private sector development Africa Region, 1.
- Vollgraaf, R. (2011). *SA sanguine over Swaziland debt crisis*. South Africa: Business Times - Sunday Times, May, 29, 5.

# RECRUITER'S EXPECTATIONS VS. STUDENT'S PERCEPTIONS, DESCRIPTIVE APPROACH TO HOSPITALITY SKILLS IN OMAN

Sedat Yuksel\*

## Table of Contents

- Abstract
- Keywords
- Introduction
- Review of Literature
- An Empirical Study on Hospitality Skills in Oman
- Determination Panel for Hospitality Skills
- Findings of the Study
- Conclusion
- References

## ABSTRACT

*This is first phase of an applied research to develop the hospitality skills framework to increase effectiveness of curriculums at hospitality management programs and to match qualified human resources needs of hospitality businesses in Oman. Thus, it is targeted to gather quantitative data from stakeholders via survey as input for second phase. To describe and to rank hospitality skills by students and professionals as recruiter, cross-section survey method has been conducted. According to results, whilst the students ranked mostly operational and knowledge skills at the top-ten hospitality skills, the recruiters have ranked soft and conceptual skills of applicants.*

**KEYWORDS:** Hospitality Skills, Career-Oriented Curriculum, Recruitment Driven, Tourism Education.

## INTRODUCTION

As a primary vehicle for job creation and economic recovery, tourism provides more than 75 million direct jobs worldwide and offers fast entry into the workforce, particularly for youth and women in urban and rural communities. Tourism contributes directly and through its multiplier effect to global job creation (UNWTO, 2009a). On the other hand hospitality and tourism graduates encounter some difficulties while they are seeking for a job in job market. Dramatically, the employers in hospitality industry are struggling and complaining to hire qualified staff from new graduates of tourism and hospitality programs in

Oman. In this study, the skills required in hospitality are being investigated to understand the paradoxical phenomenon at hospitality education in Oman.

Although the tourism industry in Oman is comparatively new and a relatively small part of the total economy, it has been growing fast. Government of Oman defined its` tourism policy as `Promotion of a market climate leading to the maximization of the contribution of the tourism sector to the country's GDP and its socio-economic development` and published a policy document entitled "Vision 2020". Omani Government has the intention to achieve an annual GDP growth of 7.4% (MoT, 2010). According to the latest figures, in 2008 tourism accounted for just fewer than 4% of Oman's GDP (MarketResearch.com 2009).

The existing supply of hotel accommodation is the order of approximately 10,000 rooms in 2009, which is predominantly focused on Muscat, Dhofar, Al Batinah and Al Sharqiya regions. On the basis that 23,000 rooms are constructed and using an assumed minimum occupancy rate of 60%, target length of stay of 3.5 nights per the tourism marketing strategy, the number of hotel visitors in 2015 is estimated to be approximately 2 million (MoT, 2010). The Muscat area is the main centre for tourism development and many of the new schemes are in the Muscat region. Currently there are approximately 6,000 hotel rooms and the broad pattern of approvals and stated aims indicate a possible growth to 20,000 rooms by 2015 (Deloitte, 2008).

*In Oman following bottlenecks can be mentioned about hospitality sector -*

- Shortage in small and medium sized hotel supply (Deloitte, 2008).
- Relatively higher prices (Choufany, 2009).
- Relatively lower quality of service in hospitality.
- Lack of qualified staff for hospitality services.
- Lack of multi cultural culinary services.
- Cleanness, hygiene and sanitation standards in lower class hotels (Yuksel, 2010).

Since 2000, three types of tourism and hospitality programs are being offered by higher

\*Senior Faculty, College of Applied Sciences, Department of International Business Administration, Sohar, Sultanate of Oman.

education institutions in Oman: Bachelor degree programs (offered by Sultan Qabous University, Gulf College, and College of Applied Sciences), diploma and certificate programs (offered by Oman Tourism College). The total number of students enrolled is approximately 500. Tourism and hospitality students ratio in total higher education students approximately is 1%. Most of students are enrolled for tourism management and tour guidance programs. In hospitality industry of Oman, more than 90% of staffs are non-Omanis. To create job for younger Omanis, Omani Government encourages Omanis to study hospitality and tourism (Abdul-ghani, 2006).

*In this study*, to develop career-oriented curriculum to match educational needs of students and human resource needs of hospitality businesses in Oman, hospitality skills have been described and ranked by stakeholders (instructors, students, and recruiters).

## REVIEW OF LITERATURE

The classification and analysis of skills have been common research concerns of researcher in vocational and hospitality education since 1980s. For example Buergermeister (1983) revealed industry deemed competencies common to all hospitality entry-level management positions. According to his study, customer satisfaction principles, effective leadership skills, such as motivation and communication, are essentials as well as training ability and profit realization at the beginning of hospitality management concern. However, the key competencies like computer skills, to identify and select proper marketing media, conducting labor studies and understanding management's role in collective bargaining have been considered as less important for success of hospitality management (Buergermeister 1983).

Whilst Ashton & Green's (1996) critique of vocational education as a basis for understanding some of the problems inherent in skills development in hospitality, Baum (2002) conceptualized the skills debate in hospitality in four key theme areas: the nature of work and skills in hospitality; de-skilling within the hospitality workplace; the technical/generic skills debate within hospitality; skills and the education/training process in hospitality. Riegels' (1995) perspective through hospitality education based on consistency of three key elements: substantive knowledge, skills and values. On the other hand, some other studies have been conducted on the extent to which higher education in hospitality is responsible for

competency and skill development (Dopson and Nelson, 2003; Harper, Brown and Irvine, 2005; Williams, 2005).

Agut, Grau and Peiro (2001) in Spain; Dimmock, Breen and Walo (2003) in Australia; Breen, Walo and Dimmock (2004) in New Zealand; Jauhari (2006) in India; Shun-Chuan (2002) in Taiwan; Christou (1999) in Greece, and Annaroud (2006) in Russia reveal skills and competencies that are useful to educators as they create curricula specific to each of the functional areas, across segments and within an international environment.

The directly related studies on the employers' expectations about hospitality skills of new graduates have been varying depend on focal point. For example, Goodman and Sprague (1991) found that the students of hospitality programs would remain in the industry longer, if they have a strong basic understanding of what is expected of them by industry. According to Johnstone (1994) there were large discrepancies between formal training and employer demands in the hospitality industry. In their 1998 study, Breiter and Clements concluded as the top three skills that deemed important by hospitality recruiters of new graduates were: leadership, managerial communications and, employee relations. National Association of Colleges and Employers (NACE) conducted "Job Outlook 2010 Survey" that employers look at the academic standing of the students, their work experiences and the soft skills such as communication skills before employers hire the candidate (NACE, 2010).

From student viewpoint, the skills involving teamwork, initiative and writing were found to predict a willingness to accept employment within a travel agency context. It has also been found that those with an adaptor style of problem-solving and those exhibiting higher levels of the work ethic were the respondents more likely not to indicate a willingness to accept employment in travel agency employment (Ross, 1997).

The case study was conducted by Baum (1987) to design a program to meet the increasing demand for multi-skilled, hospitality-orientated young people to enter the industry in Ireland. The case study explored some of the practical challenges which were faced in applying an innovator program within the context of an established educational and training environment (Baum, 1987).

Chung-Herrera, Enz and Lankau (2003) compiled a list of 99 competencies or skills grouped

into eight overarching dimensions comprising 28 factors that might contribute to leadership success in a survey of 137 industry leaders. Self management composed of ethics and integrity, time management, flexibility and adaptability, and self development has been ranked as first important dimension. Secondly important dimension was strategic positioning, comprising awareness of customer needs, commitment to quality, managing stakeholders, and concern for the community. In their competency model, concern for the community was rated least important. Industry knowledge, leadership, and interpersonal skill were factors that, while important, were ranked lower by the respondents.

When Reutzler et al conducted conjoint analysis to understand perceptions on professional attributes among professionals, students and faculty, they concluded that professionals place tremendous emphasis on interpersonal skills, interview preparation, ability to work with others, and alignment with organizational culture when deciding whom to hire (Reutzler et al, 2011).

Kwok, Adams and Feng (2012) compared graduating seniors based on whether or not they received job offers from the hospitality industry in general, as well as from six different industry segments. Quantitative data analyses confirm that hospitality recruiters from different hospitality segments hold different expectations for graduating seniors. In their Spain study Marchante, Ortega and Paga'n (2006) argued that current common policy of skills improvement must stress the importance of employers in deciding what skills are required. They recommended the government should become an economic agent providing an infrastructure of information, advice, and guidance to help people make informed choices about their careers. So individuals may make decisions regarding the type and level of skills to which they aspire. In this sense, Gibson (2004) also found that graduates needed to better inform themselves of desired attributes (qualifications, skills and personality).

#### **AN EMPIRICAL STUDY ON HOSPITALITY SKILLS IN OMAN**

Although hospitality skills and recruiter expectations have been popular research concern past 30 years, due to significant changes in the competitive environment of business and education, along with changes in the macro environment, hospitality and tourism management needs curriculum reform with

new data from industry professionals to guide the educational process in the hospitality discipline (Johanson et al, 2010). Moreover, as Reutzler et al (2011) emphasized in their study, cultural influences and associated business practices would handicap to generalize findings outside of respective region. The gap between recruiters' expectations and students' perceptions is still popular research concern especially in various destination and cultural contexts. Future research should expand this area of inquiry to compare cultural influences. These are the research needs and motivators and that is why research problem has been redefined for Omani context.

#### **Research Design**

Two-phase applied research was designed to describe hospitality skills phenomena and to develop career-oriented hospitality management curriculum for Omani context. In the first phase, it is targeted to gather quantitative data from stakeholders via survey as input for second phase. In the second phase, to conduct focus groups have been planned to develop career-oriented hospitality management program curriculum with representatives from stakeholders of hospitality and tourism industry in Oman.

The cross-section sample survey has been designed to describe research phenomenon quantitatively. The research question was formulated as 'is there any significant difference between student's perceptions and recruiter's expectations for applicants about hospitality skills learned at hospitality management programs in Oman?

#### **Sampling Methodology**

Non-probability (convenient and snowball) sampling methods have been implemented to select students as respondents. There are 5 diploma and bachelor degree hospitality/tourism programs in Oman with approximately 500 students. In addition to Oman Travel Mart visitors, to include Salalah College of Applied Sciences students (Tourism Management Program) whose are not able to attend to Oman Travel Mart due to far distance, same format questionnaire has been simultaneously circulated by instructors in the campus. At the end of data collection stage, there were 112 paper questionnaires responded by students.

Rather than design a sample from recruiters, all upper-line and top level managers of 35 four and five-star hotels, have been selected as decision maker in recruitment process. Totally 121 e-mail addresses have been gathered from the institutional web site of four and five-star hotels in Oman. The e-mail

questionnaire has been sent to all addresses. Response rate was 17.5% with 23 responds. To increase response rate, door-to-door interviews and in-drop-off address questionnaire has been conducted in Muscat and Sohar which has 87% weight in total four and five-star hotels market. Total 65 questionnaires from recruiters have been taken into analysis.

**Data Collection and Analysis**

In the data collection stage, three various respondent groups have been targeted - curriculum developers/academicians, under graduation level hospitality students and employers/recruiters in hospitality business of Oman. In this context, there were three modules to collect primary data. First module was determination panel with curriculum developers/academicians to determine a basis for hospitality skills at the further steps. Second module was survey on student's perceptions about hospitality skills frame. Third module was also survey on recruiter's expectations from new graduates as hospitality skills.

**DETERMINATION PANEL FOR HOSPITALITY SKILLS**

The three-round e-mail based panel has been organized to determine hospitality skills framework as a variable set by curriculum developers and hospitality instructors. Since the tourism programs from Oman, Turkey and Kyrgyzstan, have academic collaboration on joint projects in tourism and hospitality education, 15 panelists jointed to panel from those respective countries.

*In the first round*, the open-ended question was 'Please list leading ten skills (or more) which should be considered in curriculum development for hospitality management program at higher education level' Reiterations of same or almost same or similar or slightly different skills have been refined by moderator at the end of first round. There were 56 skills in total at the end of first round of e-mail panel.

*In the second round of e-mail panel*, the full list of 56 skills related hospitality management, was sent to panelists to consider, to combine, to classify or to clarify (if any). The question was 'If you think it would be necessary, please make needful changing (rephrasing, combining, refining, redefining etc.) on the list below' The responses have been processed by synthesizing and/or rephrasing to make a draft list of hospitality management skills at the second moderating. To avoid from leading panelists, individual differences have been strictly reserved, unless similar or slightly different wording for same skill by various

panelists. (for ex, front office operations skills and room operations; restaurant operations and food & beverage operations; computer skills and IT literacy. At the end of the second round, the total number of skills quantitatively reduced from 56 to 41. However, qualitatively 15 of skills have been redefined in light of panelist's responses. In order to develop the hospitality skills layout and to help panelists to correlate or to distinguish skills with each other, panelist responses were grouped by moderator at the end of second stage. Correlated skills were grouped into 6 general and comprehensive titles those key, soft, knowledge, managerial, conceptual, and operational/ technical skills. The titles of groups were named as general as possible to refer any undergraduate program.

*At the third round*, the draft list of skills has been sent to panelists with the request of 'When you seek for the most comprehensive and excellent list of skills which should be considered in universal curriculum development for hospitality management program at higher education level, what would be vital and final changing (if any) on the list? After analyzing third round responses, the total number of skills reduced from 41 to 33 and qualitatively some skills have been rephrased.

**Table 1: Classification of Hospitality Skills by Panelists**

Main Groups of Skills	Subgroups
Key Skills	Time Management
	Decision Making
	Problem Solving
	Self Improvement
	Stress Management
	Teamwork
	Entrepreneurship
Soft Skills	Foreign Language Capabilities
	Interpersonal
	Formal Communication
Knowledge Skills	Hospitality Management
	Travel And Tourism Industry
	Numeracy
	Hospitality Law
Managerial Skills	Strategic Planning
	Forecasting
	Staffing
	Employee Training
	Leadership
	Supervision Skills
Conceptual Skills	Performance Assessment
	Reasoning
	Critical Thinking
	Analytical Thinking
	Research Skills

Operational/ Technical	Food & Beverage
Skills	Room Division Operations
	Cost Management
	Computer Applications
	Marketing/Sales
	Events Management
	Finance & Accounting
	Supply Chain Operations

*Survey on students and employers*

Primary data has been gathered by survey method during Oman Travel Mart, the biggest travel and tourism occasion in Oman, on 17-19 May 2010 at International Exhibition Center in Muscat. There were two target groups in the field work. First group is hospitality/tourism students who visit Oman Travel Mart; second group the employer or recruiter in higher quality hotels in Oman.

The self-administered questionnaire was developed separately for students and recruiters. The full list of skills from determination panel and the scale were common components of both. The 7 points scale (1 = lowest, 7 highest importance) was employed to measure student's perceptions and recruiter expectations.

In the student's questionnaire, the request from students was 'Please do indicate the importance and/or needfulness of each title as skills to get a

leading position in hospitality businesses after your graduation'. The request from professionals as recruiter was 'Please do indicate importance and/or needfulness of each title as skills for hospitality management graduates who want to get a leading position in your hotel'.

For both groups (students and recruiters) paper questionnaire was given to respondents to fill up and return during that particular occasion. Additionally, for recruiters the e-mail questionnaire was also designed with the same format.

In the exhibition, there were only 8 representatives from hospitality industry of Oman. Thus, to increase response rate from recruiter side, door-to-door interviews, in-drop-of address (Muscat, Sohar) and e-mail surveys (for Salalah, Masirah, Nizwa Hotels) have been conducted. E-mail questionnaire has been sent to all upper-line and top managers of four and five star hotels in Oman.

#### FINDINGS OF THE STUDY

The data obtained from primary data sources, has been processed and analyzed with SPSS 13.1 (SPSS IBM Inc.). The quantitative data has been analyzed with arithmetic mean as measure of central tendency, standard deviation and variance as measures of dispersion and independent two-sample test. Table 2 illustrates results of quantitative analyzing.

**Table 2: Overall View of Quantitative Analyzing**

	Mean		Standart Deviation		Levene's Test for Equality of Variances		t-test for Equality of Means	
	Student n= 112	Recruiter n= 65	Student n=112	Recruiter n=65	F	Sig.	T df=175	Sig. 2-tailed
Time Management	3.4464	4.2000	0.9381	0.7746	3.5471	0.0613	-5.4806	0.0000
Decision Making	4.2857	3.9692	0.9626	0.8833	0.7586	0.3849	2.1722	0.0312
Problem Solving	4.3482	4.1231	0.9929	0.7182	13.0666	0.0004	1.6004	0.1113
Self Improvement	4.5357	4.3846	0.7819	0.6298	3.7261	0.0552	1.3276	0.1861
Stress Management	3.7411	3.8462	0.8025	0.7122	4.3228	0.0391	-0.8744	0.3831
Teamwork	3.9464	5.4154	0.6954	0.6822	3.2942	0.0712	-13.6414	0.0000
Entrepreneurship	4.3036	5.0308	1.0470	0.8472	1.8324	0.1776	-4.7653	0.0000
<b>F. Language Capabil.</b>	<b>5.8125</b>	<b>6.4923</b>	<b>0.9542</b>	<b>0.6155</b>	<b>9.3292</b>	<b>0.0026</b>	<b>-5.1522</b>	<b>0.0000</b>
<b>Interpersonal comm.</b>	<b>5.3482</b>	<b>6.4154</b>	<b>0.9174</b>	<b>0.6589</b>	<b>5.0997</b>	<b>0.0252</b>	<b>-8.2238</b>	<b>0.0000</b>
Formal Comm.	5.4018	6.3538	0.8950	0.7589	1.5836	0.2099	-7.2020	0.0000
<b>Hospitality Mngmnt</b>	<b>6.3036</b>	<b>4.6769</b>	<b>0.8036</b>	<b>1.0622</b>	<b>4.1658</b>	<b>0.0427</b>	<b>11.5046</b>	<b>0.0000</b>
<b>Travel and Tourism I</b>	<b>6.0893</b>	<b>4.3385</b>	<b>0.7890</b>	<b>0.9727</b>	<b>4.9415</b>	<b>0.0275</b>	<b>13.0448</b>	<b>0.0000</b>
Numeracy	4.3304	5.4769	0.8943	1.0017	2.6814	0.1033	-7.8643	0.0000
Hospitality Law	5.7946	5.9077	0.9692	0.7649	7.6399	0.0063	-0.8057	0.4215
Strategic Planning	5.6875	3.7692	0.9107	0.9316	0.0393	0.8431	13.3956	0.0000
<b>Forecasting</b>	<b>4.1250</b>	<b>3.6308</b>	<b>0.8815</b>	<b>1.0690</b>	<b>5.8742</b>	<b>0.0164</b>	<b>3.3212</b>	<b>0.0000</b>

Staffing	5.5804	4.3385	1.1674	1.1629	0.1316	0.7172	6.8320	0.0000
Employee Training	5.3036	4.8308	1.1612	1.2571	0.0186	0.8915	2.5328	0.0122
Leadership	6.0804	5.8615	0.9505	1.0136	0.5856	0.4452	1.4407	0.1514
Supervision Skills	5.7232	5.4615	1.0153	1.1191	1.1982	0.2752	1.5915	0.1133
Performance Assess.	5.8036	5.4923	0.9381	1.0326	1.3796	0.2418	2.0501	0.0418
Reasoning	3.3839	5.3846	1.0505	1.1277	0.6660	0.4156	-11.8876	0.0000
<b>Critical Thinking</b>	<b>4.6696</b>	<b>6.1077</b>	<b>1.2902</b>	<b>0.7526</b>	<b>31.8964</b>	<b>0.0000</b>	<b>-8.2064</b>	<b>0.0000</b>
<b>Analytical Thinking</b>	<b>4.9286</b>	<b>5.9692</b>	<b>1.2282</b>	<b>0.8655</b>	<b>8.1804</b>	<b>0.0048</b>	<b>-6.0161</b>	<b>0.0000</b>
Research Skills	5.5000	4.6462	1.0398	1.1915	1.4745	0.2263	4.9886	0.0000
F&B Operations	5.9554	6.0769	0.9716	0.7966	2.0788	0.1511	-0.8553	0.3935
<b>Room Division Ops</b>	<b>6.4107</b>	<b>5.6923</b>	<b>0.6515</b>	<b>0.9507</b>	<b>13.0653</b>	<b>0.0004</b>	<b>5.9494</b>	<b>0.0000</b>
<b>Cost Management</b>	<b>4.4821</b>	<b>5.5231</b>	<b>1.2804</b>	<b>1.0913</b>	<b>4.5766</b>	<b>0.0338</b>	<b>-5.4962</b>	<b>0.0000</b>
<b>Computer App</b>	<b>6.4911</b>	<b>5.2308</b>	<b>0.6002</b>	<b>1.2089</b>	<b>36.9147</b>	<b>0.0000</b>	<b>9.2530</b>	<b>0.0000</b>
<b>Marketing/Sales</b>	<b>5.3571</b>	<b>6.2923</b>	<b>1.1614</b>	<b>0.9308</b>	<b>5.5197</b>	<b>0.0199</b>	<b>-5.5391</b>	<b>0.0000</b>
Event Operations	5.5000	5.5231	1.0738	1.1740	0.7195	0.3975	-0.1331	0.8942
Finance & Accounting	3.5536	4.8154	1.0209	1.0591	0.0071	0.9329	-7.8187	0.0000
<b>Supply Chain Ops.</b>	<b>3.8304</b>	<b>5.8154</b>	<b>1.4199</b>	<b>0.9983</b>	<b>21.2879</b>	<b>0.0000</b>	<b>-9.9311</b>	<b>0.0000</b>

Top ten titles were mostly selected from the group of operational skills (computer applications 6.5, room division 6.4, F&B operations 6, marketing and sales 5.4) by students. Two titles (leadership 6.1 and performance assessment 5.8) have been selected from managerial skills. Students express the importance of knowledge skills with Hospitality Management (6.3), Travel and Tourism Industry (6.1) and Hospitality Law (5.8). as subjects in curriculum. Only one soft skill, language capabilities with (5.8) arithmetic mean was ranked at top ten skills by students.

According to recruiters, most ranked three titles are from soft skills (foreign language capabilities 6.5, interpersonal communication 6.4 formal communication 6.3) Three titles (marketing/sales 6.3, F&B 6.1 and supply chain operations 5.8) were selected from operational skills in recruiters' survey. Recruiters express the importance of conceptualizing with Critical 6.1 and Analytical (6) thinking skills. Similarly with students' results, recruiters decided on leadership skills (5.9) from managerial skills at top ten. Recruiters selected only one title from knowledge skills that Hospitality Law (5.9).

As seen on Table 2, results of independent samples t-test and F-test confirmed that language capabilities, interpersonal communication skills, hospitality management, travel and tourism industry, forecasting, critical thinking, analytical thinking, room division operations, cost management, computer applications, marketing/sales, supply chain operations

are titles of skills those significantly differentiated between students and recruiters.

#### CONCLUSION

In Oman, tourism industry is being given priority in governmental policies since last decade. Consistently, tourism and hospitality programs, offered by different level, have been increasing quantitatively. Not only Oman but also globally, tourism contributes directly and through its multiplier effect to job creation. Nevertheless, hospitality graduates encounter some difficulties while they are seeking for a job in both contexts. As Baum (2007) indicated tourism industry is ready access to low cost migrant labor both legal and illegal permits many tourism businesses to sidestep this trend and to ignore issues of productivity, skills development and general workplace enhancement.

The research problem was how hospitality skills can be described and ranked by stakeholders to develop career-oriented curriculums and to match educational needs of students and human resource needs of hospitality businesses in Oman. At the end of analyzing stage, test results confirmed that, the skills, those foreign language, interpersonal communication, hospitality management, travel and tourism industry, forecasting, critical thinking, analytical thinking, room division operations, cost management, computer applications, marketing/sales, supply chain operations were significantly differentiated

between student's perceptions and recruiter's expectations.

According to results, Omani students perceive operational and knowledge skills are relatively important in hospitality management. The reasons to explain their perceptions can be considered as lack of experience in hospitality industry, short-term considerations, college environments, educators' influences. Although there is no conclusive evidence, while the students are considering importance and needfulness of any skill, they may be impressed by leading and distinguishing instructors and/or creative/interactive teaching styles in their respective hospitality programs. Hence, teaching styles and student perception may be further research concern for hospitality educators.

The both group perspectives onto managerial skills were found similar. Both groups give leadership priority as a skill in hospitality. Nevertheless conceptual skills are taken into account by recruiters more than students. On the other hand, recruiters expects from candidates who apply for a position well- equipped with soft skills in hospitality businesses. In Oman, not only the high-volume guests but also majority of staff in hotels is non-Arabic speakers. Thus, it is not difficult to understand the importance of foreign language capabilities for recruiters. In most cases, foreign language competencies of any candidate can be considered as well-enough criteria to work for hotel in Oman. Recruiters may think they can easily match the operational and managerial needs of new staff via on-the-job and off-the-job training programs. But foreign language education takes relatively long time and it will be costly and risky way for management due to high turnover in hospitality.

One of the most common challenges is transformation of theoretical information into skills in hospitality management programs. Knowledge skills can be improved via education in-class environment. On the other hand operational and soft skills require day-to-day practice, out-the-class exposure, in-facility environment, experience, self-discipline and developer assessment by facilitators. It can be derived as a further research concern that how to be measured transformative capabilities of hospitality management programs from theoretical information into key, conceptual, managerial and soft skills.

Curriculum developers and faculty staffs need to consider the relatively importance of soft skills indicated by recruiters and how to improve soft skills

of students. To develop career-oriented curriculum for hospitality management programs in Oman, syllabuses, assessment patterns, practice/application facilities; mentoring, apprenticeship monitoring, and out-the-class activities should be well-designed to improve operational and soft skills in light of recruiters' expectations. The symbiotic relationship context between educational institutions and hospitality businesses requires quantitatively and qualitatively higher cooperative efforts, not only during curriculum development but also training and learning processes and environments. Both sides may focus on how to include other party into their learning/training processes to succeed qualified/skilled staff employment in hospitality industry. To develop industry contact ways and times and more industrial training for hospitality students during their educational period, may influence on students perceptions empathically amid hospitality industry expectations and needs.

## REFERENCES

- Abdul-Ghani, M. (2006). Hospitality and tourism education in the making: the case of the Sultanate of Oman. *Journal of Teaching in Travel & Tourism*, 6(2), 71-87.
- Agut, S., Grau, R. & Peiro, J. (2001). Competency needs among managers from Spanish hotels and restaurants and their training demands. *Human Resource Development Quarterly*, 13(1), 31-51.
- Annaroud, K. (2006). A comparison of skills necessary for successful careers for American and Russian hospitality students upon graduation. *Journal of Hospitality & Tourism Education*, 18(4), 33-44.
- Baum, T. (1987). Introducing educational innovation in hospitality studies: A case study in practical curriculum change. *International Journal of Hospitality Management*, 6(2), 97-102.
- Baum, T. (2002). Skills and training for the hospitality sector: A review of issues. *Journal of Vocational Education & Training*, 54, 343-364.
- Baum, T. (2007). *Human resources in tourism: Still waiting for change*. *Tourism Management*, 28, 1383-1399.
- Breen, M, Walo, M. & Dimmock K. (2004). Assessment of tourism and hospitality competencies: A student perspective. In K.A. Smith and C. Schott (eds.). *Proceedings of the New Zealand tourism and hospitality research conference*, 22-34. Wellington, Victoria: University of Wellington.



- Breiter, D. and Clements, C.J. (1996). *Hospitality curricula for the 21st century*. *Hospitality & Tourism Educator*, 8(1), 57-60.
- Burgermeister, J. (1983). Assessment of the educational skills and competencies needed by beginning hospitality managers. *Journal of Hospitality & Tourism Research*, 8(1), 38-53.
- Choufany, H.M. (2009). *Middle East hotel survey: changing times: but for better or for false?* Accessed on 01/12/2009 at <http://www.hvs.com/jump/?f=2860.pdf&c=3904>.
- Chung-Herrera, B.G., Enz, C.A. & Lankau, M.J. (2003). Grooming future hospitality leaders: A competencies model. *The Cornell Hotel and Restaurant Administration Quarterly*, 44(3), 17-25.
- Christou, E. (1999). *Hospitality management education in Greece: an exploratory study*. *Tourism Management*, 20, 683-691.
- Dimmock, K., Breen, M., & Walo, M. (2003). Management competencies: an Australian assessment of tourism and hospitality students. *Journal of Australian and New Zealand Academy of Management*, 9(1), 12-26.
- Dopson, L. & Nelson, A. (2003). Future of hotel education: required program content areas for graduates of U.S. hospitality programs beyond the year 2000-part two. *Journal of Hospitality & Tourism Education*, 15(2), 11-17.
- Gibson, D.A. (2004). Hotel controllers in the 21st century a Hong Kong perspective on desired attributes. *International Journal of Hospitality Management*, 23, 485-503.
- Goodman, R.J. & Sprague, L.G. (1991). The future of hospitality education: meeting the industry's needs. *The Cornell Hotel and Restaurant Administration Quarterly*, 32(2), 66-69.
- Harper, S., Brown, C. & Irvine, W. (2005). Qualifications: A fast-track to hotel general manager. *International Journal of Contemporary Hospitality Management*, 17, 51-64.
- Jauhari, V. (2006). Competencies for a career in the hospitality industry: an Indian perspective. *International Journal of Contemporary Hospitality*, 7(4), 65-80.
- Johanson, M. et al (2010). Revealing key competencies of hospitality graduates demanded by Industry: A 25 year review. *Published by ScholarWorks@UMass Amherst*. Accessed at [http://scholarworks.umass.edu/refereed/CHRIE\\_2010/Saturday5](http://scholarworks.umass.edu/refereed/CHRIE_2010/Saturday5).
- Johnstone, D. (1994). College at work: partnership and rebuilding of American competence. *Journal of Higher Education*, 65, 168-181.
- Kwok, L., Adams C.R., Feng D. (2012). A comparison of graduating seniors who receive job offers and those who do not according to hospitality recruiters' selection criteria. *International Journal of Hospitality Management*, 31, 500- 510.
- Marchante A., Bienvenido, O. & Pagan, R. (2006). *Determinants of skills shortages and hard-to-fill vacancies in the hospitality sector*. *Tourism Management*, 27, 791-802.
- Market Research.com. (2010). *Oman tourism report Q2 2009*. Accessed on 05/01/2010 at <http://www.marketresearch.com/map/prod/2253864.html>.
- Ministry of Tourism, (2010). National Tourism Development Plan, Accessed 05.01.2010 [http://consys.omantourism.gov.om/wps/wcm/resources/filebff10b97de37c/Tourism\\_Strategy\\_inOman.doc](http://consys.omantourism.gov.om/wps/wcm/resources/filebff10b97de37c/Tourism_Strategy_inOman.doc).
- National Association of Colleges and Employers, (2010). Job Outlook 2010, <http://www.nacweb.org/WorkArea/linkit.aspx?LinkIdentifier&ItemID=3856>.
- Reigel, C. D. (1995). An introduction to career opportunities in hospitality and tourism. In a guide to college programs in hospitality and tourism (4th ed.). New York: John Wiley & Sons, Inc.
- Ross, G.F. (1997). *Travel agency employment perceptions*. *Tourism Management*, 18, 9-18.
- Ruetzler, T. et al (2011). Understanding perceptions of professional attributes using conjoint analysis. *International Journal of Hospitality Management*, 30, 551-557.
- Shun-Chuan, L. (2002). Exploring the relationships between hotel management courses and industry required competencies. *Journal of Teaching in Travel & Tourism*, 2(3-4), 81-101.
- Williams, D. (2005). Hospitality management curriculum design and graduate success in the hospitality industry. *Consortium Journal of Hospitality & Tourism*, 9(1), 25-33.
- World Tourism Organization (UNWTO). (2009). *Roadmap for recovery tourism & travel: a primary vehicle for job creation and economic recovery*, Madrid: UNWTO.
- Yuksel, S. (2010). Does the roadmap of UNWTO work to overcome challenges of tourism in Oman? *Paper presented at international symposium on strategies for sustainable business development*, February 21-22, Sur, Sultanate of Oman.

## A REVIEW PAPER ON SERVICE PROFIT CHAIN

Shilpy Singh\*  
Yogesh Upadhyay\*\*  
Shiv Kumar Singh\*\*\*  
P. Painuly\*\*\*\*

### Table of Contents

- Abstract
- Keywords
- Introduction
- Review of Literature
- The Extended SPC
- Conclusion
- References

### ABSTRACT

*Organizations need to maintain good relations with customers, suppliers, investors, co-operation partners and the public at large. It keeps customers from leaving a commercial relationship and ensures a strong bond between company and customer. This in turn leads to customer retention and finally improving profitability. The Value Profit Chain or commonly called as Service Profit Chain (SPC) is a set of principles for building successful organisations through delivering value to employees, customers, shareholders and any other key stakeholder groups. In many organizational subunits where employee perceptions are favourable enjoy superior business performance. The service profit chain model of business performance has identified customer satisfaction as a critical intervening variable in this relationship. Research on SPC represents an intersection of research in human resources, organizational behaviour, and marketing. The present paper reviews research pertaining to SPC. The aim is to synthesize the research findings in an attempt to analyze direction and focus of research in Service Profit Chain with some additional constructs.*

**KEYWORDS:** Service Profit Chain (SPC), Employee Satisfaction, Customer Orientation, Employee Company Identification.

### INTRODUCTION

With the rising share of the service sector in the global economy, best practices in production, human resource management (HRM) and marketing

are taken from manufacturing and applied to service industries. As the production and marketing of services involve human interaction between producer and consumer, the question is relevant to what extent the marketing function intersects with production and HRM functions. A particular strand of research deals with the relationship between employee versus customer satisfaction. Xu, and Goedegebuure (2005), did an empirical study of a leading Chinese securities firm and tested the relationship between employee satisfaction, customer satisfaction, and their joint impact on profitability. The findings indicate that employee satisfaction and customer satisfaction are positive correlated, and both of them have a positive impact on profitability. Satisfied employees deliver the service customers desire for the company and remain loyal to the company, which results in a higher return on employee investment. Customer satisfaction and increased profitability can be achieved by managing the quality of employees and by improving employee satisfaction. Since customer satisfaction results into employee satisfaction, a sustainable competitive advantage can be created.

Research on SPC represents a combination of research in human resources, organizational behaviour, and marketing. The initial part of the chain deals largely with human resource issues. In other words, for employees to deliver high levels of service, it is critical that companies pay attention to issues such as employee selection, training, motivation and support. In doing so, they create higher levels of employee satisfaction, which in turn leads to higher employee loyalty (Schlesinger and Heskett 1991a, b). Snipes and colleagues (2005) find that job satisfaction also has a significant, positive impact on internal service quality. Similarly, according to Hartline and Ferrell (1996), employee job satisfaction is necessary to produce customer perceptions of service quality.

### REVIEW OF LITERATURE

#### **Service Profit Chain (SPC)**

#### **Employee Satisfaction - Customer Orientation -**

\* Assistant Professor (Management), ITM University, Gwalior (M.P.), India.

\*\* Vice Chancellor, ITM University, Gwalior (M.P.), India.

\*\*\* Professor, Institute of Commerce, Jiwaji University, Gwalior (M.P.), India.

\*\*\*\* Assistant Professor, Department of Management Studies, Kanya Gurukula Campus, Dehradun, GKV, Haridwar (U.K.), India.

### **Customer Satisfaction - Customer Loyalty - Firm's Financial Performance**

A strong focus in modern sales and service management discipline has been on the Service-Profit Chain (SPC), which refers to a causal chain linking employee satisfaction to firm financial performance through mediating constructs such as customer satisfaction and customer loyalty (Anderson and Mittal 2000; Heskett et al. 1994; Heskett, Sasser, and Schlesinger 2003; Loveman 1998). Employee job satisfaction is defined as a positive attitude, which results from a person's positive evaluation of his or her job experiences (e.g., Brown and Peterson 1993; Homburg and Stock 2004; Locke 1976). Customer orientation "refers to the employee's behaviors that are geared toward satisfying customers' needs adequately" (Stock and Hoyer 2005, p. 536). Customer satisfaction occurs when the performance of a product or service meets the customer's expectations (e.g., Bearden and Teal 1983; Oliver 1980; Oliver and DeSarbo 1988). Finally, customer loyalty is "a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior" (Oliver 1997, p. 392). Willingness to pay can be defined as the maximum price a customer is willing to spend for a product or service (e.g., Cameron and James 1987; Krishna 1991).

According to Heskett and colleagues (1994) and Heskett, Sasser, and Schlesinger (2003), internal service quality leads to employee satisfaction, which then drives employee loyalty and productivity. As a result, employee productivity drives value, which is the basis for customer satisfaction. Customer satisfaction then determines customer loyalty, which leads to firm's profitability and growth. This conventional SPC logic stands as a widely accepted element of current management knowledge, especially in areas in which employee-customer interaction occurs. As Rucci, Kim, and Quinn (1998, p. 84) note, "The basic elements of an employee-customer-profit model are not difficult to grasp. Any person with even a little experience understands intuitively that there is a chain of cause and effect running from employee behaviour to customer behaviour to profits." As moving ahead, we study that a considerable amount of academic research has examined specific links in this SPC as well as the entire chain (Kamakura et al. 2002; Loveman 1998). Many of these studies find support for the proposed

chain linkages. However, not all the academic research on the conventional SPC has been positive. Some studies report either small effect sizes or non-significant effects (e.g., Brown and Chin 2004; Brown and Mitchell 1993; Herrington and Lomax 1999; Szymanski and Henard 2001). Thus, despite the widespread appeal and interest in the conventional SPC, further research is needed.

Loveman (1998) provides an empirical examination of the entire conventional SPC and finds support for all the links in the chain. In particular, the strongest links were between internal service quality and employee satisfaction, employee satisfaction/loyalty and customer satisfaction, and customer loyalty and profitability. Harter, Schmidt, and Hayes (2002) also establish the link between employee satisfaction and various outcomes (e.g., customer satisfaction, productivity, profit).

Barbosa, Leone, de Souza, Nóbrega, (2009) studied that the strongest relationships between the elements of Heskett, Sasser and Schlesinger's service profit chain is verified between employee satisfaction and client's satisfaction. This paper reports the results of an exploratory study on the Brazilian operation of a world-wide leader of elevator technical assistance, in which the relationship between these two elements and their influence on the client retention rate was evaluated. The research data were treated with statistical discriminant and cluster analysis. The findings identified the relationship between employee and client satisfaction in 25 of the 27 business units studied. On the other hand, the factor that largely influences the client retention rate in this business environment is client satisfaction, while employee satisfaction is almost null. The results have important academic and managerial implications, given the limited amount of studies in this area and draws actions for the business success.

Hurley and Estelami (2007) explored the service profit chain which postulates that higher employee satisfaction levels lead to high customer satisfaction, and ultimately affect consumer loyalty and profitability. One construct that has largely been ignored in most of this research has been the role of employee turnover. They proposed that employee turnover can also be a powerful predictor of employee sentiment and resulting customer satisfaction levels. The test of various turnover indicators suggested that certain employee turnover indicators can perform as effectively as single-item employee satisfaction ratings do in predicting customer satisfaction. The finding that

turnover predicts customer satisfaction as effectively as employee satisfaction is new and has important implications. More attention should be paid to managing customer satisfaction through managing turnover. Also, the use of turnover as an indicator of customer satisfaction should be explored in light of the fact that employee turnover is a naturally collected managerial measure, and does not require the costly administration of employee satisfaction surveys. This paper builds on Loveman's (1998) work by systematically exploring the role of employee turnover on customer satisfaction in a service organization. Using data from a chain of 275 convenience stores, the relationship between employee turnover and customer satisfaction is explored. Results show that certain employee turnover indicators predict customer satisfaction levels well, and their predictive ability is equivalent to that of single-item employee satisfaction measures gained through employee surveys. A study of 16 turnover indicators suggests that raw turnover measures in general do not have a significant effect on customer satisfaction levels. However, non-linear transformations of these measures have been found to be better predictors of customer satisfaction ratings. This suggests that the relationship between raw employee turnover measures and customer satisfaction is non-linear. It is important to note, however, that the multi-item (rather than the single-item) employee perception ratings have outperformed all predictors in determining customer satisfaction levels. Higher levels of employee turnover, which can lead to lower customer satisfaction, may not only be indicative of a poor work environment, but may also be reflected in the loss of experienced employees and established customer relationships, resulting in negative effects on the customer. The researchers seek to validate this view in the context of retail stores and to better understand the capabilities of employee turnover measures as predictors of customer satisfaction. It should also be borne in mind that the link between customer satisfaction and employee satisfaction might, in some instances, be in reverse. Unhappy customers creating a poor work environment, leading to employee dissatisfaction, and to increased turnover. With regard to the link between employee turnover and firm performance, Hurley and Estelami say: "When people depart, their intelligence regarding processes, methods and customers also leaves. In a service organization, a logical and well framed hypothesis is that higher levels of employee turnover will be associated with lower levels of customer satisfaction.

Heintzman and Marson (2005) in their article focused on the role of service delivery in enhancing citizen trust and confidence. But it does so in the context of a broader model, one that links service delivery to other important aspects of management performance, especially people management. The article refers to this model as the 'public sector service value chain', drawing on work by Heskett and others in the private sector (Heskett et al., 1994, 1997). The article reviews evidence for links between employee engagement (satisfaction and commitment) and client satisfaction in the public sector, and between public sector client satisfaction and citizen trust and confidence. Both theory and practice in the private sector have already identified a link between employee satisfaction and customer satisfaction. The sum of these relationships is termed as the 'service profit chain'. In its simplest form, this concept maintains that 'there are direct and strong relationships between profit; growth; customer loyalty; customer satisfaction; the value of goods and services delivered to customers; and employee capability, satisfaction, loyalty and productivity' (Heskett et al., 1997: 11). The 'public sector service value chain' helps us to understand that public managers should give greater attention to measurement and accountability for both internal and external performance.

Al-Tamimi et al (2009) analyzed the Service-Profit Chain in the Jordanian mobile telecommunications sub-sector through analyzing the relationships between other areas of the chain by developing an original model that demonstrates those relationships. They examine the relationships between call center employees' satisfaction, customers experience, customers' satisfaction, customer advocacy, brand loyalty and achieving 'Orange Mobile' a competitive advantage among competitors. In order to examine those relationships, two populations were identified to be served: 1. The first population was Orange Mobile call center employees. 2. The second population was Orange Mobile subscribers. Consequently, two questionnaires were developed to gather the needed data from the representing samples as the following: The first questionnaire was developed to examine the call center employees' satisfaction in which data were gathered from 50 call center employees, representing almost 31% of the total number of call center employees working for Orange Mobile. The second questionnaire was developed to examine customers experience, customers' satisfaction, customer advocacy, brand loyalty and

achieving Orange Mobile a competitive advantage among competitors, in which data were gathered from 400 mobile subscribers, representing 0.025% (400 out of 1,598,158 subscribers) of the total number of mobile subscribers with Orange Mobile. The statistical analysis was processed through SPSS (Statistical Package for the Social Sciences) version 13, by using descriptive statistical analysis (Frequencies, Percentages, Accumulative Percentages, Mean and Standard Deviation) and inferential statistical analysis (Pearson correlation, T-Test and One-Way Analysis of Variance (ANOVA)). Consistent with the research findings, the main conclusion that was reached in this study is: A 1 degree increase in call center employees' satisfaction represents approximately a 23% increase in customers experience and about 37% in customers' satisfaction. Such increase in customers experience and satisfaction represents nearly 17% increase in their advocacy. Such increase in customer's advocacy represents approximately a 8% increase in their loyalty to the brand. Such increase in brand loyalty represents almost a 5% increase in achieving the company a competitive advantage among its competitors. Finally, this research presented various recommendations that are applied to Orange Mobile top management; call center management and for further studies to be conducted. The most important recommendations they gave were: To adopt a philosophy of "putting people first" that applies to employees and customers, and this philosophy shall be reflected in the organization mission. To develop and maintain a corporate culture that is employee - customer centric. To adopt a comprehensive strategy aiming to achieve a competitive advantage among competitors through linking employees, customers and the financial performance of the organization.

Emerson (2007) in his Ph.D. dissertation studied the relationships between employees' satisfaction, customers retention, and corporate profitability. The study was conducted on Maine Savings, a financial services firm that is located in USA, as a case study, since the researcher was working for this firm as the vice president of finance, accounting and operations. The methodology approached in gathering data was through reviewing literatures and conducting structured and unstructured interviews. For literature review, an in-depth search was done through specific literature searches (e.g. Proquest, URSUS, MARVEL); college search sources at Harvard University, Northeastern University and the University of Maine; as well as business periodicals

such as Harvard Business Review, The Economist and HR Digest. For interviews, the data was collected through conducting interviews. The paper concluded that there is a direct and fundamental link in the relationship between employees, customers and corporate profitability, and emphasized on the positive effects of employee satisfaction and customer retention on corporate profitability.

Andersson and Dellham (2006) examined the link between employees' satisfaction, customers' satisfaction and the company's profitability as well as the value of the company, as a case study on an unnamed banking group that is headquartered in Europe. The research methodology was employed utilizing three groups of empirical data: A survey of the company's employees, a survey of its customers and a set of financial data. Employees' data were based on 4,500 distributed questionnaires, whereas customers' data were based on 55,000 distributed questionnaires. The financial data has been made available in the form of the company's own internal financial and operational score-card database for 2004. The major conclusions of the study were: there are statistical relationships between the variation in employees' and customers' satisfaction, loyalty and other behaviors. Although findings are weak regarding viable connections to the final category of the model, the nature of the factors in the customer behaviour category provide adequate support for the profit/value connectivity of the model.

Titko and Lace (2010) explored the criteria that customers use to evaluate their banks. In the modern competitive environment banks create the value generally using the relational capital. Thus, customer satisfaction and loyalty are the main components of bank success in a market. To achieve this goal, the customers of Latvian commercial banks were surveyed. The authors used their developed questionnaire that was aimed to evaluate level of satisfaction and loyalty of bank clients, as well as to predict their future actions towards to the bank. As a theoretical basis they used Balanced Scorecard approach, RATER model, concept of Service-profit chain, concept of customer perceived value and the results of previous surveys in the area of service quality measurement. The obtained results allow distilling the most important factors of bank attractiveness for retail customers, determining the factors affecting customers' decision about suspending the relationships with the bank and completing our developed performance measurement system for a bank branch

with some additional metrics. This paper presents an original survey in the banking sector of Latvia. To achieve the main goal of the research, the authors of the paper developed questionnaire designed for bank clients. The respondents were randomly selected. Based on survey results, authors concluded that customers of Latvian banks are very conservative and antipathetic to any changes. It helps to retain customers, but on the other hand there are some negative aspects: (i) customers are unreceptive to new products and (ii) it is difficult to reimburse lost customers. The key factors that affect customers' decision about suspending relationships with their banks are increased service fee, bad service and operational errors of employees. Price increase is often a coercive measure. Thus, human factor becomes the main instrument of impact on customers. Also, among the most important factors of customers' perceived value of a bank are qualification and emotional intellect of bank front office staff. At the current moment the primary task of bank executives is to develop professional qualification, emotional intellect and communication skills of customer service specialists.

Kassinis and Soteriou (2003) explored the relationship between environmental practices and performance in services and the impact of such practices on the external portion of the service profit chain. Using structural equation modeling, it tests the hypotheses developed with data from the European hospitality industry. The findings suggest that environmental practices are positively related to performance through the mediating effect of enhanced customer satisfaction and loyalty. The paper's contributions include: the conceptual development of the relationship between environmental practices and performance in services, the incorporation of environmental practices within the service profit chain, and the testing of their impact on customer satisfaction.

Cook and Verma (2002) explored the linkages between quality system, employee service-quality culture, and performance excellence in the banking industry operating in a turbulent business environment. Properly conducted quality culture and strategic consensus assessment has the potential of informing a service organization of its current position and possible areas for improvement. The opinions, values, and practices of employees regarding quality are the fundamentals that define quality culture in many service organizations. Management must apply this knowledge to plan for the successful implementation of service-quality related activities. In an exploratory

study the authors tested the linkages between quality system, service quality, and performance as perceived by the employees of a large banking institution in Hong Kong. Results of a detailed case study and empirical analysis show that employees perceive strong linkages between quality system, service quality, and performance measures.

#### **THE EXTENDED SPC**

##### ***Employee Company Identification-Customer Orientation-Customer Company Identification-Customer Outcomes (Customer Loyalty, Customer's Willingness to pay)-Firm's Financial Performance.***

Homburg et al (2009) tried to explore the extended Service Profit Chain. According to them the conventional Service Profit Chain (SPC) proposes that a firm's financial performance can be improved through a path that connects employee satisfaction, customer orientation, customer satisfaction, and customer loyalty. Using a large-scale triadic data set that includes data from employees, customers, and firms, the authors find strong support for the extended SPC, which accounts for important customer (loyalty and willingness to pay) and firm (financial performance) outcomes. Strong focus in contemporary sales and service management has been on the Service-Profit Chain (SPC), which refers to a causal chain linking employee satisfaction to firm financial performance through mediating constructs such as customer satisfaction and customer loyalty (Anderson and Mittal 2000; Heskett et al. 1994; Heskett, Sasser, and Schlesinger 2003; Loveman 1998). According to Heskett and colleagues (1994) and Heskett, Sasser, and Schlesinger (2003), internal service quality leads to employee satisfaction, which then drives employee loyalty and productivity. In turn, employee productivity drives value, which is the basis for customer satisfaction. Customer satisfaction then determines customer loyalty, which leads to profitability and growth. This framework incorporates two paths to firm financial success. The upper part of the framework presents the conventional, satisfaction-based SPC (job satisfaction? customer satisfaction? customer outcomes [e.g., loyalty, willingness to pay]? firm financial performance), and the lower part depicts the complementary, social identity-based SPC (employee-company identification? customer-company identification? customer outcomes [e.g., loyalty, willingness to pay]? firm financial performance). Research on SPC represents an interdisciplinary approach for human resources, organizational

behaviour, and marketing. The initial part of the chain deals largely with human resource and employee issues. It focuses on employee selection, training, motivation and support so that employee in turn deliver value to customers. By focusing on employee development and support, they create higher levels of employee satisfaction, which in turn leads to higher employee loyalty (Schlesinger and Heskett 1991a, b). This study provides evidence that employee identification with the company is associated with a stronger customer-company identification. Thus, employee- and customer-company identification appear to represent promising constructs that positively affect firm financial performance. The main elements of the social identity approach are self-categorization theory (e.g., Turner et al. 1987) and social identity theory (e.g., Tajfel and Turner 1986). Self-categorization theory suggests that human beings have a need to simplify the social world by categorizing people into groups (e.g., occupation, nationality, clubs, social groups). People perceive themselves as belonging to a particular group or category. According to social identity theory, people strive for positive self-esteem and try to accomplish this by enhancing their social identity. Since the outstanding work of Ashforth and Mael (1989), many researchers have found employee-company identification to be a predictor of organizational citizenship behavior (Riketta 2005), turnover (Mael and Ashforth 1995), organization-based self-esteem (Bergami and Bagozzi 2000), and work motivation and performance (Van Knippenberg 2000).

Bhattacharya and Sen (2003) transferred the social identity approach into the customer domain and developed a conceptual framework for customer-company identification. Their core suggestion is that, similar to employees, customers can identify with a company. Furthermore, this group identification can even occur in the absence of formal membership (see Pratt 1998; Reed 2002). In other words, customers' self-definitional needs can be partially fulfilled by the companies they patronize. Customer-company identification helps a person clarify his or her self-concept and to gain a positive self-appraisal through a positive company appraisal. As Bhattacharya and Sen (2003, p. 77) note, "in today's era of unprecedented corporate influence and consumerism, certain companies represent and offer attractive, meaningful social identities to consumers that help them satisfy important self-definitional needs." There is an emotional component in customer-company identification. Einwiller and colleagues (2006, p.192) describe the

emotional part of customer-company identification as follows: "Strong identification occurs when a company becomes personally relevant for consumers, and personal relevance creates the potential for emotional reactions."

#### ***Employee Company Identification-Customer Company Identification***

People's identification with an organization is based on their perception of its core characteristics (Bhattacharya and Sen 2003; Dutton, Dukerich, and Harquail 1994). In a sense, customer-contact employees are the long arm of a company who transport these core defining characteristics to the customers (i.e., they are the "face" of the organization; Hartline, Maxham, and McKee 2000). The link between employees' prototypicality and customer-company identification, is suggested by Bhattacharya and Sen (2003) in their conceptual model on constituents and communicators of company identity. Research in social psychology (e.g., Van Knippenberg 2000; Van Knippenberg, Lossie, and Wilke 1994) has confirmed that people are more likely to attend to communications from prototypical group members than from non-prototypical members and are more likely to align their attitudes with the attitudes of prototypical members. Identification includes a hedonic dimension (Dutton, Dukerich, and Harquail 1994; Tajfel 1981). Homburg et al expect that employees who identify strongly with the company will express more positive emotions than employees who do not identify with the company. According to the theory of emotional contagion, these emotions are "caught" by the respective customers (either consciously or unconsciously) and, in turn, positively influence their company identification.

Identification with a group leads to a deep-lying motivation to enhance the value of the respective group (e.g., Ellemers, De Gilder, and Haslam 2004). In line with previous research, it has been argued that among other actions (e.g., in-role behavior, organizational citizenship behavior), engaging in customer-orientated behavior can be one way of acting positively toward the organization. In support of this view, employees with a deep-level bond to their organization display a higher level of customer orientation (Hoffman and Ingram 1991; Pettijohn, Pettijohn, and Taylor 2002; Siguaw, Brown, and Widing 1994).

Through their customer interactions, frontline employees signal the character and identity of their

company to the customers (Ahearne, Bhattacharya, and Gruen 2005; Liao and Chuang 2004). Bhattacharya and others have argued that the more favorable the behavior of the frontline employee as perceived by the customer (i.e., in terms of customer orientation), the more likely the customer is to consider the company a target for social identity fulfillment (Ahearne, Bhattacharya, and Gruen 2005; Bhattacharya and Sen 2003). According to Ahearne, Bhattacharya, and Gruen (2005, p. 577), "this is because such interactions make it easier for the customer to retrieve favorable, self-relevant information from memory, which scholars have suggested is an important driver of company identification." It is in accordance with Bhattacharya, Rao, and Glynn (1995, p. 55), who find "that a strong and often distinctive customer orientation is a necessary condition for fostering identification."

A key link in the framework is between customer-company identification and customer loyalty and willingness to pay. It is said that customers who identify with a company will be motivated to act favorably toward it to raise its status. In line with this reasoning, Bhattacharya and Sen (2003) propose a conceptual framework in which customer-company identification predicts customer loyalty toward a company. In support of this, Ahearne, Bhattacharya, and Gruen (2005) find that customer-company identification is related to beneficial customer outcomes (i.e., product utilization and extra-role behaviors, such as recommendation of the company to friends). Homburg et al applied this reasoning in their proposed framework of positive relationship between customer-company identification and the outcomes of customer loyalty (e.g., repurchase, recommendation) and willingness to pay. With respect to customer loyalty, they argue that customers who identify strongly with the company tend to engage in loyal behavior, such as repurchasing and recommending the company, because of three social identity theory-based reasons. First, being loyal validates and reinforces the feeling of belongingness to the company and thus fulfills a self-definitional need. Second, according to social identity theory, people strive to raise the status of the group to which they belong (in this case, the company). In turn, loyal behavior, such as repeated purchase and positive word-of-mouth communication, can be viewed as ways to help the organization in this respect. Third, as stated previously, customer-company identification fulfills an emotional need for customers (Ahearne, Bhattacharya, and Gruen 2005; Bhattacharya and Sen 2003). If customers switch to another firm, they will no longer

receive this emotional benefit. This should raise their propensity to stay loyal to the company with which they identify.

Willingness to pay is the maximum amount of money a customer is willing to spend for a product or service or the value he or she assigns to a consumption experience in monetary units (Cameron and James 1987; Homburg, Koschate and Hoyer 2005; Krishna 1991). Given that customer-company identification serves as a motivator to act on behalf of a group, it should also raise the consumer's willingness to pay for products or services of the company (Arnett, German, and Hunt 2003). Moreover, because customer-company identification helps a person define him- or herself, this would be of significant value to the customer, and this additional value would be taken into account in terms of the price he or she is willing to pay.

Customers who are more loyal should buy more from a firm, recommend the firm's products and services to others, and be more likely to adopt a firm's new add-on services or new products (Mooradian and Oliver 1997; Rust, Lee, and Valente 1995). In addition, a more loyal customer base leads to reduced costs in future customer transactions and customer acquisition (e.g., costs of customer communications; Reichheld and Sasser 1990; Srivastava, Shervani, and Fahey 1998).

Palmatier, Scheer, and Steenkamp (2007) did a study of 362 buyer-salesperson dyads using triadic data (from buyer, salesperson, and sales manager), the authors examine both a customer's overall loyalty to the selling firm and the customer's loyalty vested specifically in his or her salesperson. They find that only salesperson-owned loyalty, a newly identified construct, directly affects the more tangible seller financial outcomes of sales growth and selling effectiveness, whereas both salesperson-owned loyalty and loyalty to the selling firm increase the customer's willingness to pay a price premium. Across their cross-sectional and longitudinal studies, loyalty to the selling firm positively affected only customer willingness to pay a price premium. In contrast, salesperson-owned loyalty significantly affected all three financial outcomes in the cross-sectional study and positively affected sales growth longitudinally.

## CONCLUSION

In an era of increased competition, the importance of achieving high levels of customer satisfaction has gained the attention of researchers and practitioners alike. This is especially the case in



the service sector, where many companies are focusing upon service quality improvement issues in order to drive high levels of customer satisfaction. A review of the literature highlights that a number of common factors have been identified as critical drivers of customer satisfaction. The service profit chain, Heskett et al. (1994) is one of the most widely supported theories of customer satisfaction. In brief, it proposes a positive linear relationship between staff satisfaction, service quality and customer satisfaction leading, ultimately, to profitability.

The concept should be analyzed clearly so to achieve an insight into the concept. This review study would make an important contribution to human resource management and marketing theory and research because it would help to demonstrate empirically a positive role for the social identification construct and other variables of employee in developing strong customer relationships, which in turn lead to positive market and financial outcomes. Moreover, it will help researchers to identify gaps in present research in SPC and can attempt to fill that gap.

## REFERENCES

- Ahearne, M., Bhattacharya, C.B. and Gruen, T. (2005). Antecedents and consequences of customer-company identification: Expanding the role of relationship marketing. *Journal of Applied Psychology*, 90(3), 574-585.
- Al-Tamimi, W.S., Hasonah and A.I. Rezaqallah, I.E.L. (2009). Service-profit chain analysis in the telecommunications sector Jordanian perspective on the mobile sub-sector: The case of orange mobile. *European Journal of Economics, Finance and Administrative Sciences*, 17, 107-120.
- Anderson, E.W. and Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, 3(2), 107-120.
- Andersson, M. and Dellham, N. (2006). An empirical model of customer relationships and value creation in a service industry. *Master's Thesis*, Stockholm School of Economics.
- Arnett, D. B., German, S.D. and Hunt, S.D. (2003). The identity salience model of relationship marketing success: The case of nonprofit marketing. *Journal of Marketing*, 67, 89-105.
- Ashforth, B. E. and Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14(1), 20-40.
- Barbosa, F., Leone, R., de Souza, T. and Nóbrega, K.C. (2009). Studying the service profit chain in the technical assistance environment. *POMS 20th Annual Conference Orlando*, Florida U.S.A.
- Bearden, W. O. and Teal, J.E. (1983). Selected determinants of consumer satisfaction and complaint reports. *Journal of Marketing Research*, 20(1), 21-28.
- Bergami, M. and Bagozzi, R.P. (2000). Self-categorization, affective commitment, and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychology*, 39(4), 555-577.
- Bhattacharya, C.B., and Sen, S. (2003). Consumer-company identification: A framework for understanding consumers' relationships with companies. *Journal of Marketing*, 67, 76-88.
- Bhattacharya, C.B., Rao, H. and Glynn, M.A. (1995). Understanding the bond of identification: An investigation of its correlates among art museum members. *Journal of Marketing*, 59, 46-57.
- Brown, K. A. and Mitchell, T.R. (1993). *Organizational obstacles: Links with financial performance, customer satisfaction, and job satisfaction in a service environment*. *Human Relations*, 46(6), 725-758.
- Brown, S. P. and Peterson, R.A. (1993). Antecedents and consequences of salesperson job satisfaction: Meta-analysis and assessment of causal effects. *Journal of Marketing Research*, 30, 63-77.
- Brown, S.P. and Chin, W.W. (2004). *Satisfying and retaining customers through independent service representatives*. *Decision Sciences*, 35(3), 527-550.
- Cameron, T. A. and James, M.D. (1987). Estimating willingness to pay from survey data: An alternative pre-test-market evaluation procedure. *Journal of Marketing Research*, 24, 389-395.
- Cook, L.S. and Verma, R. (2002). Exploring the linkages between quality system, service quality, and performance excellence: service providers' perspective. *Quarterly Management Journal*, 9(2).
- Dutton, J. E., Dukerich, J.M. and Harquail, C.V. (1994). *Organizational images and member identification*. *Administrative Science Quarterly*, 39(2), 239-263.
- Einwiller, S.A., Fedorikhin, A., Johnson, A.R. and Kamins, M.A. (2006). Enough is enough! when identification no longer prevents negative corporate associations. *Journal of the Academy of Marketing Science*, 34(2), 85-194.
- Ellemers, N., Gilder, D. and Haslam, S.A. (2004).

- Motivating and groups at work: A social identity perspective on leadership and group performance. *Academy of Management Review*, 29(3), 459-478.
- Emerson, A. L. (2007). The effects of employee satisfaction and customer retention on corporate profitability: an analysis of the service-profit chain. *PhD Dissertation*, International School of Management.
- Harter, J. K., Schmidt, F.L. and Hayes, T.L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268-279.
- Hartline, M. D., Maxham III, J. G. and McKee, D.O. (2000). Corridors of influence in the dissemination of customer-oriented strategy to customer contact service employees. *Journal of Marketing*, 64, 35-50.
- Hartline, M.D. and Ferrell, O.C. (1996). The management of customer-contact service employees: An empirical investigation. *Journal of Marketing*, 96, 52-70.
- Heintzman, R. and Marson, B. (2005). People, service and trust: is there a public sector service value chain? *International Review of Administrative Sciences*, 17(4), 549-575.
- Herrington, G. and Lomax, W. (1999). *Do satisfied employees make customers Satisfied? An Investigation into the Relationship Between Service Employee Job Satisfaction and Customer Perceived Service Quality*, Kingston. UK: Kingston University.
- Heskett, J. L., Sasser, W.E. and Schlesinger, L.A. (2003). *The value profit chain: Treat employees like customers and customers like employees*. New York: The Free Press.
- Heskett, J. L., Jones, T.O., Loveman, G.W., Sasser, W.E. Jr., Schlesinger, L. (1994). Putting the service-profit chain to work. *Harvard Business Review*, 72(2), 164-174.
- Heskett, J. L., Sasser, W. E., Jr, and Schlesinger, L. A. (1997). *The service profit chain*. New York: Free Press.
- Hoffman, K. D. and Ingram, T.N. (1991). Creating customer-oriented employees: The case in home health care. *Journal of Health Care Marketing*, 11(2), 24-32.
- Homburg, C. and Stock, R.M. (2004). The link between salespeople's job satisfaction and customer orientation in a business-to-business context: A dyadic analysis. *Journal of the Academy of Marketing Science*, 32(2), 144-58.
- Homburg, C., Wieseke, J. and Hoyer, W.D. (2009). Social identity and the service-profit chain. *Journal of Marketing*, 73, 38-54.
- Hurley, R.F. and Estelami, H. (2007). An exploratory study of employee turnover indicators as predictors of customer satisfaction. *Journal of Services Marketing*, 21(3), 186-199.
- Kamakura, W.A., Mittal, V., Rosa, F.D. and Mazzon, J.A. (2002). *Assessing the service-profit chain*. *Marketing Science*, 21(3) (summer), 294-317.
- Kassinis, G.I. and Soteriou, A.C. (2003). *Greening the service profit chain: The impact of environmental management practices*. *Production and Operations Management*, 12(3), 386-403.
- Krishna, A. (1991). Effect of dealing patterns on consumer perceptions of deal frequency and willingness to pay. *Journal of Marketing Research*, 28, 441-451.
- Liao, H. and Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal*, 47(1), 41-58.
- Locke, E. A. (1976). *The nature and causes of job satisfaction*. *Handbook of industrial and organizational psychology*, Marvin Dunnette, ed. Chicago: Rand McNally, 1297-1350.
- Loveman, G.W. (1998). Employee satisfaction, customer loyalty, and financial performance: An empirical examination of the service profit chain in retail banking. *Journal of Service Research*, 1(1), 18-31.
- Mael, F. and Ashforth, B.E. (1995). *Loyal from day one: biodata, organizational identification, and turnover among newcomers*. *Personnel Psychology*, 48(2), 309-333.
- Mooradian, T. A. and Oliver, J.M. (1997). *I can't get no satisfaction: The impact of personality and emotion on post-purchase processes*. *Psychology & Marketing*, 14(4), 379-393.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17, 460-469.
- Oliver, R. L. and DeSarbo, W.S. (1988). Response determinants in satisfaction judgements. *Journal of Consumer Research*, 14, 495-507.
- Oliver, R.L. (1997). *Satisfaction: A behavioral perspective on the consumer*. New York: Richard D. Irwin/McGraw-Hill.

- Palmatier, R.W., Scheer, L.K. and Steenkamp, J.B.E.M. (2007). Customer loyalty to whom? managing the benefits and risks of salesperson-owned loyalty. *Journal of Marketing Research*, 44, 185-199
- Pettijohn, C. E., Pettijohn, L.S. and Taylor, A.J. (2002). *The influence of salesperson skill, motivation, and training on the practice of customer-oriented selling*. *Psychology and Marketing*, 19(9), 743-758.
- Pratt, M. G. (1998). *To Be or Not to Be? Central questions in organizational identification*, in identity in organizations: Building theory through conversations, D.A. Whetten and P.C. Godfrey, eds. Thousand Oaks, CA: Sage Publications, 171-207.
- Reed, A. (2002). *Social identity as a useful perspective for self-concept-based consumer research*. *Psychology and Marketing*, 19(3), 235-266.
- Reichheld, F.F. and Sasser, E.W. (1990). Zero defections: quality comes to services. *Harvard Business Review*, 68(5), 105-111.
- Riketta, M. (2005). Organizational identification: a meta-analysis. *Journal of Vocational Behavior*, 66(2), 358-384.
- Rucci, A.J., Kim, S.P. and Quinn, R.T. (1998). The employee-customer-profit-chain at Sears. *Harvard Business Review*, 76(1), 83-97.
- Rust, R. T., Lee, C. and Valente, E. (1995). Comparing covariance structure models: a general methodology. *International Journal of Research in Marketing*, 12(4), 279-291.
- Schlesinger, L. A. and Heskett, J.L. (1991b). The service-driven company. *Harvard Business Review*, 69, 71-81.
- Schlesinger, L. A. and Heskett, J.L. (1991a). Breaking the cycle of failure in services. *Sloan Management Review*, 32, 17-28.
- Siguaw, J. A., Brown, G. and Widing, R.E. (1994). The influence of the market orientation of the firm on sales force behavior and attitudes. *Journal of Marketing Research*, 31, 106-116.
- Snipes, R. L., Oswald, S.L., LaTour, M. and Armenakis, A.A. (2005). The effects of specific job satisfaction facets on customer perceptions of service quality: an employee-level analysis. *Journal of Business Research*, 58(10), 1330-39.
- Srivastava, R. K., Shervani, T.A. and Fahey, L. (1998). Market-based assets and shareholder value: A framework for analysis. *Journal of Marketing*, 62(1), 2-18.
- Stock, R. M. and Hoyer, W.D. (2005). An attitude-behavior model of salespeople's customer orientation. *Journal of the Academy of Marketing Science*, 33(4), 536-552.
- Szymanski, D. M. and Henard, D.H. (2001). Customer satisfaction: a meta-analysis of the empirical evidence. *Journal of the Academy of Marketing Science*, 29(1), 16-35.
- Tajfel, H. (1981). *Human groups and social categories*, Cambridge. UK: Cambridge University Press.
- Tajfel, H. and Turner, J.C. (1986). *The Social identity theory of inter-group behavior in psychology of inter-group relations*. Stephen Worchel and William G. Austin, eds. Chicago: Nelson-Hall, pp.7-24.
- Titko, J. and Lace, N. (2010). *Customer satisfaction and loyalty in Latvian retail banking*, *Economics and Management*, 15, 1031-1038.
- Turner, J. C., Hogg, M.A., Oakes, P.J., Reicher, S.D. and Wetherell, M.S. (1987). Rediscovering the social group: a self-categorization theory. *American Journal of Sociology*, 94(6), 1514-1516.
- Van K., Lossie, N. and Wilke, H. (1994). In-group prototypicality and persuasion: Determinants of heuristic and systematic message processing. *British Journal of Social Psychology*, 33(3), 289-300.
- Van, K.D. (2000). Work motivation and performance: a social identity perspective. *Applied Psychology: An International Review*, 49(3), 357-71.
- Xu, Yingzi and Goedegebuure, Robert, (2005). *Employee satisfaction and customer satisfaction: Testing the service-profit chain in a Chinese securities firm*. *Innovative Marketing*, 1(2), 49-59.

# AN ORGANIZATIONAL CULTURE FRAMEWORK FOR EFQM MODEL OF BUSINESS EXCELLENCE: A CASE STUDY OF HEEP, BHEL

Ashish Sinha\*

## Table of Contents

- Abstract
- Keywords
- Introduction
- Review of Literature
- Indian Industry and Business Excellence
- Objectives of the Study
- Scope of the Study
- Research Methodology
- The Organizational Culture Framework Evolved
- Conclusion
- References

## ABSTRACT

*Business excellence is today's corporate mantra. Business organizations have seen the writing on the wall - be excellent otherwise mediocrity can lead them to their graves. In this cut of the edge competitive environment organizations are in constant search of drivers of excellence which can be harnessed to the best. And one driver which organizations have realized to be one of the most enduring and well established is organizational culture. But the moot question before organizations is what kind of culture because as such culture is an abstraction which needs to be defined. This paper deals exactly with this issue. The European Foundation for Quality in Management (EFQM) model is one of the most widely adopted model of business excellence today. In fact, Confederation of Indian Industry (CII) has adopted this model and has instituted CII-EXIM Bank award for business excellence whose evaluation is based on this model only, with a large number of Indian organizations going for CII evaluation. While a lot of culture frameworks exist in literature there is a certain need for a specific dimensional framework of culture which suits this model given the contingent nature of culture. The results of this paper emerge out with such a dimensional framework only. While the study has been done on a case basis in context of Heavy Electrical Equipment Plant, Bharat Heavy Electricals Limited, Hardwar, manufacturing organizations with operational similarity can use this study as a reference pole for augmenting their own cultures.*

**KEYWORDS:** Organizational Culture, Business Excellence, EFQM Model, Cultural Framework.

## INTRODUCTION

### *The concept of business excellence*

Business excellence, as described by the European Foundation for Quality Management (EFQM), refers to "outstanding practices in managing the organization and achieving results, all based on a set of eight fundamental concepts", these being "results orientation, customer focus, leadership and constancy of purpose, management by processes and facts, people development and involvement, continuous learning, innovation and improvement; partnership development, and public responsibility"

*The five essentials of excellence as described by Marazza are:*

- Planning strategically
- Benchmarking for excellence
- Leading collaboratively
- Engaging the community
- Governing by standards

### *Imperativeness of Business Excellence*

One philosophy that business organizations have over the years come to understand, is that their continued existence is a function of the degree to which they are able to excel in business. Excellence in their functions, processes, systems, people and of course their performance is what organizations are today striving at. It is a reflection of the paradigm shift that has taken place on frontiers of management. At one time we talked of efficient organizations or successful organizations. But today we talk of excellent organizations. More than a paradigm shift in the theoretical framework of management knowledge, excellence is becoming an imperative benchmark for organizations.

What has made this paradigm shift happen in the Indian context is actually the shift in the economic policy of the country post 1991. Ever since the early nineties liberalization and globalization have

\*Assistant Professor, School of Management Studies, Doon University, Dehradun, (U.K.), India.

been the buzzwords of Indian economy. Sectors hitherto restricted from private sector were opened up to them and no more business in India was just for Indians. Multinationals from around the globe were now free to do business in India. The economy of the new millennium is no more the control regime economy of the past but a free market economy that sees the world as global village.

The most profound impact of this transition has been the growth and intensification of competition that has virtually changed the landscape of Indian Business Environment. The Public Sector Undertakings (PSUs) which were till now pretty secure from any sort of competition have to face heat from private players and the private sector companies have to now face what they have feared all along - competition from Multi National Companies (MNCs). But the moot point is not the entry of competition but the entry of multi national corporations which possesses the best of Human Resource (HR), the best of technology, the best of systems and processes, follow the best practices, achieve the best of results and are already on the list of excellent companies. The challenge to Indian corporate is from such kind of organizations and this challenge has the potential of raising a question mark even on the survival of Indian corporate in the domestic market.

Obviously before competing with these MNCs, Indian companies have to brace to the veritable bests in the repertoire of these MNCs and this is the real challenge. Indian corporate has to rise to this challenge, beating the heat of competition will only be the outcome of this. But how do Indian corporate rise up to this formidable challenge? What organizations have to do is to put up their best in every critical area where a difference between them and their competitors can mean ending up as the loser in the great game of the market. This is the only way they can compete when faced against some of the best companies in the world. And this is nothing but excellence. In fact, it's not just a question of fighting it out on home turf but taking the battle out to the competitors turf as well. In the globalized economy you have to reach to international markets if you have to sustain yourself in the long run. With cut of the edge competition prevailing in domestic markets even market leadership is no more a guarantee of sustained profitability. Gradually it is becoming expedient for domestic companies to enter international markets and competing in the international

market with the best companies in the world again requires excellence.

### ***Culture and its Imperativeness***

One of the most fundamental issues that have continued to make organizations introspect and search for answers is - what are the critical success factors that lead organizations through the turbulence of markets, internal flux and change or lead organizations to what we define as excellence. Human Resource (HR), technology, strategies, organizational systems, market dominance, and quality leadership are some factors on which organizations and management scientists have agreed upon.

Indeed these factors have proved to be facilitators of goal attainment for organizations but merely possessing a best fit of these factors cannot ensure sustained success for the organizations in their mission paths. At best they can be a guarantee for ephemeral successes. But to succeed in the longer term on a sustained basis or to achieve excellence, organizations have to learn to perform. And this learning comes from something we know as organization culture. Nothing reflects this better than Edgar Schein's classical definition of organization culture [21]. A pattern of basic assumptions - invented, discovered or developed by a given group as it learns to cope with its problems of external adaptation and internal integration - that has worked well enough to be considered valuable and to be taught to the members as the correct way to perceive, think and feel in relation to those problems.

The mechanics of business makes two things very clear. First, to succeed and to excel, you require adapting to the environment i.e. the changes around you and secondly, you need to keep your flock together bang on the mission target. The first is the problem of external adaptation and the second of internal integration. Organizations, which for instance do not have the ability to adapt to technological changes aren't destined for long. Nor are those organizations, which possess a multitude of diversities but do not know how to tread the entire organization into a common thread. Both are problems of Organizational Culture. In the first case, a shared pattern of belief that innovation is necessary to keep pace with the changing technological environment is missing i.e. lack of culture for innovation which will ultimately result in market failure with the competitors overpowering your products in the

market with their technologically better products.

Actually if we take a closer look then what is obvious is that factors like HR, technology, systems are not too difficult to acquire. What actually is required is the integration of these factors to develop what we call core competence and this requires the help of collective learning in organizations. Moreover organizations need to internalize what has been learned. But from where is this collective learning and internalization going to come from - none other than from Organization Culture.

Successful organizations achieve a good external fit and as well as a good internal fit. A good external fit implies cultures are well aligned with the strategy and environment. For instance, dynamic environment with market driven strategies require a culture of initiative risk taking, conflict tolerance, high integration and high horizontal communication. In contrast stable environments with product driven strategies require a culture of control with minimum of risk and conflict. A good internal fit implies culture well matched with technology. Routine technologies work well with a culture of centralized decision-making and limited individual initiative. Non-routine technologies on the other hand require just the opposite culture. Clearly Organizational effectiveness cannot be achieved without the external and the internal fit. And Organization Culture remains at the crux of both. But what is significant from the excellence point of view is that it is the effectiveness of organizations that sets the tone for excellence in organizations. It is effectiveness which determines whether goals are being attained or not. Goal attainment is verily the crux of excellence.

In fact, evolution and change require that organization push in one direction while facing them rather pulling in different directions. This is the essence of surviving change or managing change or what is called excelling change. Surviving change and coming on to top of it requires leadership, leadership of the highest order. It is leadership only that gives a unity of direction to the organization throughout the turbulence of change and evolution. While leaders do start Organizational Culture, leadership in organizations is sustained only by having compatible Organization Culture for it.

The edifice is undoubtedly that excellent organizations have got to the way they are because of their unique set of cultural attributes that distinguish

them from the rest. And if we can understand what that unique set of attributes is, perhaps we can simplify the way organizations strive to achieve excellence.

## REVIEW OF LITERATURE

Anecdotal evidence suggesting a link between organizational culture and effectiveness first came from Peters & Waterman (1982) who, in their classic study, *In search of Excellence*, had remarked, "Our strong belief was that the excellent companies had gotten to be the way they are because of a unique set of cultural attributes that distinguish them from the rest." There is also strong evidence supporting the premise that the reason for failure of efforts such as TQM lies in the failure to successfully change organizational culture (Goss, Pascale & Athos, 1993; Kotter & Heskett, 1992). Large scale studies in this context were undertaken by Lim (1995), Denison (1990), Denison & Mishra (1995), Gordon & Di Tomaso (1992), Marcoulides & Heck (1993), Petty, et al (1995), Calori & Sarnin (1991), Koene (1996), and Wilderom & Van den berg (1998). Barney (1986) showed that organizational culture could be a source of sustained competitive advantage. Siehl & Martin (1990) found a link between organizational culture and financial performance. Denison & Mishra (1998) indicated that organizational culture had an impact on quality. Kekele (1998) suggested that success of TQM approaches depended on organizational culture. Foster (2002) showed that management excellence could be achieved through organizational culture. Sorenson (2002) had also suggested a link between organizational culture and firm performance. Black (2003) considered organizational culture as essential for strategic success. Nikolic & Nastasic (2010) confirmed the inevitability of organizational culture for TQM. Stok, et al (2010) established the role of organizational culture in fostering business excellence. Sinha (2012) also established link between organizational culture and business excellence taking the case of a navratna PSU in India.

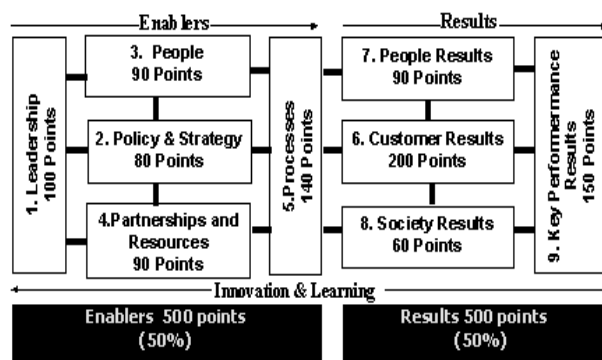
## INDIAN INDUSTRY AND BUSINESS EXCELLENCE

India's IT flagship company and one of the most respected company INFOSYS has also won the CII-EXIM bank excellence award in the Year 2002. It has proved to be an excellent company judging from the EFQM model criteria[28]. Sundaram Fasteners of TVS group is another company that has taken rapid strides in the excellence journey and has won the award in the past. Tata steel is another company that has won the award in the past. Though the Tata group

has formally adopted the Malcolm Baldrige model but TISCO has also been going for CII evaluation on the EFQM criteria. In fact the Indian automobile industry is replete with examples such as Tata Motors, Sundaram Fasteners, Jay Bharat Maruti, Bharat Forge, etc which have made formidable progress on the path to excellence and have won different categories of the award.

But it is amply clear from the number of companies and their reputation that are going for CII assessment that business excellence is the new paradigm of Indian companies. Indian companies have recognized the imperativeness of business excellence in today's highly competitive globalized times. In fact The Indian Industry is going through an excellence revolution and EFQM model has become a widely adopted benchmark.

**Figure 1: EFQM Model of Business Excellence**



*Excellent Results with respect to Performance, Customers, People, and Society are achieved through Leadership driving Policy and Strategy, People, Partnerships and Resources, and Processes.*

This model has also been adopted by Bharat Heavy Electricals Limited, Haridwar in whose perspective this research has been done. It consists of five enablers namely Leadership, Policy and strategy, People, Partnership and Resources and Processes. To achieve excellence an organization has to fulfill the criteria as given under these enablers. Then there are four sets of results- People results, customer results, society results and key performance results. To achieve excellence an organization has to achieve excellent results with regard to these four categories. A detailed explanation of these criteria and result categories is given below:

### 1. Leadership

How leaders develop and facilitate the achievement of the mission and vision, develop values

required for long term success and implement these via appropriate actions and behaviours, and are personally involved in ensuring that the organization's management system is developed and implemented.

### 2. Policy and Strategy

How the organization implements its mission and vision via a clear stakeholder focused strategy supported by relevant policies, plans, objectives, targets and processes.

### 3. People

How the organization manages, develops and releases the knowledge and full potential of its people at an individual, team-based and organization-wide level, and plans these activities in order to support its policy and strategy and the effective operation of its processes.

### 4. Partnership and Resources

How the organization plans and manages its external partnerships and internal resources in order to support its policy and strategy and the effective operation of its processes.

### 5. Process

How the organization designs, manages and improves its processes in order to support its policy and strategy and fully satisfy, and generate increasing value for, its customers and other stakeholders.

### 6. Customer Results

What the organization is achieving in relation to its external customers.

### 7. People Results

What the organization is achieving in relation to its people.

### 8. Society Results

What the organization is achieving in relation to local, national and international society as appropriate.

### 9. Key Performance Results

What the organization is achieving in relation to its planned performance.

## OBJECTIVES OF THE STUDY

To establish a cultural framework for HEEP, BHEL in accordance with the EFQM model of business excellence.

## SCOPE OF THE STUDY

The scope of the study is limited to one public sector organization which in fact is one of India's most respected organizations and also the largest capital

goods manufacturing organization.

### RESEARCH METHODOLOGY

The assessment of culture of any organization is done along a dimensional framework. Theoretically Organizational Culture is a construct which comprises of various dimensions. Hence what kind of culture an organization has and whether it is weak or strong, this assessment has to be done along certain dimensions. If an organization rates strong on a particular dimension say innovation, this implies it has a strong culture for innovation and if it rates low then the situation is otherwise.

Culture has to be assessed with a contingency approach. This implies that before assessment it has to be ascertained that what dimensions are adequate indicators of business excellence in context to the organization in question. This has to be ascertained keeping in mind the strategic thrust of the organization and its operational and environmental characteristics. Though many standard Organizational Culture frameworks such as OCTAPACE, Denison Culture Survey, etc are available, but a separate framework has been derived for assessing BHEL Haridwar's culture keeping in mind the EFQM model of business excellence that BHEL Haridwar has adopted. This culture framework is also consistent with other models of business excellence.

A lot of exploratory research was done with regard to the selection of dimensions of organizational culture required for achieving business excellence as propounded in the EFQM model of business excellence. Initially this was carried out with the help of literature survey. Ashkanasy and Broadfoot's OCP came in handy in this research. Initial discussions were then carried out with experts from academics and BHEL. This helped to identify the similar dimensions and provided an initial validity of the OC framework selected. The seventeen dimensions identified were Leadership, Structure, Innovation, Job Performance & Appraisal, Planning, Communication, Environment, Humanistic Approach, Development of individual, Socialization of new entrants, Commitment, Inter-Department Cooperation, Conflict tolerance, Systems, Result Orientation, Aggressiveness and Stability. The dimensions drawn from OCP-Leadership, Planning, Communication and Humanistic workplace had a Cronbach alpha reliability >.80. Three other dimensions environment, job performance and development of individual approached acceptable reliability (Cronbach alpha >.70). Structure, Innovation

and socialization of entry were also in due course proved to be reliable. OCP dimensions validity was obtained in significant correlations between organizational commitment and other dimensions (ranging from .67 to .79) had already a tested validity.

After zeroing on these dimensions they were empirically tested. A questionnaire survey was carried out for this task. Likert 5-point scale was used for measurement in this questionnaire.

The scores were interpreted in this manner. If Total score of all the respondents on a particular dimension was  $\geq 75\%$ , that particular dimension was selected as part of that framework. This is in consonance with the nature of Likert scale. The instrument formed contained basic description of all the dimensions.

On the basis of this survey it was ascertained as to what extent the respondents agreed with the imperativeness of a particular dimension. The respondents selected for this survey were part of the total quality (TQ) matrix of BHEL, Haridwar. The sampling was thus judgmental and the basis was that these personnel had a fairly good idea of business excellence and organization culture on account of their involvement in business excellence activities. The total number of respondents was 100. The TQ matrix of BHEL Haridwar for business excellence is shown on the following page.

Thus fifteen dimensions having scores  $\geq 75\%$  were selected for measurement of OC of BHEL Haridwar. The dimensions selected are Leadership, Structure, Innovation, Job Performance & Appraisal, Planning, Communication, Environment, Humanistic Approach, Development of individual, Socialization of new entrants, Commitment, Inter-Department Cooperation, Conflict tolerance, Systems, Result Orientation. The last two - Aggressiveness and stability were rejected. The probable explanation was that, BHEL is a power generation equipment manufacturer, a field where there is not much role of marketing unlike FMCG sector. Most of the manufacturing is done on tender-order process. Stability was rejected because BHEL is not immune to changes in technology, regulatory framework which is now allowing private players in this sector and other factors. The ten dimensions of OCP have been ab-initio defined by Ashkanasy and Broadfoot, but a broader definition was required for making the framework operational in case of HEEP, BHEL since modifications if any suggested by experts had to be incorporated. Additionally five



more dimensions were being added. This was largely done with the help of wide ranging depth interviews and ethnographic research. Depth interviews were conducted with members from TQ Matrix, Training coordinators and HR managers with the view that they

would have been having a fair idea of OC. A detailed OC instrument which was later developed hinged on the operational definition of OC dimensions as suggested by experts.

**Figure 2: Organisation Structure/ TQ Matrix for Business Excellence**

<p><b>Unit Level TQ Council (TQC)</b></p> <ul style="list-style-type: none"> <li>● Chairman - E.D.</li> <li>● Members - Participants of Top Mgmt TQM Workshop from HEEP</li> <li>● Secretary - TQ Manager {GM(Q)}</li> <li>● Meetings - Once in two months</li> </ul>	<ul style="list-style-type: none"> <li>● To set Vision, Mission, Values &amp; Strategic Objectives for TQM</li> <li>● To steer &amp; review the progress of various TQ initiatives</li> <li>● To establish linkage in the various improvement initiatives</li> </ul>
<p><b>TQM Group (TQMG) (Think Tank for TQ Council)</b></p> <ul style="list-style-type: none"> <li>● Chairman - GM(T&amp;D)</li> <li>● Members - GMs/AGMs (7 nos.)</li> <li>● Secretary - AGM (QAX)</li> <li>● Meetings - Once a month (minimum)</li> </ul>	<ul style="list-style-type: none"> <li>● To steer TQM movement in HEEP</li> <li>● To act as standing committee for directing &amp; monitoring various TQ activities</li> <li>● To formulate &amp; review Unit Level TQ Action Plans</li> </ul>
<p><b>TQ Promotion Council (TQPC)</b></p> <ul style="list-style-type: none"> <li>● Chairman - TQ Manager {GM(Q)}</li> <li>● Members - TQ Co-ordinators &amp; TQ Assessors from HEEP</li> <li>● Secretary - AGM (QAX)</li> <li>● Meetings - Once a month</li> </ul>	<ul style="list-style-type: none"> <li>● Trainers &amp; Change agents to bring excellence</li> <li>● To coordinate TQ initiatives in their respective departments / functions</li> <li>● To provide vital inputs for TQM implementation</li> </ul>
<p><b>Functional TQ Councils (FTQC)</b></p> <ul style="list-style-type: none"> <li>● Chairman - GMs / DROs</li> <li>● Members - All Sectional Heads and TQ Assessors of Concerned Area</li> <li>● Secretary - TQ Co-ordinator</li> <li>● Meetings - As often as required but not less than once a month</li> </ul>	<ul style="list-style-type: none"> <li>● To steer TQM movement in concerned Department / Function</li> <li>● To formulate &amp; review Department /Function Level TQ Action Plans</li> </ul>
<p><b>Area TQ Councils (ATQC)</b></p> <ul style="list-style-type: none"> <li>● Chairman - All HODs (DRO to GMs)</li> <li>● Members - All Sectional Heads and TQ Assessors of Concerned Area</li> <li>● Secretary - TQ Co-ordinator of Area</li> <li>● Meetings - As often as required but not less than twice a month</li> </ul>	<ul style="list-style-type: none"> <li>● To steer TQM movement in concerned Department / Function</li> <li>● To formulate &amp; review Department /Function Level TQ Action Plans</li> </ul>

The reliability of the five new dimensions added viz. Commitment, Inter Department Cooperation, Conflict Tolerance, Systems and Reward Orientation, was further established by conducting reliability tests for these dimensions. For this a questionnaire comprising of 17 statements - 4 each for Commitment and Result Orientation and 3 each for the remaining three dimensions was developed using Likert 5 point scale. Cronbach's alpha, inter item correlation and item total correlation have been used to measure the reliability of these dimensions. Inter item correlation measures the correlation amongst test items whereas item total correlation gives the correlation between an item's score and the score of the total set of items. It also measures the internal consistency between items. A sample of 150 respondents from the executive cadre from all departments of the organization was taken for this survey. SPSS was used for computation of results. Table 1 shows the corrected item-total correlation for each of the 17 items. The Cronbach's alpha for the 17 items comes out to be 0.8735 and the corrected item-total correlation varies from 0.3122 to 0.6623. Only in case if the item is deleted, the value of alpha increases slightly to 0.8763 but the item-total correlation for this item is 0.3122, so there is no need to delete any item. Theoretically Cronbach's alpha should exceed 0.7 and item-total correlation should exceed 0.3. Hence all items are acceptable.

Item	Dimension	Corrected Item-Total Correlation	Alpha if item deleted
Item1	Commitment	.4477	.8691
Item2		.6070	.8618
Item3		.6623	.8596
Item4		.5946	.8632
Item5	Inter Dept Coop.	.3941	.8707
Item6		.5284	.8657
Item7		.3122	.8763
Item8	Conflict Tolerance	.4741	.8685
Item9		.3575	.8736
Item10		.4509	.8700
Item11	Systems	.5261	.8659
Item12		.5906	.8628
Item13		.3940	.8706
Item14	Result Orientation	.5312	.8661
Item15		.6136	.8633
Item16		.6020	.8625
Item17		.6223	.8623

**Cronbach's alpha - 0.8735 (n = 150)**

Commitment	Item1	Item2	Item3	Item4
Item1	1.000			
Item2	.531**	1.000		
Item3	.369**	.588**	1.000	
Item4	.230**	.366**	.475**	1.000

**\*\* - Correlation is significant at the 0.01 level**

Table 2 gives the inter-item correlation for the four items used to measure commitment.

Mean inter-item correlation for commitment is 0.427 while individual correlations vary from 0.230 to 0.588.

Inter Dept. Coop	Item5	Item6	Item7
Item 5	1.000		
Item6	.534**	1.000	
Item7	.269**	.293**	1.000

**\*\* - Correlation is significant at the 0.01 level**

Table 3 gives the inter-item correlation for the three items used to measure Inter department cooperation.

Mean inter-item correlation for Inter department cooperation is 0.365 while individual correlations vary from 0.269 to 0.534.

Conflict Tolerance	Item 8	Item 9	Item 10
Item8	1.000		
Item9	.487**	1.000	
Item10	.248**	.157	1.000

**\*\* - Correlation is significant at the 0.01 level**

Table 4 gives the inter-item correlation for the three items used to measure conflict tolerance.

Mean inter-item correlation for conflict tolerance is 0.297 while individual correlations vary from 0.157 to 0.487.

Systems	Item 11	Item 12	Item 13
Q11	1.000		
Q12	.533**	1.000	
Q13	.262**	.267**	1.000

**\*\* - Correlation is significant at the 0.01 level**

Table 5 gives the inter-item correlation for the three items used to measure Systems.

Mean inter-item correlation for systems is 0.354 while individual correlations vary from 0.262 to 0.533.

Result Orientation	Item 14	Item 15	Item 16	Item 17
Item 14	1.000			
Item 15	.339**	1.000		
Item 16	.409**	.561**	1.000	
Item 17	.421**	.591**	.516**	1.000

\*\* - Correlation is significant at the 0.01 level

Table 6 gives the inter-item correlation for the four items used to measure Result Orientation. Mean inter-item correlation for Result Orientation is 0.567 while individual correlations vary from 0.339 to 0.591.

Theoretically for good internal consistency, inter-item correlations should range from 0.2 to 0.7 and mean inter-item correlation should exceed 0.3. It can be seen from Tables 2 to 6 that the mean inter-item correlation for each dimension exceeds 0.3 all inter-item correlations lie in the range 0.2 to 0.7, except Conflict tolerance which has a mean inter-item correlation of 0.297, indicating a fairly good internal consistency amongst items.

As commitment has a direct impact on performance, its correlation with the other four dimensions was also evaluated.

Correlation with	Commitment
Inter Department Cooperation	0.442
Conflict Tolerance	0.483
Systems	0.587
Result Orientation	0.674

The three indicators of internal consistency - Cronbach's alpha, item-total correlation and inter-item correlation, all show that the five new dimensions added are acceptable in the context of the organization under study. The new framework for assessing the organization's culture has been described in the following section.

## THE ORGANIZATIONAL CULTURE FRAMEWORK EVOLVED

A detailed description of the dimensions is being given after a lot of depth interviews and ethnographic research so that a detailed instrument could be developed to assess and measure HEEP's culture.

### 1. Leadership

Timeless and ageless - Leadership is an infinite success mantra for any organization. Leadership is defined as the ability to influence or direct people towards the achievement of organizational goals.

Leadership is perhaps the most basic facet of organizational culture. If people do believe that they are being led by leaders who are committed to the organizational objectives, then certainly this assumption becomes a catalyst for the attainment of organizational objectives.

One of the most basic aspects of leadership is the ability of leaders to motivate people to give their best to the organization. In fact it is this very quality which differentiates successful leaders from the unsuccessful ones. If managers are able to inspire their subordinates to give their 100% to the organization, the accomplishment of organizational objectives is ensured. The degree to which managers guide their subordinates and help them in solving their work related problems not only contributes to stimulating the employees but also leads to proper accomplishment of work in time. It is managers who set the tone and tenor of the accomplishment of work related tasks in the organization and it is their duty to guide their subordinates regarding the work related aspects.

An important aspect of leadership is the style of leadership. A democratic and participative style of leadership, embedded deeply in the culture of the organization, is what is required. How important it is for any organization hardly needs to be explained. Ideas which make it big come from the participation of all levels of members of the organization in organizational deliberations. Henceforth it is very important for managers to encourage their staff to give their views and take due consideration of them while taking decisions. And it is highly important for the leaders to set examples for the followers to follow. Exemplary leadership is the best form of leadership. Subordinates generally look to their superiors for inspiration. It is of paramount importance that managers be role models for their subordinates.

### 2. Structure

A major issue in organizations is its structural orientation. While some may argue that what has structure got to do with organizational culture but structural orientation is an inherent part of the culture. Structural orientation related to culture pertains to the degree of flexibility in the working of the organization, clarity of authority, responsibility and accountability in the organization, the level of delegation of authority and the climate for empowerment in the organization. If an organization goes strictly by the book it has its own impact on the working pattern of employees. Employees do get rigid and at many times fail to

understand the expediency of the situation. But if there is flexibility in the working of the organization for e.g. the authority to take a particular decision may not solely rest with a particular individual, things can get a lot better. Decision can be taken faster and a lot of crisis situation can be saved in this manner.

Again if there is clear authority, responsibility and accountability for decision taking in the organization, the better shall be the working of the organization. Employees should clearly know their ambit of authority if decisions are to be taken and that too timely. More over the responsibility has also to be clear. It must be clear that who is responsible for accomplishing a particular task or to take a particular decision. In the absence of these elements, no individual can be held responsible for any task and employees would shirk to take decisions. In this light accountability is also very important. If an individual is taking a decision he must be held accountable for it, otherwise people would take decisions without caring for their consequences. Without accountability authority has got no meaning. Unless and until people are answerable for their actions, they can take decisions, which might be detrimental to the interests of the organization.

Another important aspect is delegation of authority. Only if the delegation of authority is adequate, individuals can be expected to take decisions on their own. Decision-making shall certainly be faster in this case. Superiors overloaded with authority becoming decision bottlenecks are less likely to be found if there is adequate delegation of authority. The latest paradigm is of empowerment. Empowerment is a tendency on the part of superiors to let the subordinates take decisions. If employees are empowered in the organization, this not only leads to better working but also results in highly motivated employees.

### **3. Innovativeness**

Innovations dictate the future of industries. One of the most important dimensions of organizational culture of a manufacturing organization is innovativeness. Manufacturing organizations continually harp on product development and cost reduction. This is an inherent part of their strategy. In times of infinite competition and clutter cost, leadership is an excellent strategy for survival and winning through competition. Companies sustainedly make efforts to reduce their costs. Price, which is also much a point for market competition can only be won over if companies are able to reduce their costs because lower costs

translate into lower prices.

However cost reduction alone cannot be the strategy. What is also required is sustained efforts to develop newer and better products. To outwit your competitors you need to have fast and effective new product development in your organization. Product life cycles are generally short and to be the market winner you have to continually come up with new products.

But the primary question is how do we achieve cost reduction or sustain New Product Development (NPD) in the organization. It is only when people are encouraged to take initiatives to develop better products, processes and techniques, we can achieve cost reduction or NPD. Ideas, which make it big, have to come from the people itself. Development of better techniques and processes which lead to cost reduction, has to come from the people itself. This is the culture for innovativeness. Innovations in the organization need to be encouraged and rewarded. Only then can a culture for innovation thrive in the organization. This cultural aspect has to be percolated down to the level of blue-collar work force. Some times the best ideas come from workers who are in closest touch with manufacturing.

Another important aspect is that to what extent employees are open to learning of new technology, systems, practices and policies. Organizations today can survive only when they are responsive to adoption of latest technology and systems. And it is the people in the organization who have to be responsive to adoption of latest technology and systems. Organizations have to develop a culture of continuous learning, sharing of knowledge, innovation and improvement.

### **4. Performance Appraisal**

One of the key factors that build up a climate of high employee satisfaction and morale and consequent high levels of employee motivation in the organization is the culture for performance appraisal in the organization. There has to be a positive general assumption in the organization that performance of employees is recognized and rewarded. Unless and until this is a shared pattern of belief across the length and breadth of the organization, we cannot expect employee satisfaction or motivation levels to be high. It is a natural human tendency that people want their performance to be recognized and rewarded, and organizations have to affirmatively respond to this requirement. And this pattern of belief can be perpetuated only if it emanates from the top

management. Top management has to support and facilitate a culture of performance recognition and reward.

But performance recognition and reward alone is not enough. What is also important is the faith that employees repose in the performance appraisal system. This can take place only when the employees believe that the method for performance appraisal is clear and justified. If employees do not have faith in the system, satisfaction levels can never be high. Employees shall always have a sense of perceived injustice. It is an undeniable fact that promotions are one of the biggest sources of grievance in organizations. And promotions should depend on performance appraisal. The primacy of performance appraisal can hence be very well understood. If employees believe that promotions are based on other factors such as seniority, goodwill of bosses etc., then performance appraisal is a superfluous exercise. Performance appraisal should be justified. This is a value that has to be perpetuated in the organization. But the driver of this value shall be the system that we have for performance appraisal. Combinedly all of this results in a positive culture for performance appraisal, which definitely is a motivator in its own right.

### **5. Planning**

Planning is one of the most important aspects of organizational management. One of the key ingredients of any organization's success is how efficiently and effectively it is able to plan its goals and objectives. It is the corner stone of any organization's success. Planning is not merely a functional area of management or a practice that any organization follows. Planning is a matter of culture. Does the organization plan each and everything that it does? This has to be a general tendency in the organization, if the organization has to run efficiently and effectively. It must be clear that what is to be done and how it is to be done - the two basic facets of planning. Unless and until this is clear, success cannot be guaranteed.

But culture for planning does not just include a general practice to plan. It also implies that whether members of the organization are involved in planning or not. Targets of employees should be set in concurrence with the concerned employees. This helps to secure a general acceptability regarding targets, very necessary to ensure that employees work with commitment towards adhering to the set targets. And this is not all. What also is required is participation of managerial level employees in strategic planning and

policy formulation. Not only does this lead to wider acceptability among managers, but also leads to better formulation of plans, strategies and policies, since participation leads to diverse pooling of ideas and creativity.

However, any planning is incomplete without the control element in it. A regular assessment has to be done to ensure that the planned objectives are being met. Without this we would be unaware that where we stand. Rectification or corrective action can only be done when there is an above-mentioned assessment. Again this is a matter of general tendency in the organization and henceforth a cultural aspect. The top management has to perpetuate this approach in the organization and has to ensure that it percolates down to the junior level managers in the organization.

Another identifiable element of planning is whether planning is proactive and timely or not. Reactive planning leads to largely knee-jerk reaction while proactive planning appraises the environment and ensures that a plan is ready whenever the need arises for it.

### **6. Communication**

Communication forms the backbone of any organization. It is in fact what we call the live wire of the organization. The need for communication has been well established in practice. What communication derives from culture is the openness, transparency and clarity of communication. And this has to be both ways - Top to bottom and Bottom to top.

In top to bottom communication, communication regarding company objectives, policies, plans, processes, practices, systems, customer requirements, and quality standards has to be done in an effective and open manner by the top management. If this communication is not effective employees shall not know what they stand for and how they have to function. No organization can be successful where employees do not know what they have to achieve, be it in terms of targets, customer requirement or quality standards, and how they have to achieve it i.e. what plans, policies, practices and systems are to be followed. ISO, TQM, business excellence whatever standards practices and systems are adopted by the organization, they have to percolate down to the lowest level. And communication should ensure this.

The bottom to top communication is concerned about how open is the communication between employees and the upper levels of management. Do employees have the freedom to express their opinion

and give their feedback regarding organizational issues to the management is the basic question here. This is a reflection of employee autonomy in the organization and how much employee autonomy is important in an organization is anybody's guess. Moreover positive criticism is something, which should be more than welcome in any organization. Such kind of criticism by employees many a times leads to betterment of various organizational aspects.

Another important aspect of communication is that how open is communication across all levels of employees in the organization. If this communication is open and smooth it gives what we call a vent to the employees to express their problems and grievances, horizontally and vertically in the organization. Many a problem and grievances can be solved with the help of this kind of communication.

One of the most important communication - culture aspect in any organization is the culture for informal communication in the organization. This is present naturally in every organization. But at times is a reflection of the strength of formal communication network in the organization. If decisions taken by the management reach employees through the informal communication network (grapevine) or if rumors are having a field day in the organization, this reflects very poorly on formal communication channels. The management has to keep a tab on the informal communications network in the organization because it cannot be eliminated but a strong culture for it is something which management should avoid developing in their organization.

### **7. Environment**

Yet another aspect of organizational culture is the responsiveness of the organization to its external environment. When we talk of responsiveness of the organization to its external environment, customer orientation of the organization automatically comes into focus. Customers form a very important part of the external environment. In fact today the paradigm of most companies is customer delight. We have come to believe that customer is the king and the organization in question BHEL itself prophecies 'Grahak safal hum safal'. Winning through cut of the edge competition requires organizations to win over customers. There is no alternative to that. Henceforth customer orientation is of paramount importance. How much emphasis is laid on meeting customer requirement is a reflection of the customer culture of the organization. The customer culture of the organization has to be emphasized enough to ensure that employees do take care of

customer requirements. If employees generally believe that customer requirements come first and do take care of them we have a positive customer culture in the organization. At the same time when we consider the human factor we have to recognize that it is the leader or the manager who has to lead from the front. Customer focus should be visible within managers at all levels. Their subordinates shall also naturally show a customer focus.

Apart from customer orientation it is the responsiveness of the organization to external changes such as change in technology, change in competitive environment etc., which is a part of the culture. The more quickly and effectively an organization responds to such changes the more responsive its culture is said to be. Most of the changes mentioned above are inevitable part of the environmental dynamics. The only thing constant today is change. Only those organizations turn out to be ultimate winners who can respond swiftly and effectively to these changes. And changes can be effected by people only. If people working in the organization believe in change and are ready to respond to change, half the battle is won. And this is precisely why this dimension of environmental responsiveness is a part of the culture.

### **8. Humanistic Approach**

A very important element of the culture of any organization is its humanistic nature. The humanistic nature of any culture covers specifically three aspects. First, to what extent do employees help each other with on the job as well as personal problems? If employees do help each other a lot with on the job problems, this indicates that the organization has a very conducive and amiable work culture. High levels of cooperation can lead to high efficiency and effectiveness in the organization. But it is not on the job aspect only. Helping each other with personal problem also is an equally important aspect. It is a foregone fact that personal problems do affect on the job performance of employees. So if employees are sharing personal problems and are helping each other to solve them, this is an indication of healthy organizational culture.

Secondly, what is the welfare orientation of the organization? If the organization regards welfare of its employees as its top priority it is definitely a morale booster in its own right. How much concern the organization shows for its employee is highly important. The more the welfare concern of the organization, the higher level of overall satisfaction is likely to be there

of the employees within the organization. And higher the level of overall satisfaction more shall be the motivation among employees. Welfare facilities like hospitals, recreation centers, housing facilities, canteens etc. are thus highly valued by employees. Thirdly, to what extent employees work together with team spirit in the organization is highly important. This is especially important in the case of an organization like BHEL where tasks are highly team based. If teams work cohesively in the organization this certainly leads to higher level of productivity.

### **9. Development of the Individual**

Another dimension of organizational culture is development of the individual i.e. the development orientation of the organization towards its employees. This is one of the most important factors in job satisfaction and employee motivation. The very first aspect that this dimension covers is that whether employees have enough training to do their job well. If employees are inadequately equipped to handle their jobs, this shall certainly leads to lower efficiency of employees. Productivity shall naturally be affected. Effectiveness of employees shall also be lowered. Moreover this leads to lower morale and lower job satisfaction among employees. When employees realize that they cannot handle their job properly on account of poor training their confidence level with the job goes down and so also their motivation level.

But it is not just this aspect alone. Development of employees has to take place in a sustained manner. The skills and ability of employees have to be regularly upgraded. This is due to two reasons. One, organizations adopt new technology, systems and practices on a continuous basis. Employees have to be readied for them. Second if the organization wants its employees to assume higher responsibilities, their abilities have to be commensurately upgraded. With increase in responsibilities, employees face more complex problems. Hence their problems solving skills also have to be honed up.

And this is an era of specialists. So the approach should be to identify the competencies of employees and develop these competencies. People do work at their best when their latent talent is discovered and developed. Moreover the organization gets what we call hardcore specialists of different areas. They are best geared up to tackle the challenges and problems of their areas.

It is not just competency or skill development that motivates employees. They should also get ample

opportunities for personal and career development as well. For e.g. personality development of employees, development of Emotional Quotient, etc. are exercises that increase the confidence of employees and consequently their motivation. Moreover employees should also have an assured career development path i.e. they should have opportunities to move up in organizational ladder. If there is stagnation, this would lead to increased levels of dissatisfaction and lower level of motivation among employees because to move up is a basic human need. To have self-esteem and to actualize their self, employees want to move up in the organizational ladder. Henceforth the need for career development arises.

### **10. Socialization of New Entrants**

Socialization of new entrants is yet another dimension of organizational culture. Socialization of new entrants implies orientation or induction of new employees on joining the organization. This is a very important aspect of organizational culture. The better the socialization of new employees the more is their comfort level. And if employees do feel comfortable with their new organization, this shall leave no scope for any psychological dissonance that new employees may encounter on joining the organization. It is a natural human tendency that individuals do feel a degree of uneasiness in a new environment. But their uneasiness can be countered through their proper socialization. And socialization is a cultural practice. If there is a shared assumption across the organization that new employees have to be well socialized, only then their socialization shall be strong. The question is how to ensure effective socialization of new employees.

First of all they should be well acquainted with the company profile, policies, procedures, organizational structure and norms of the organization on joining. When employees are aware of the structure and norms of the organization, they can adhere to them. Employees should also be made aware of what is expected of them as an employee of the organization i.e. role expectation. This minimizes chances of behavioral irregularity on part of new employees. Socialization also involves the degree to which immediate superior guide new employees. The procedural aspects of the working of the organization have to be taught to new employees by their immediate superiors. If they are unclear about how to perform it will be akin to shooting in the dark. Moreover socialization also involves the training that new employees receive immediately on joining the

organization. Proper training not only enhances the comfort level of new employees but also their efficiency and effectiveness.

### **11. Commitment**

One of the most basic assumptions that must be shared across the length and breath of the organization by its members is commitment. No organization whose members are not highly committed towards it can be successful. A high degree of commitment on the part of members of the organization must be embedded in the culture of the organization. An organization may have the best systems practices and technologies in place but if its employees are not committed, it cannot be successful in its mission. Technically speaking commitment is an attitude, but if a majority of the members of the organization share this attitude and this attitude becomes a perpetual tendency i.e. it takes a permanent place in the mind of employees and new members on joining the organization also learn it, then it becomes a part of the culture of the organization. In fact it would not be wrong to brand commitment as a value. It is such a strong thing. As a cultural value it guides the behavior of the members of the organization. The older ones share it and the newer ones learn it.

Commitment defined is the degree to which employees want to stick to their organization and are willing to exert the best of their efforts towards the goal attainment of the organization. But how do we measure commitment. The very first measure of commitment is that whether employees feel proud to be a part of their organization. If this sense of pride is there definitely there shall be some degree of commitment in the employees. Another aspect is that whether the organization inspires its employees to do the best in their jobs. If inspiration is there, certainly there shall be commitment. A third aspect is that whether employees are committed to the values of the organization. Every organization has some basic values that it prophesizes and believes, that adhering to them shall certainly help it in its vision and mission accomplishment. Henceforth commitment towards these values is a measure of commitment of employees towards the organization. If commitment is a part of the culture then it is highly useful in reducing personal problems such as absenteeism, grievances, turnover etc. A high level of commitment among the employees also contributes to organizational effectiveness.

### **12. Inter-Department Cooperation**

Another integral dimension of organizational

culture is inter-department cooperation. To what extent this tendency exists in the organization is very important. The functioning of any department of the organization cannot be totally independent. Every department requires the cooperation of other departments to some extent or the other. This is very consistent with the system theory which views organization as composed of various subsystems, which are related to each other. Each of the department can be regarded as a subsystem. Hence if we take goal attainment as the criteria for organizational effectiveness, this shall require effective functioning of each department. This requires departments to work in tandem with each other. For example, manufacturing and materials departments have to work in close cooperation with each other. Materials can ensure availability of material only with the feedback from manufacturing and on the other hand manufacturing can ensure smooth production only when it gets support from materials. Same is the case with marketing and manufacturing. Inter department cooperation is especially important in the case of an organization like BHEL where tasks are highly inter linked. Design is the work of one department, actual manufacturing of another department and solving problems of manufacturing is the work of yet another department. All of them have to work in close cooperation with each other if tasks are to be successfully accomplished. The inter linking of tasks many a times leads to formation of inter departmental teams to solve a particular problem or to deliberate on some specific issue. Whether these inter departmental teams work with team spirit and are able to reach at decisions is also highly important. It is another reflection of the culture of the organization.

### **13. Conflict Tolerance**

Conflicts are an inevitable part of organizational life. While dysfunctional conflict has negative repercussion on the organization, functional conflicts have a positive side. In fact, functional conflict should be actively promoted in the organization. And this is what we imply by conflict tolerance. The culture of the organization must be supportive of this tendency in the organization. To what extent open discussions are held is a measure of conflict tolerance. Criticism should be freely allowed during discussions. Many a times there are divergent views on a specific issue. A subordinate may have a different viewpoint from his superior. There can be instances in which deliberating members are divided in majority and minority. Whether divergent views are tolerated and discussed openly is



the moot point. Thus it is highly necessary to have an open and participative culture in the organization. An open and participative culture is not only necessary for employee motivation but for other reasons as well. In an increasingly diverse workforce we have people with diverse ideas, creativity and skills. What is required is a pooling of their ideas, creativity and skills. Many a times, their ideas and creativity can lead to path breakers. But for this there must be a utilization of these resources. And this can take place only in an open and participative culture where every person is free to express his opinion and ideas and even a lone viewpoint is discussed threadbare. The culture of the organization must provide for a vent to ideas and creativity of its members. An organic free flowing culture is what is required.

#### **14. Systems**

One of the drivers of success in any organization is systems. Organizations need to have systems in various functional areas be it production, quality, marketing, Human Resource (HR) etc. Systems proliferate every area of management. Systems ensure the efficiency of efforts directed to achieve goals and also effectiveness i.e. the efforts move in the right direction. For e.g. an efficient and effective material procurement system shall ensure that right kind of material is available at the right place at the right time and that too at a minimum cost. ISO, TQM, EFQM model all are quality systems, which ensure that there is efficiency and effectiveness in the entire functioning of the organization. And how far they have proliferated manufacturing as well as service sector is anybody's guess. Organizations today are going for the best systems of the day.

But adoption of systems alone is not enough. There must be a culture for systems. This culture for systems implies that there should be a strong emphasis on the implementation of systems in the organization. If this emphasis is missing, one may adopt the best systems but it shall be of no use. And not just the top management but managers at all levels have to stress upon the implementation of these systems. Only then can these systems percolate the entire organization. Also employees at all levels should be committed towards the implementation of these systems. If commitment on the part of the employees is missing, the best systems are reduced to zero. So a culture for systems should be there in the organization; a shared assumption that systems meant for improvement in the functioning of the organization have to be sincerely adhered to and implemented to,

must exist.

#### **15. Result Orientation**

The final dimension that has been included in OC assessment of BHEL is result orientation. How much emphasis is laid on achieving the final results is the result orientation of the organization and an integral part of its culture. To what extent do the members of the organization believe that the end results are important is a reflection of the culture of the organization. High performance organizations generally have a strong result orientation. Any why is it so is anybody's guess? What matters at the end of the day is that whether you have achieved your result, your targets or not. Methodically, organizations may pursue the best path but if results are not there then it is useless. Henceforth organizations need to have a strong result orientation. How much emphasis is laid on achieving departmental targets is a very common measure of this orientation. Result orientation is both quantitative and qualitative. Quantity alone cannot be the criteria for meeting targets. Quality is also an important consideration. The emphasis that is laid in the organization on its manufacturing or service is an important part of its culture. Important here is the human factor i.e. how much do the employees care for quality. If employees do care for quality it is a reflection of a positive culture for quality of results in the organization.

#### **CONCLUSION**

The dimensional framework of culture comprising of the fifteen dimensions described above was used to assess the OC of HEEP BHEL and more importantly to identify what kind of culture is imperative for an organization engaged in business excellence efforts especially when the thrust is on EFQM model which is being adopted by thousands of organizations internationally[28]. Results shown in the paper illustrate survey study with large sample size, quite a good number of depth interviews and ethnographic assessment. Adopting a model is not difficult. The major obstacle is its successful implementation. And herein comes the role of culture. If the model gets embedded in the fabric of the organization only then it can said to be successful. And the role of binding glue is played by culture. What is essentially most important is how culture is conceptualized in the organization. Henceforth utmost importance has been given to discussions and depth interviews held with experts from BHEL. Even the empirical testing though of very simple nature was done taking the sample of TQM matrix of HEEP, BHEL. At the end we get a

dimensional framework of culture fit enough for HEEP, BHEL. Though the study is on a case basis, organizations with operational similarity can find it as useful tool for their own assessment and augmentation.

## REFERENCES

- Barney, J. B. (1986). Organizational culture: Can it be a source of sustained competitive advantage? *Academy of Management Review*, 11(3), 656-665.
- Black, Richard J. (2003). *Organisational culture: Creating the influence needed for strategic success*, London. UK: Universal Publishers.
- Broadfoot, L. E., & Ashkanasy, N. (1994). The dimensions of survey instruments used in the measurement of organizational culture: An analysis and explanatory test. *Paper presented at the annual meeting of Australasian Social Psychologists*, Cairns, Queensland, Australia.
- Calori, R., & Sarnin, P. (1991). *Corporate culture and economic performance: A French study*, *Organization Studies*, 12(1), 49-74.
- Denison, D. R. (1990). *Corporate culture and organizational effectiveness*. New York: John Wiley.
- Denison, D. R., & Mishra, A. K. (1995). *Toward a theory of organizational culture and effectiveness*. *Organization Science*, 6(2), 204-223.
- Denison, D.R., & Mishra, A.K. (1998). *Does organizational culture have an impact on quality? A study of culture and quality in ninety-two manufacturing organizations*. Working Paper, University of Michigan.
- Foster, N. (2002). Management excellence through corporate culture: The HP way, *The Management Case Study Journal*, 1(3), 33-52.
- Gordon, G. G., & DiTomaso, N. (1992). Predicting corporate performance from organizational culture, *Journal of management Studies*, 29, 783-798.
- Goss, T., Pascale, R., & Athos, A. (1993). The reinvention roller coaster: Risking the present for a powerful future, *Harvard Business Review*, 72(2), 97-108.
- Kekele, T. (1998). *The effects of organizational culture on success and failures in implementation of some total quality management approaches: Towards a theory of selecting a culturally matching quantity approach*, *Acta Wasaensia*, 65.
- Koene, B.A.S.(1996). Organizational culture, leadership and performance in context: Trust and rationality in organizations. *Unpublished doctoral dissertation*, Rijksuniversiteit Limberg.
- Kotter, J.P., & Heskett, J. L. (1992). *Corporate culture and performance*. New York: Free Press.
- Lim, B. (1995). Examining the organizational culture and organizational performance link. *Leadership and Organization Development Journal*, 16(5), 16-21.
- Neal M.Ashkanasy, Lyndelle E. Broadfoot and Sarah Falkus, Questionnaire measures of organizational culture in , Ashkanasy M. Neal, Wilderom, C.P.M., & Peterson, M.F. (Eds.). (2000). *Handbook of organizational culture and climate*. Thousands Oaks, CA: Sage.
- Marazza Lawrence L. (2005). *The Five Essentials of Organizational Excellence*. Corwin Press Inc.
- Marcoulides, George A. & Heck, Ronald H. (1993). *Organizational culture and performance: Proposing and testing a model*. *Organization Science*, 4, 209-224.
- Nikolic, Vladimir & Nastasic, Aleksandra,(2010). Organizational culture as significant factor in implementation of TQM - Experience in Serbian economy. *International Journal of Quality Research*, 4(1), 59-69.
- Peters, Tom & Waterman, Robert H., Jr (1982). *In search of excellence: Lessons from America's best run companies*. New York: Harper & Row.
- Petty, M.M., Beadles, N.A., II, Lowery, C.M., Chapman, D.F. & Connell, D.W. (1995). Relationships between organizational culture and organizational performance. *Psychological Reports*, 76(25), 483-492.
- Schein, E.H. (1992). *Organizational culture and leadership: A dynamic view (2nd ed.)*. San Francisco: Jossey-Bass.
- Siehl, C., & Martin, J. (1990). *Organizational culture: A key to financial performance?* In Schneider, B.(Ed.), *Organizational climate and culture*. San Francisco: Jossey-Bass, 241-281.
- Sinha, Ashish (2008). Organizational culture and business excellence: A case study of BHEL, Haridwar, *Unpublished doctoral dissertation*, Gurukula Kangri Viswavidyalaya, Haridwar.
- Sinha Ashish & Arora Bindu (2012). *Fit between organizational Culture and Business Excellence: A case study of HEEP, BHEL*, *Vikalpa*, 37(3), July-Sep., 41-49.
- Sorensen, J.B. (2002). *The strength of corporate culture and the reliability of firm performance*. *Administrative Science Quarterly*, 47, pp.70-91.
- Stok, Zlatka Meško; Markič, Mirko; Bertonec, Andrej & Meško, Maja (2010). *Elements of organizational culture leading to business excellence*. *Zb. rad. Ekon. fak. Rij.*, 28(2), 303-318.
- [www.efqm.org/en/tabid/132/default.aspx](http://www.efqm.org/en/tabid/132/default.aspx)
- [www.mancam.org.uk/course-pop.php?courseId=85](http://www.mancam.org.uk/course-pop.php?courseId=85)

# IMPACT OF FIRM'S CHARACTERISTICS IN DETERMINING THE CAPITAL STRUCTURE: A STUDY OF OIL AND GAS INDUSTRY IN INDIA

Vikas Choudhary\*  
Anshu Bhardwaj\*\*

## Table of Contents

- Abstract
- Keywords
- Introduction
- Review of Literature
- Objectives of the Study
- Hypotheses of the Study
- Data and Research Methodology
- Empirical Results and Discussions
- Conclusion
- References

## ABSTRACT

*The capital structure approach studies the impact of capital structure changes on value of the firm and how different factors may influence, directly or inversely, the debt and equity components of capital structure. The various theoretical and empirical researches about the optimal capital structure have identified various factors affecting the firm's leverage and consequently its value. An optimal capital structure may be regarded as one that will minimize a firm's cost of capital, while maximizing firm value. Thus, considering the objective of the firm to maximize the value of the shareholders, the firm should select a financing mix which will help in achieving the objective of financial management. The various theories suggest that firms select capital structures depending on the attributes that determine the various costs and benefits associated with debt and equity financing. In India, Oil and Gas sector industry has continued its growth trajectory and capital structure decisions have great impact on their success. The present study is focused on assessing the determinants of capital structure and their influence in deciding the financial structure. The study also throws light in evaluation of pattern and degree of suitability of Oil and Gas Sector firms.*

**KEYWORDS:** Financial Structure, Financial Ratios, Financial Leverage, Firm Value.

## INTRODUCTION

Capital structure is considered as a crucial aspect in firm's performance and has occupied financial researchers for a long time. Since the seminal work of Franco Modigliani and Merton Miller (MM), 1958 showed that capital structure decision do not affect firm value when capital markets are perfect, corporate and personal taxes do not exist. The theory of irrelevance may sound theoretically applicable but it does not exist in the real world. However, later on when one or more of the MM assumptions are relaxed many economists have shown that how firm value may vary with changes in the debt-equity mix. From this point of view, it is important to study the financial decisions in determining the ratio of debt, the impact on the cost of funds when affects the value of firm and the factors impacting the choice of capital structure. The issues regarding the determinants of capital structure has attracted a lot of attention (Michael G.F. and Wesley H.J., 1979; G. Hall et al. 2000; F. Voulgaris et. al. 2002; Tran D.K.N., Cassar and Holmes, 2003, Venkatesan, 1983, Abor Joshua, 2009; Eriotis Nikolaos 2007 and Neelakantan.R, (2006). The manufacturing sector in India has received scant attention regarding capital structure decision. As manufacturing accelerates the growth of the country and thus considered as a prime mover of a modern economy. The present study is related to determining the firm specific factors affecting the capital structure decisions of Oil and Gas sector firms in India. In fact, manufacturing sector has performed significantly better than several of the core infrastructure sectors.

## REVIEW OF LITERATURE

Serrasqueiro and Ragao (2009) conducted a study on evaluating the impact of listed Portuguese company's specific determinants on adjustment of actual debt towards target debt ratios. The determinants are assets, tangibility, size, profitability and market to book ratio to determine the optimal level of debt by using dynamic panel estimators and OLS regression. The paper investigate the explanatory power of Trade-off, Pecking Order Theory and Market Timing Theory which further contributes for a deeper

\*Associate Professor, Department of Humanities and Social Sciences, National Institute of Technology, Kurukshetra, India.

\*\*Assistant Professor, Department of Management Studies, BPS, Mahila Vishwavidyalaya, Khanpur Kalan, Sonapat, India.

understanding about capital structure decisions. The findings of the study are that the tangibility of assets and size are the determinants that contribute for a greater adjustment of debt towards optimal level. The results also suggest that the transaction costs are relevant and capital structure decisions are explained in the light of Trade-off and Pecking Order Hypothesis. Abar Joshua (2009) conducted a study on 160 industries during a six year period (1998-2003) to examine the determinants of capital structure decisions in Ghana. In order to estimate the relationship between firm level characteristics and capital structure regression model was used by long term debt ratios and short term debt ratios. The results of the study suggest that variables such as firm's age, size, asset structure, profitability and growth affect the capital structure of Ghana enterprises.

Shanmugasundaram G. (2008) conducted a study on Indian companies and Multinational companies for a period of 16 years from 1988-89 to 2003-2004 which is divided into two parts i.e. process patent period and transition period. The study aims to explain the variation in the capital structure in the pharmaceutical companies. The most important explanatory variables for the capital structure pattern are asset type measured by the proportion of fixed assets to total assets. The variable profitability showed negative relation consistent with the Pecking Order Theory (domestic) and positive relation consistent with the static trade off theory (MNC's). The growth rate of total assets showed positive relation consistent with Pecking order theory (domestic) while Multinational Companies showed the reverse but an insignificant level. MNC'S showed a negative relation with risk consistent with the static trade off theory. The comparison of two pair of regression models between the process and transition period has shown significant structural shift in the debt ratio of Indian, foreign and pooled companies in India.

Buferna, Fakher et.al.(2005) conducted a study on 55 Libyan companies(private as well as public companies) for a time period of 5 years (1995-1999) in order to examine the difference existing between private and public sectors capital structure. The results of cross sectional OLS regression shows that both the static trade -off theory and the agency cost theory are the pertinent theories to the Libyan company's capital structure whereas there was little evidence to support the asymmetric information theory. Thus, the paper provides evidence of the capital structure theories pertaining to a developing country and examines the impact of the lack of secondary capital market by analysing capital structure decision with reference to

Libyan environment.

Cassar and Holmes (2003) wrote a paper entitled: "Capital structure and financing of small and medium sized enterprises". This study examined the determinants of capital structure in small and medium enterprises in Australia. This study throws light on the impact of various characteristics like size, rate of profit, growth profitability and asset structure on the capital structure. The researcher used multiple-regression model, they suggested that the asset structure ratio, profitability and growth, play an important role in the financing of small and medium enterprises, there is no clear evidence of the impact of size and risk to the capital structure.

Voulgaris (2002) presented a research titled: "Capital structure and profitability, growth and structure of the assets in the industrial sector". This study examined the determinants of capital structure of the industrial sector, in the large Greek enterprises during the period between (1986-88) where the study concluded that the structure of assets and the rate of growth and net profit has no effect on the structure of capital for large projects and the ratio of debt to total assets has a strong correlation with the net profit and turnover of capital assets.

#### **OBJECTIVES OF THE STUDY**

- To assess the determinants of capital structure and their influence in deciding the financial structure.
- To evaluate the pattern and degree of suitability of the capital structure of firms with its financial ratios.

#### **HYPOTHESES OF THE STUDY**

- There is a positive relationship between determinants and capital structure.
- There is a positive relationship between financial ratios and capital structure.

#### **DATA AND RESEARCH METHODOLOGY**

##### ***Scope of Study and Sample Size***

The study is spread over a period of 9 years from 2001-2009 for Oil and Gas sector firms listed on the Bombay Stock Exchange (BSE-500). The total numbers of Oil and Gas sector firms considered for the study are 20. The criteria for the selection of the firms are that those firms which are listed for a period of less than 9 years (which is the period taken under study) are not considered.

##### ***Collection of Data***

The present study of Oil and Gas sector firms will rely on the data collected from secondary sources. The financial and income statement of the firms under study are collected from various sources such as

Annual reports of the various firms, CMIE (Centre for monitoring the Indian Economy) and Capitaline database.

**EMPIRICAL RESULTS AND DISCUSSIONS**

The regression analysis was carried out for Oil & Gas sector firms using relevant techniques to identify the major variables which have impact on capital structure decisions. The various testes are conducted to assess the relative significance, desirability and reliability of model estimation parameters. Thus, regression analysis was used to see how far the explanatory variables were related with capital structure decisions and also to examine the inter industry difference in determinants of capital structure. The regression results presented in the table below for Oil & Gas sector helps in identifying the financial leverages to provide insight into the capital gearing practices followed by the companies in this sector. The study also helps to evaluate the variations explained by financial ratios considered as a proxy for firm value. The focus will be on to test the significance of the explanatory variables selected for the analysis of the capital structure based on regression model and its impact on the firm value.

Table 1 is an extract of the regression results used to test the primary hypothesis i.e. impact of valuation ratios on the capital structure of Oil & Gas Sector firms.

**Table 1: Regression Statistics of Oil & Gas Sector**

Multiple R	0.830403907
R Square	0.689570648
Adjusted R Square	0.578703023
Standard Error	0.135694955
Observations	20

*Source: Capitaline database 2010*

From Table 2 It is observed that the overall regression model is significant (F=6.219766, p<0.00). In terms of the relationship between overall valuation ratios and financial leverage, the adjusted R2 = 0.5787 was statistically significant It was suggested that the valuation ratios explained 57 per cent of the variance in the capital structure. The Oil & Gas sector firms are having positive influence of Earnings per share on financial leverage thus it can be interpreted that the returns are being made available to shareholders thus having a positive impact on the value of the firm, even though there is a negative relationship existing between the other explanatory variables and financial leverage.

**Table 2: Significance of the model on the Relationship between Capital Structure and Firm Value of Oil & Gas Sector**

ANOVA					
	Df	SS	MS	F	Significance F
Regression	5	0.572626485	0.114525	6.219766	0.003077325
Residual	14	0.257783693	0.018413		
Total	19	0.830410178			

*Source: Capitaline database 2010*

From Table 3, it is concluded that t-value of 1.446362 with a significance level of 0.170092 for the constant (intercept) is not statistically significant. The coefficient of Fixed Assets Turnover Ratio (FATR) is negative and is not statistically significant. The coefficient of Earnings Per Share (EPS) is positive and is not statistically significant. The coefficient of Operating Profit Margin (OPM) is negative and is statistically significant. The coefficient of Debt to Assets Ratio (DAR) is negative and is not statistically significant. The coefficient of Return On Assets (ROA) is negative and is statistically significant.

**Table 3: Parameter estimates for the Regression results of Oil & Gas Sector**

	Coefficients	Standard Error	t Stat	P-value
Intercept	1.177715768	0.814260966	1.446362	0.170092
FATR AVG.	-1.28927E-0	3.50854E-06	-0.36747	0.718766
EPS AVG.	0.000584141	0.002198315	0.265722	0.794326
OPM AVG.	-0.00357901	0.001762297	-2.03088	0.061706
DAR AVG.	-0.51290332	0.795081727	-0.6451	0.529296
ROA AVG.	-0.01558512	0.003281218	-4.7498	0.000311

*Source: Capitaline database 2010*

The findings of oil & gas sector followed a different pattern of results in which only earning per share is related positively to financial leverage. The other variables i.e. fixed assets turnover ratio, operating profit margin, debt to assets ratio and return on assets are negatively related to financial leverage. There is a disadvantage of high debt in the capital structure because it increases the borrowing cost. A high proportion of debt in the capital structure makes debt risky. The lender incorporates the high risk element in the lending rate making the interest cost high. If the company's profits are low, the high risk of default further swells up the lending rate making the interest cost high. This can result in leverage working in the opposite direction. The return on assets is a measure of firm's profit generated relative to its investment in assets. It

provides an indication that firm's assets are underutilized. Thus, it is an indicator of operating performance, Firer et.al. (2004) in the present case, negative impact on financial leverage was experienced. The correlation coefficient was used to assess the determinant of capital structure and its influence in deciding the financial structure. The independent and

dependent variable are used to explain the inter industry variation of capital structure for Oil & gas sector firms. To test the correlation between each dependent and independent variable, Karl Pearson correlation is being calculated and presented in Table 4.

It can be interpreted that financial leverage is

**Table 4: Correlation for Independent and Dependent variable for Oil & Gas Sector Firms**

	FL Avg	CVA Avg	Net sales Avg	Glo Avg	Pro Avg	NDTS Avg	ICR Avg	ROCE Avg	RONW Avg
FL Avg Pearson Correlation	1	-.039	.121	.277	-.732**	-.004	-.420	-.649**	-.456*
Sig (2-tailed)		.872	.612	.238	.000	.986	.065	.002	.043
N	20	20	20	20	20	20	20	20	20
CVA Avg Pearson Correlation	-.39	1	.179	-.215	.107	.811**	.101	.166	.269
Sig (2-tailed)	.872		.450	.363	.653	.000	.670	.485	.252
N	20	20	20	20	20	20	20	20	20
Net sales Avg Pearson Correlation	.121	.179	1	-.286	-.115	-.011	-.118	-.091	.051
Sig (2-tailed)	.612	.450		.221	.630	.964	.621	.702	.830
N	20	20	20	20	20	20	20	20	20
Glo Avg Pearson Correlation	.277	-.215	-.286	1	-.464*	.050	-.263	-.439	-.451*
Sig (2-tailed)	.238	.363	.221		.039	.835	.263	.053	.046
N	20	20	20	20	20	20	20	20	20
Pro Avg Pearson Correlation	-.732**	.107	-.115	-.464*	1	.160	.411	.978**	.855**
Sig (2-tailed)	.000	.653	.630	.039		.500	.072	.000	.000
N	20	20	20	20	20	20	20	20	20
NDTS Avg Pearson Correlation	-.004	.811**	-.011	.050	.160	1	-.096	.222	.262
Sig (2-tailed)	.986	.000	.964	.835	.500		.687	.347	.265
N	20	20	20	20	20	20	20	20	20
ICR Avg Pearson Correlation	-.420	.101	-.118	-.263	.411	-.096	1	.397	.387
Sig (2-tailed)	.065	.670	.621	.263	.072	.687		.083	.092
N	20	20	20	20	20	20	20	20	20
ROCE Avg Pearson Correlation	-.649**	.166	-.091	-.439	.978**	.222	.397	1	.929**
Sig (2-tailed)	.002	.485	.702	.053	.000	.347	.083		.000
N	20	20	20	20	20	20	20	20	20
Ronw Avg Pearson Correlation	-.456*	.269	.051	-.451*	.855**	.262	.387	.929**	1
Sig (2-tailed)	.043	.252	.830	.046	.000	.265	.092	.000	
N	20	20	20	20	20	20	20	20	20

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

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

Source: Capitaline database 2010

positively correlated with size and growth. In the present study of Oil & Gas sector firm size is considered to be a factor in determining capital structure as discussed in earlier studies, Booth et.al. (2001). In a study of factors influencing capital structure in developed countries, Rajan and Zingales (1995) reported that an increase in financial leverage is associated with firm size in all the G-7 countries with the exception of Germany. It is thus argued that large firms tend to be well diversified and hence are less likely to go bankrupt. Myer and Majluf (1984) is considered as the cause of positive relationship between leverage and growth ,because high growth rate will tell outside financier that

the borrower is now in a growing market and is less likely to go bankruptcy. G. Hall et.al. (2000) also raised the point that growth is likely to put a strain on retained earnings and push the firm to borrow and thus be positively related to leverage. It is also possible that larger firms that have built enough reserves may choose to finance their operations through their respective internal markets, rather than passing through the difficulties inherent in accessing the external financial markets. This impression is supported by other empirical results from Desai et.al. (2004) and Li(2005) who both resolve that larger firms are financed with less external debts in countries with undeveloped

capital markets or weak creditor rights in Nigeria. Growth opportunities can be considered as future capital assets that cannot be used as collateral for lending agreements, Titman and Wessels (1988). Firms with growth opportunities may have incentives to invest in a suboptimal manner. There are two competing arguments on the impact of growth potential on a firm's financing decisions. As explained by Myers (1977), since risky debt may capture enough of the benefit from the exercise of growth potential, managers act to maximize equity value rather than total firm value. Consequently managers have an incentive to underinvest in future growth opportunities. Therefore, a firm's leverage and growth potential may have negative relationship. On the other hand, growth potential may offer incentive to managers to overinvest in future growth options, Jensen and Meckling (1976) resulting in more demand for the debt capital. In the study of oil & gas sector it is found that there is a statistically significant relationship between debt and growth potential. Further results of the study suggest that financial leverage is negatively related with return on capital employed, interest cover ratio, collateralizable value of assets, return on net worth, non-debt tax shield and profitability. Based on pecking order theory in the financing pattern, the results show that the relationship between profitability and financial leverage is highly significant and negative indicating that the firms that are more profitable are very much likely to rely on internal capital in financing their operations. The negative coefficient of collateralizable value of assets indicates that increase in short term debt is used to finance current assets, due to which the proportion of net fixed assets in the total assets reduces. These findings are consistent with the findings of Rajan and Zingales (1995).

## CONCLUSION

The capital structure to be called as an optimum capital structure requires judicious mix of debt and equity. An optimal capital structure exists which balances the risk of bankruptcy with the tax savings of the debt. In order to determine the optimal capital structure for Oil and Gas sector firms in the process of maximising shareholder value has been an elusive target and a challenging pursuit for a number of years. The decision also has an impact on an organization's ability to deal with its competitive environment. The present study evaluated the relationship between capital structure and firm value of Oil and Gas sector firms listed on the BSE-500 for nine year period (2001-2009). The present study also focused on assessing the impact of determinants of capital structure of Oil &

Gas sector firms in deciding the financing pattern. It is suggested that Oil & Gas sector firms should use retained income in financing new investments and operational costs. With the current financial crisis in mind, Indian firms must increase their cash generating capacity through more efficient asset management, increase competitiveness within the continent and global markets, increase cash generating capacity, establish good and steady bank-firm relations and provide highly trained managerial personnel to upgrade technologies in accordance with the new global trends. It is also suggested to include macro-economic variables while studying the impact of the capital structure decisions on firm value because under more stable and healthier internal conditions firms are not only likely to take more debt but the effects of firm level determinants of leverage are also reinforced.

## REFERENCES

- Abor, Joshua (2009). How do we explain the capital structure of SME's in sub-Saharan Africa? *Journal of Economic Studies*, 36(1), 83-97.
- Buferna, Fakher, Bangsassa, Keubota and Hodgkinson, Lynn. (2005). *Determinants of capital structure: Evidence from Libya*. Research Paper Series 2005/08, Management School, University of Liverpool, Liverpool.
- Cassar, G. and S. Holmes (2003). Capital structure and financing of SME's: Australian evidence. *Account Finance, Journal*, 43, 123-147.
- Eriotis, Nikolaos (2007). *How firm characteristics affect capital structure: An empirical study*. *Managerial Finance*, 33(5), 321-331.
- F. Voulgaris et.al. (2002). Capital structure, asset utilization, profitability and growth in the Greek. *Journal of Applied Economics*, 34, 1379-1388.
- G. Hall et al. (2000). Industry effects on the determinants of Unquoted SME's Capital Structure. *International Journal of the Economics of Business*, 73, 279-31.
- Harris M and Ravi (1999). The Theory of Capital Structure. *Journal of Finance*, 46, 297-355.
- Michael G.F and Wesley H.J. (1979). Determinants of Financial Structure: a new Methodological approach. *The Journal of Finance*, 3.
- Tran.N.D and R.N. Khoig (2006). *Capital structure in small and medium sized enterprises: The case of Vietnam*. *ASEAN Economics Bulletin*, 23, 192-211.

Venkatesan S. (1983). *Determinants of financial leverage: An empirical extension*. The Chartered Accountant, 519-527.

Shanmugasundaram G. (2008). Inter-Industry variations of capital structure in Pharmaceuticals Industry in India, *International Research Journal of Finance and Economics*, 16, 162-174.



# A STUDY ON FACTORS AFFECTING TRAINING EFFECTIVENESS IN MANUFACTURING SECTOR : A STUDY WITH REFERENCE TO GOLD PLUS GLASS INDUSTRY LIMITED, ROORKEE

Vijit Chaturvedi\*  
D.S Yadav\*\*

## Table of Contents

- Abstract
- Keywords
- Introduction
- Review of Literature
- Objectives of the Study
- Research Methodology
- Data Analysis and Interpretation
- Analysis
- Findings of the Study
- Conclusion
- References

## ABSTRACT

*Training plays a pivotal role in deciding and determining the present and future success of any organization with respect to its manpower. In today's competitive environment where organizations are focussing largely on skilled and trained manpower due to rising pressures, competition, and also preparing employees to occupy future roles has become significant. The present paper attempts to identify the approach of the selected glass manufacturing unit in identifying training need at different levels and factors that affect the training and its effectiveness. From the data collected and supported by tools like regression analysis, f-test and based on percentage analysis different conclusions were made like it was found that few skills like leadership, decision making, time management, technical skills and team work were found to be significantly affecting training. The factors like relevance, relatedness and application of the learned skills are important factors that also affect training. Positive and employee driven approach based on needs and supported by right tool can enhance learning to a large extent. Based on suggestions and ideas of the participants it can be concluded that if organization identifies, plans, designs and keeps*

*evaluating the skill and requirement of the employees it can provide highly effective training which will help employees to create visible difference in their performance.*

*The results helps in focussing that organization while designing, planning, assessing and evaluating training should be more employee centric, the contrast between pre and post training behaviour should be focussed and sufficient time should be provided to expect results from training. The training should be linked both to organization goals and employees need primarily. This will help in providing a long term advantage to the organization as well as employees.*

**KEYWORDS:** Training, Training Methods, Training Effectiveness.

## INTRODUCTION

Training refers to imbibing and transferring necessary skills, attitude and competencies in employees at different levels after identifying the need and relate or align it with the task or work to be performed .Whether training is meant for long term or for meeting short term needs it should be need based, trainee centric, result focussed, clear in objectives and purpose both for trainer and trainee and a suitable climate for transfer of skills should be designed.

Training is important and a pervasive function all across the organization irrespective of the size, nature, structure, and type of organization. Investing strategically in training and development is important because the focus of every organization now is on procuring and maintaining "Talent workers" in organization. The organization suffers more when those adding consistently to value of organization and for whose replacement is tougher and expensive leave the organization. Thus, training and development is one of the function that helps in improving continuously the required gaps in skills or competencies and enhancing the quality and contribution of each employee with respect to the task thus mutually

\*Assistant Professor, Lingayas University, Faridabad, U.P., India.

\*\*Assistant Professor, RBS Management Technical Campus, Agra, U.P., India.

benefitting the employee and the organization Other benefits includes-

- It helps in avoiding loss and wastage due to lack of training or required skills
- It helps in building and gaining a competitive advantage by way of maintaining skilled manpower in organization it helps in developing a sense of belongingness in employees since they feel that organization is bothered for their development and helps them to explore better growth opportunities.
- It helps in filling the deficiencies at right time thus avoiding losses.
- It helps in adapting to the changing environment and this quick adaptability leads to effective and faster development.
- It helps in making organization stay ahead in competition with the help of trained and competent manpower.
- It helps in effective retention of talented employees and thus helps in brand building or employer branding at large.

## REVIEW OF LITERATURE

Training is the formal and systematic modification of behaviours through learning which occurs as a result of education, instruction, development and planned experience.' (Armstrong, 2001: 543)

Development is any learning activity, which is directed towards future, needs rather than present needs, and which is concerned more with career growth than immediate performance (Armstrong, 2001: 543)

A study of 74 senior managers by Farhad Analoui (1995) within Indian Railways, over three years, has revealed that managers, in order to become effective, not only require task and people skills but also self-development knowledge and skills, because the effectiveness of the senior officials within the public sector has been disproportionately associated with task instead of people-related skills.

Joe Perdue, Jack D. Ninemeier, Robert H. Woods, (2002) describes a study undertaken to assess how private club managers perceive the relative effectiveness of alternative training methods to attain specific types of training objectives. Data were obtained from 123 club managers who were members of the Club Managers Association of America. Participants rated the effectiveness of 16 alternate training methods for potential use in six different types of training

situations. Training methods studied included case study, video-tape, lecture, one-to-one, role play, games, computer simulations, paper and pencil, audiotapes, self-assessment, movies/films, multi-media, audio, computer and video conferencing and sensitivity training. Training objectives studied were knowledge acquisition, changing attitudes, problem solving, interpersonal skill development, participant acceptance and knowledge retention. Analysis of data indicated that one-to-one training is the preferred method to attain all objectives except interpersonal skill development.

Diarmuid De Faoite, Colette Henry, (2002) discussed the importance of proving the effectiveness of training. Effectiveness is the primary motive for training. They define that in order to measure the effectiveness of training evaluating it by way of behaviour changes on the job is most important. They emphasize that an approach whereby individuals can see how they have changed and quantify the amount of change is very important.

### **Purpose of Study**

Manufacturing confronts not a good public image. Characteristic notions that are synonymous with this industry include: low pay, no scope for growth and so on. Consequently, few highly skilled workers seriously consider manufacturing careers.

However, now the general perception is changing dramatically. Apart from providing a more structured career growth path, one of the reasons for this change in the mindset would be the nature of training and coaching provided to new entrants once they are taken on board. Employers are quickly realising that the quality of their manpower is directly proportional to the final bottom line, bringing forward the need to train and coach employees appropriately.

While an assessment process and competency-based interviews help identify talent, coaching and training are initiatives that aim at grooming and nurturing the talent. Training provides theoretical support to an individual development whereas coaching provides a more practical and personal form of support. The combination of both creates a powerful foundation stone for future development and potential identification.

Every organization has different processes, and at times, a different approach to work as well, leading to the need for process-driven training and coaching to facilitate relevant learning. Most hires may have the theoretical knowledge required for the job, but they need to be taught the tricks of applying that

knowledge in the fashion that best suits the process.

A company-specific structured training program is extremely essential. Fresh engineers recruited straight off campuses cannot be put on the job straight away, as they have very little knowledge about the actual dynamics at shop floor level. They need to be introduced to Engineering Management skills in a systematic manner.

The manufacturing industry also boasts about the fact that it provides its workforce with competency enhancement training. This ensures that they become competent to take up different roles in the organization and have an insight into various managerial soft skills, which are almost as essential as the technical ones.

At Gold Plus (selected organization) various areas on which training is given is as follows:

- Quality Control.
- Defect from Tin Bath.
- Understanding "Balance Score Card"
- ISO Training.
- Review of Safety Aspects.
- Training imparted and its effectiveness.
- Technical Training.

#### OBJECTIVES OF THE STUDY

Based on review of literature and after conceptual analysis of the training program at gold plus glass manufacturing the following objectives of study were framed-

- To identify training need identification process at the company for 50 employees across different levels of organization namely- At Junior Level-Shop Floor Workers, Middle Level-Engineers, Design Engineers, Supervisors, Senior Level-Assistant Departmental Managers, Departmental Managers
- To study different skills that employees at different levels feel important for improving their performance
- To study employees perception about different MDP programs offered by the company at different levels
- To study the satisfaction of the employees from different training programs
- To study major factors that affect training and its effectiveness on employees performance like training need identification, pre and post training, feedback from superiors, methods of training, support from management, opportunities to implement the learning

from training for growth, challenges and obstacles in training, suggestions for improvement.

#### RESEARCH METHODOLOGY

The research is descriptive and diagnostic in nature where based on the practices the effectiveness of training is attempted to be measured at Gold Plus Glass unit. Sample size is 50 which are selected across different levels to measure and compare different skill requirement of employees across the organization. Sampling unit is all employees of Gold Plus Glass Industry Ltd, Roorkee.

Type of sampling used in this survey is convenience sampling. In this method, the sampling units chose randomly from the total employees at all the levels in the organization.

Research Instrument is a structured questionnaire consisting of 13 items including factors like factors affecting effective training, post training feedback, training assessment, learning and its implementation, opportunities and skill development after training and challenges in training.

#### Statistical Tools Used

The collected data based on questionnaire was analyzed using percentage method and by regression analysis to identify the relationship between factors affecting training.

Sample Size	50
Target Population	Gold Plus Glass Industry Ltd.
Sample Area	Gold Plus, Roorkee plant
Sampling	Convenience sampling
Type of questionnaire	Structured
No. of Questions involved	20 questions
Type of questions	Close as well as open ended

#### Validity of Questionnaire

Before distributing questionnaire to the respondent's pilot testing was conducted on 20 different employees. The cronbach alpha was 0.75 which indicates the data is reliable. The questionnaire was also discussed with different experts and based on their inputs and few questions were reframed to make them easily understood and simple. Thus the questionnaire has expert validity. It was ensured that the respondents had filled the questionnaire completely.

For the present study the data was collected between April to June 2012.

## DATA ANALYSIS AND INTERPRETATION

Based on the questions and the response collected the following analysis and interpretation can be made. The employees selected for this survey are from Shop Floor Workers to Departmental Managers. Employees above Departmental Managers are not included in this survey. After a thorough discussion and feedback on training need identification 21 different skills which the organization tries to instil at different levels were identified and then importance that employees at different levels consider were recorded and top 3 skills that they consider are identified. The details of these are as follows-

### **Skills important at Junior Level**

No. of participants = 25

**Table1: Table showing the percentage of skills required for Junior Level**

No.	Skills and Behaviour	Score based on Questionnaire	Average	Percentage
1.	Presentation Skills	25	1	2.43%
2.	IT related Skills	25	1	2.43%
3.	Supervisory Skills	30	1.2	2.9%
4.	Marketing Skills	26	1.04	2.53%
5.	Time Management	104	4.16	10.11%
6.	Leadership Skills	25	1	2.43%
7.	Technical Skills	119	4.76	11.57%
8.	Quality related activities	85	3.4	8.26%
9.	Team Work	101	4.04	9.82%
10.	Decision Making Skills	37	1.48	3.59%
11.	Coaching Skills	36	1.04	2.53%
12.	Creativity and Innovation	71	1.44	3.52%
13.	Change Management	78	2.84	7%
14.	Interpersonal Skills	26	3.12	7.59%
15.	Negotiating Skills	36	1.04	2.53%
16.	Problem Solving Skills	75	1.44	3.51%
17.	ISO knowledge	25	3	7.3%
18.	Strategy and Planning Skills	28	1	2.43%
19.	Stress Management	26	1.12	2.72%
20.	Project Management	25	1	2.43%
21.	Work Life Balance/issues	25	1	2.43%

From the above it is clear that at junior level employees were of the opinion that technical skills, time management, team work, quality related activities, inter-personal skills were ranked higher in comparison to other skills at junior level.

### **Skills important at Middle Level**

No. of participants = 15

**Table 2 :Table showing skill requirement at Middle Level**

No.	Skills and Behaviour	Score based on Questionnaire	Average	Percentage
1.	Presentation Skills	15	1	2.139%
2.	IT related Skills	15	1	2.139%
3.	Supervisory Skills	36	2.4	5.13%
4.	Marketing Skills	15	1	2.139%
5.	Time Management	55	3.6	7.7%
6.	Leadership Skills	17	1.13	2.42%
7.	Technical Skills	68	4.53	9.69%
8.	Quality related activities	47	3.13	6.69%
9.	Team Work	64	4.26	9.112%
10.	Decision Making Skills	32	2.13	4.56%
11.	Coaching Skills	34	2.26	4.8%
12.	Creativity and Innovation	33	2.2	4.71%
13.	Change Management	31	2.06	4.4%
14.	Interpersonal Skills	41	2.73	5.84%
15.	Negotiating Skills	18	1.2	2.57%
16.	Problem Solving Skills	31	2.06	4.4.06%
17.	ISO knowledge	51	3.4	7.27%
18.	Strategy and Planning Skills	39	2.6	5.6%
19.	Stress Management	30	2	4.28%
20.	Project Management	16	1.06	2.26%
21.	Work Life Balance/issues	15	1	2.139%

It was found that at middle level also employees ranked technical skills, team work, quality related activities to be important skills for them.

**Skills important at Senior Level**

No. of participants = 10

**Table 3: Showing the percentage of skills required at Senior Level**

No.	Skills and Behaviour	Score based on Questionnaire	Average	Percentage
1.	Presentation Skills	33	3.3	6.16%
2.	IT related Skills	17	1.7	3.17%
3.	Supervisory Skills	16	1.6	2.99%
4.	Marketing Skills	10	1.0	1.86%
5.	Time Management	42	4.2	7.84%
6.	Leadership Skills	45	4.5	8.39%
7.	Technical Skills	10	1.0	1.86%
8.	Quality related activities	26	2.6	4.85%
9.	Team Work	39	3.9	7.7%
10.	Decision Making Skills	39	3.9	7.27%
11.	Coaching Skills	21	2.1	3.92%
12.	Creativity and Innovation	15	1.5	2.8%
13.	Change Management	27	2.7	5%
14.	Interpersonal Skills	24	2.4	4.47%
15.	Negotiating Skills	15	1.5	2.8%
16.	Problem Solving Skills	28	2.8	5.22%
17.	ISO knowledge	23	2.3	4.3%
18.	Strategy and Planning Skills	31	3.1	5.78%
19.	Stress Management	29	2.9	5.41%
20.	Project Management	26	2.6	4.85%
21.	Work Life Balance/issues	20	2.0	3.73%

After analysis it was seen that leadership skills, team work, decision making skills and time management were thought to be important skills which employees at senior level deem to be a part of their training program.

Further, in order to identify whether briefing and debriefing sessions are conducted it was found that 48% employees agreed that briefing sessions are conducted. From the response of the participants, it is evident that some of the departments in the organization are practicing briefing sessions before training program in an informal manner but there is no formal process of briefing.

Similarly for debriefing sessions 46% participants disagreed that no debriefing sessions are conducted and only 32% agreed that such

sessions are conducted. Thus, no formal process for debriefing is conducted for debriefing which is required.

**Table 4: Briefing of Session**

Category	No. of Participants	Percentage
Strongly Agree	3	6 %
Agree	24	48 %
Disagree	19	38 %
Strongly Disagree	4	8 %

**Table 5: De-briefing Sessions are Conducted for Participants Sponsored for Training**

Category	No. of Participants	Percentage
Strongly Agree	7	14 %
Agree	16	32 %
Disagree	23	46 %
Strongly Disagree	4	8 %

The next question focussed on interest shown by superior in training of employees it was found after analysis that 50% employees agreed that their superiors show interest in their development which is a positive indicator. Only 6% disagreed that interest level of superior is less.

**Table 6 : Interest Shown by Superior in Development**

Category	No. of Participants	Percentage
Strongly Agree	22	44 %
Agree	25	50 %
Disagree	3	6 %
Strongly Disagree	0	0 %

In order to assess whether there is an improvement in MDP offered by the organization and whether they are improving or not it was found that 66% agreed that there is an improvement in MDP offered by organization and 18% agreed that there is improvement in quality of MDP offered.

All participants agreed that training program should be continuously improved so as to get maximum benefits out of it. Almost all the participants agreed that MDPs are continuously improving.

**Table 7: Improvement in MDP offered by Organization**

Category	No. of Participants	Percentage
Strongly Agree	7	14 %
Agree	33	66 %
Disagree	9	18 %
Strongly Disagree	1	2 %

The next question focussed on whether the employees are selected on the basis of training need

it was found that 42% disagreed that participants are selected for training based on training need identification and 38% agreed that they are selected on the basis of training need.

**Table 8: Employees are sponsored based on training need identification**

Category	No. of Participants	Percentage
Strongly Agree	4	8 %
Agree	9	38%
Disagree	21	42%
Strongly Disagree	6	12%

Participants agreed that selection of training need should be based on their designation, profile and responsibilities. Further, in order to assess the perception about MDP a 5-point rating scale ranging from poor to very good was used. It was found that 40% of employees rated it as good and only 2% rated it as poor. Almost all of the participants have given above average rating to the training program as a whole. For identifying the most important factors for MDPs success, participants were asked to rate some of the factors like Relevance to my work, Discussions, Structured, Use of time, Level of activities, Personal objectives achieved, Well organized, Training methodology used, Relevant training material and Communication and coordination.

**Table 9: Factors Responsible for Overall Success of MDPs**

S.No.	Factors	Coefficient	P-Value
1.	Relevance to my work	0.408382	0.000506
2.	Well Organized	0.288283	0.00974
3.	Level of Activity	0.235741	0.032417

### ANALYSIS

Level of significance is = 5% = 0.05

With the help of regression analysis, the three most important factors which are responsible for the overall success of MDPs at large are found out and shown in the table:

The value of R Square is calculated by the regression analysis is = 0.843 and the value of F-significance = 9.64E-13. With the help of the value of R Square = 0.843, 84 % variation in the overall rating is explained by the selected criteria (Ten factors), hence model is a good fit and also the significance of the entire model can be further checked by the value of F-significance. The value of F-significance = 9.64E-13, which shows that the entire model (Ten Factors)

are highly significant. Training also helps an individual in applying new skills on the job.

Further, in order to find how far employees are able to use the learned skills a 4 point rating scale it was found that 66% participants agreed that they are able to use some skills and 2% agreed that they have not used any skills learned in training.

**Table 10: Regression Test**

Multiple R	0.919				
R Square	0.844				
Adjusted R Square	0.804				
Standard Error	0.422				
Observations	50				
<b>ANOVA</b>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Signif. F</i>
Regression	10	37.549	3.755	21.069	9.64918E-13
Residual	39	6.951	0.178		
<b>Total</b>	49	44.5			
	<b>Coeff.</b>	<b>S. E.</b>	<b>t Stat</b>	<b>P-value</b>	
Intercept	-0.526	0.317	-1.659	0.105	
Relevant To My Work	0.408	0.108	3.793	0.001	
Discussion	-0.183	0.136	-1.344	0.187	
Structured	-0.044	0.107	-0.409	0.684	
Use Of Time	0.016	0.108	0.148	0.883	
Level Of Activity	0.236	0.106	2.218	0.032	
Personal Objectives Achieved	0.103	0.109	0.945	0.351	
Training Methodology	0.133	0.115	1.158	0.254	
Well Organized	0.288	0.106	2.718	0.010	
Training Material	0.050	0.076	0.654	0.517	
Communication & Coordination	0.156	0.124	1.260	0.215	

**Table 11: Usage of Learned Skills**

Category	No. of Participants	Percentage
Lack of opportunity	16	32%
Lack of time	17	34%
S skills were not relevant	7	14%
No supervision	1	2%

Further, in order to identify which factors are hindering application of new skills on the job few factors like lack of opportunity, time, lack of coaching, time to experiment, lack of supervision were selected. From the analysis it was found that lack of time and opportunity and lack of coaching were amongst major reason that hindered the application of learned skills

on the job.

**Table 12: Factor that Creates Difficulty in Applying New Skills on the Job**

Category	No. of Participants	Percentage
All Skills	6	12%
Some Skills	33	66%
Very Few Skills	10	20%
No Skills	1	2%

The next focus was to determine what makes learning and training most effective for participants. In order to determine this four options for this question were- studying underlying concept, step-by-step instructions, observing others and active participation. From the result it was found that participants can learn more effectively, it was seen that 74% are in favour of active participation, 8% are in favour of observing others 10% are in favour of step-by-step instruction, 8% are in favour of studying underlying concepts.

**Table 13: Methods of Effective Learning**

Methods of Effective Learning	Percentage
Studying underlying concept	8%
Step-by-step instructions	10%
Observing others	8%
Active participation	74%

Finally the focus of the study was on identifying which method of training participants feel is effective in developing their skills. For this question 3 point scale is used i.e. most effective, somewhat effective and effective.

**Table 14: Effective Methods of Training**

Methods of Training	Percentage
Classroom Lectures	8%
Video	10%
Workshops	11%
On The Job	11%
Computer Base	9%
Case Study	10%
Role Play	10%
In the Basket	9%
Outbound	10%
Group Studies	11%

After analysis it was found that -

- Workshops, On the job training and group studies

are the most effective methods

- Videos, Case Studies, Outbound and Role Playing are effective methods

- In-basket Exercise and Classroom Lectures are somewhat effective methods.

### FINDINGS OF STUDY

From the above analysis the following observations were made -

1. Training and development programs at Gold Plus Glass Industry Ltd. are aimed at systematic development of knowledge, skills, attitude and team work.

2. Satisfaction of the learner is the most important factor in training program. It plays a major role in employees' growth and development, commitment towards the job. It is evident from the analysis that 88% participants have ranked MDPs as good and above it shows interest on the part of organization as well as participants that they consider these MDP to be a important source for their development.

3. Only 53% participants were aware about the objective, benefits & learning of training through briefing sessions when being selected. Also, some of the departments in the organization are practicing briefing and debriefing sessions before and after the training program respectively in an informal manner but there is no formal process of briefing and debriefing in the organization. Thus this is an important improvement area for organization which can further facilitate training and its outcomes.

4. Three important factors like high relevance, well organized and appropriate level of activity were found to be the important factors that affect effective training in a MDP. Thus this being a strong area organization should further strengthen this as a key differentiator for employee development.

5. It was found that almost irrespective of the level need of focussing on technical skills, team work, time management along with good decision making and leadership abilities were accepted to be strong factors in which skills needs to be developed, thus while designing training programs focus should be on emphasizing these skills so that training becomes more employee driven.

6. Other positive factor was that majority of employees agreed that their managers take interest in their development. This mindset helps in building sound leadership and develops a sense of accountability and creativity amongst employees thus making them to

perform more effectively in long run.

7. Also in questionnaire based on suggestions of employees to improve T&D effectiveness following observations were made -

- Participants believe that training needs should be identified according to the level, designation and job profile and such training needs should be finalized only after conducting a joint discussion between HODs and their subordinates.

- 16% participants were of the opinion that in-house training programs should be conducted by internal trainers of the organization.

- 12% participants have given the suggestion that management should revise methods for measurement of effectiveness of training imparted.

- 18% participants are of the opinion that case studies & examples shared with the participants during the training programs should be more realistic and related to project industries so that the participants can successfully relate the same to their day-to-day job demands.

- Cross functional departmental training should be imparted in order to do away with the monotony and boredom of their routine work.

- The Organization should provide the facility of e-library to all employees where in technical and behavioural training material can be accessible to employees across the organization in order to promote the concept of self-learning

- 38% participants say that there is need for improvement in infrastructure & facilities provided to employees such as proper working conditions in summer, proper space arrangements for keeping papers as well as inventory, adequate sitting space in library, proper entertainment & cafeteria

- 12% participants are in the favour that employees should get more exposure & training in latest technology available in the market so as to augment their efficiency, effectiveness & productivity.

- Flexible timings: 12% participants are of the opinion that employees belonging to the category of officer and above should have the option of flexible work timing so that they can work more productively in their preferred work timings

- One question which was asked to identify the strength of their organization the following observations were made-

- Supportive & encouraging work culture: 50%

participants say that the working environment in the organization is very encouraging & supportive. Employees are of the opinion that team work is of paramount importance for the success of the organization.

- Exposure to world class technology: almost all the participants are agreeing with the fact that strong system base & in depth technical knowhow is available at all corners of the organization which is enabling the organization to become one of the global market leaders.

- Exposure to world class brand: 30% participants say that the strength of the organization is in its brand image, relevant collaborations & strong market hold / share as far as turnkey projects are concerned.

- Competent & committed work force: 26% participants say that the organization has a good & relevant human resource base i.e. multi skilled man power.

- Feedback Forms: After every session of Training a feedback form is filled in which all employees give their ratings and suggestions and on which work is carried out.

## CONCLUSION

Thus, it can be concluded from above analysis that in order to make training more effective in this organization few changes and improvements are required like the survey for identification of training needs should be conducted more frequently in order to gauge the perception of the employees regarding training & development process practiced by the organization. The Management should initiate the process of mentoring by the senior management for new employees to induce hand holding culture in the organization. The HODs of different departments should compulsorily practice formal process of briefing and debriefing before and after every training program respectively with an objective to inculcate learning culture into the organization.

The Management should change training vendors & faculties for conducting MDPs on yearly basis. The Management should conduct employee satisfaction surveys after every 2 years for gauging perception of the employees in relation to the parameters like overall employee satisfaction, advocacy & stability and finally to assess the employee engagement ratio of the organization. The Management should conduct employee satisfaction surveys after every 2 years for gauging perception of the employees in relation to the parameters like overall employee



satisfaction, advocacy & stability and finally to assess the employee engagement ratio of the organization. By adopting these measures the organization will really reap the benefits of training in most strategic way thus making its employee a real talent for long term sustainability of organization effectiveness.

#### REFERENCES

Armstrong, M.J. (2001). *A Handbook of Personnel Management Practice London*. Kogan Page Diarmuid De Faoite, Colette Henry.

Farhad Analoui (1995). Management skills and senior management effectiveness. *International Journal of Public Sector Management*, 8(3), 52 - 68.

Joe Perdue, Jack D. Ninemeier, Robert H. Woods (2002). Training methods for specific objectives: preferences of managers in private clubs, *International Journal of Contemporary Hospitality Management*, 14(3), 114 - 119.

# A STUDY OF SHAREHOLDER'S VALUE AND FINANCIAL VARIABLES OF INDIAN PHARMA INDUSTRY: AN EMPIRICAL ANALYSIS

Dharmendra S. Mistry\*  
Saket Kumar Singh\*\*  
Shruti Singh\*\*\*

## Table of Contents

- Abstract
- Keywords
- Introduction
- Review of Literature
- Objectives of the Study
- Research Methodology
- Results and Analysis
- Conclusion
- References

## ABSTRACT

*The present study is an attempt to measure the relationship between shareholders' value i.e. residual income measures and financial variables i.e. residual income components; traditional value measures and cash flow measures. The study found that the majority of the selected variables for this study differ significantly among selected pharma players except traditional value measure i.e. P/E Ratio. The study found that shareholders' value can be predicted by the selected financial variables.*

**KEYWORDS:** Cash Flow Measures, Residual Income Measures, Residual Income Components, Shareholders' Value, Traditional Value Measures.

## INTRODUCTION

Measurement of accounting income had been of central focus with a view to judging real value of the business. Shortcomings such as possibility of manipulation and focus on the quantity of profit have given rise to the concept of EVA (Stewart, 1991). EVA's connection with the stock's price for performance evaluation and indication whether the operating profit is sufficient for the cost of capital employed or not, makes it, simple yet significant tool for performance evaluation. It is also significant tool to measure shareholders' wealth and source of corporate governance (Baginski et al., 2003) and thus to check whether the primary objectives to maximise profit and shareholders' wealth are achieved or not (Sakthivel,

2011) from the perspective of stakeholders (Abate et al., 2004). Though the concept of Value Added (VA) was originated in U.S.A., the companies in Europe have been using it with greater frequency because European countries have introduced value added tax in their fiscal system. The concept of value added is also becoming popular in India due to introduction of value added tax in recent past.

Bearing in mind the substance of EVA and VA, the present study is an attempt to measure the relationship between shareholders' value and financial variables. As far as shareholders' value is concerned, residual income measures have been considered and financial variables such as residual income components, traditional value measures and cash flow measures have been taken into account. EVA and VA have been taken as residual measures. Earning Before Interest and Tax (EBIT) and Earning Before Interest, Tax, Depreciation and Amortization (EBITDA) as residual income components, Earning Per Share (EPS) and Price-Earning Ratio (P/E) as traditional value measures and Cash Flow from Operating Activities (CFO) and Cash Flow from Investing Activities (CFI) as cash flow measures have been taken for the study.

This study is organised as follows: the next section following the introduction discusses the literature review. The third section highlights the problem under investigation. Objectives are listed in the fourth section. The fifth section discusses study methodology. The sixth section provides details of the results and analysis of the available data and the final section presents conclusion.

## REVIEW OF LITERATURE

EVA, REVA (Refined Economic Value Added) and MVA are better measures of business performance than NOPAT and EPS in terms of shareholders' value creation and competitive advantage of a firm because conventional management compensation systems emphasize sales / asset growth at expense of profitability and shareholders' value (Anand et al.,

\*Associate Professor, P.G Department of Business Studies, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India.

\*\*Student, P.G Department of Business Studies, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India.

1999).

There was positive and high correlation between EVA and RONW, ROCE. There was a positive but low correlation between EVA and EPS and hence not a single traditional performance measure explains to the fullest extent variation in shareholder wealth (Malik, 2004). By increasing EVA, Shareholder Wealth is created and established the fact that the EVA is superior to the Market Value Added (MVA) in ITC Limited (Panigrahi, 2005).

The traditional performance indicators are showing quite high values of ROCE and EPS growth as compared to EVACE in Cholamandalam Investment and Finance Co. Ltd. The traditional parameters indicated quite a rosy and healthy picture of the company during all five years of the study (Bhayani, 2006). Negative EVA for eight years consecutively was found in top 205 companies from BT-500 India's most valuable companies during 1995-96 to 2006-07 (Kaur & Narang, 2009). Introducing EVA as a performance measure for pharmaceutical companies in Gujarat is an effective measure of the quality of managerial decisions as well as a reliable indicator of an enterprise's value growth in future (Bhatt & Mistry, 2010). Firm's shareholders value creation is highly dependent on Operating expenses, Profit margin, ROCE and Expense ratio. The inter company and inter industry analysis results indicate that there is no positive impact of mergers on shareholder value creation (Chauhan & Bhayani, 2010). There are no any uniform EVA trends in 10 selected companies of India for the period of 1998-99 to 2007-08 (Khatik & Singh, 2010). Except few, majorities of the sample companies are able to continuously create value for their shareholders during the study period of 2001-02 to 2008-09 and EVA is gaining popularity in India as important measures of firm performance (Sharma & Kumar, 2010). Capital Employed and Net Operating Profit after Tax have positive impact on next period's profit while Return on Assets has negative impact thereon (Mistry, 2011).

#### **The Problem Investigated**

From the above literature review, it is clear that there is an immediate need for a comprehensive and elaborate research to study the interrelationships and predictive power of the financial variables in determining shareholders' value in the Indian context. This gap in the literature is the primary and strong motivation for the present study. The present study is an attempt to cover traditional as well as contemporary measures

used by pharma players in India for shareholders' value creation. Some important issues on which the research provides insight, thereafter, are:

- What are the important variables that discriminate the companies creating value?
- What are the interrelationships that exist among various measures used for shareholders' value creation?

#### **OBJECTIVES OF THE STUDY**

*The present study has been carried out with the objectives:*

- To compute and analyze the shareholders' value i.e. residual income measures (Economic Value Added and Value Added) and financial variables i.e. residual income components (Earning Before Interest and Tax and Earning Before Interest, Tax, Depreciation and Amortization); traditional value measures (Earning Per Share and Price-Earning Ratio) and cash flow measures (Cash Flow from Operating Activities and Cash Flow from Investing Activities).
- To study whether there is significant difference between shareholders' value and financial variables of the selected players during the study period or not.
- To study whether there is relationship between financial variables and EVA or not.
- To study whether there is relationship between financial variables and VA or not.
- To study whether Shareholders' value can be predicted by the selected financial variables or not.

#### **RESEARCH METHODOLOGY**

The sample of this study includes following seven major pharma players in India selected on the basis of their performance, position and sales during the 2003-04 to 2009-10:

1. Cipla
2. Lupin
3. Unichem
4. Ranbaxy
5. Orchid
6. Piramal
7. Dr. Reddy's

The data for the accomplishment of the aforementioned research objectives used was secondary. With a view to analyzing the relationship

between shareholders' value and financial variables, the data was gathered from financial statements as published in annual reports (2003-04 to 2009-10) of the selected pharma players in India. Besides, the review of different articles and research papers was another source of the data.

For the purpose of the study, relationship between shareholders' value and financial variables has been measured. As far as shareholders' value is concerned, residual income measures have been considered and financial variables such as residual income components, traditional value measures and cash flow measures have been taken into account. Residual income measures i.e. Economic Value Added (EVA) and Value Added (VA) have been taken as dependent variables; while residual income components i.e. Earning Before Interest and Tax (EBIT) and Earning Before Interest, Tax, Depreciation and Amortization (EBITDA); traditional value measures i.e. Earning Per Share (EPS) and Price-Earning Ratio (P/E) and cash flow measures i.e. Cash Flow from Operating Activities (CFO) and Cash Flow from Investing Activities (CFI) have been taken as independent variables.

*The following hypotheses have been laid down for the present study:*

**H1:** There is no significant difference between shareholders' value and financial variables of the selected players during the study period.

**H2:** There is no relationship between financial variables and EVA.

**H3:** There is no relationship between financial variables and VA.

**H4:** Shareholders' value ( $EVA = a_1.23456 + b_{12}.3456*VA + b_{13}.2456*EBIT + b_{14}.2356*EPS + b_{15}.2346*CFO + e$  and  $VA = a_1.23456 + b_{12}.3456*EVA + b_{13}.2456*EBIT + b_{14}.2356*EPS + b_{15}.2346*CFO + e$ ) can be predicted by the selected financial variables.

In order to examine and compare the relationship between shareholders' value and financial variables and to test the first hypothesis, technique of One Way Analysis of Variance. Technique of Correlation Matrix has been applied to test second and third hypotheses. In order to study the impact of financial variables on shareholders' value and to test the fourth hypothesis, technique of regression has been applied.

## RESULTS AND ANALYSIS

### Testing of Hypothesis 1

**Table 1: One way analysis of variance of selected variables between selected pharma players in India**

Sources of Variation	Sum of Square	Degree of Freedom	Mean Square	F - Ratio
EVA				
Between Groups	2195313	6	365885.5	4.72772
Within Groups	3250444	42	77391.52	
VA				
Between Groups	4273821	6	712303.5	4.823241
Within Groups	6202623	42	147681.5	
EBIT				
Between Groups	2189384	6	364897.4	2.591563
Within Groups	5913686	42	140802	
EBITDA				
Between Groups	2848379	6	474729.9	3.267678
Within Groups	6101781	42	145280.5	
EPS				
Between Groups	2877.459	6	479.5765	2.680081
Within Groups	7515.523	42	178.941	
P/E Ratio				
Between Groups	3426.862	6	571.1437	2.091605*
Within Groups	11468.72	42	273.0648	
CFO				
Between Groups	1015890	6	169315	3.442539
Within Groups	2065693	42	49183.17	
CFI				
Between Groups	2963955	6	493992.5	4.148773
Within Groups	5000921	42	119069.6	

*\*Indicates that null hypothesis is accepted at 5 % level of significance.*

Table 1 throws light on whether there is a significant difference in the selected variables among the selected pharma players or not. The findings based on ANOVA are presented therein. From the table, it follows that only for one variable i.e. P/E ratio, calculated value of 'F' is less than the table value of 'F' at 5% level of significance. This implies that for this one variable, there is no significant difference among the players. For all other variables, it is found that the computed value of 'F' is higher than the table value of 'F'. Hence

null hypothesis is rejected. This indicates that the majority of the selected variables for the study differ significantly among selected pharma players.

**Testing of Hypothesis 2**

**Table 2: Correlation Matrix of EVA and Financial Variables**

	Residual Income Measure	Residual Income Components		Traditional Value Measures		Cash Flow Measures	
	EVA	EBIT	EBITDA	EPS	P/E	CFO	CFI
EVA	1						
EBIT	0.991398	1					
EBITDA	0.993322	0.995588	1				
EPS	0.6756	0.62185	0.625985	1			
P/E	0.670053	0.689695	0.720827	0.467392	1		
CFO	0.854061	0.846773	0.871923	0.766251	0.875039	1	
CFI	-0.64279	-0.63994	-0.68976	-0.46043	-0.86665	-0.88539	1

Table 2 reveals that EVA had positive relation with both the residual income components i.e. EBIT and EBITDA, both the traditional value measures i.e. EPS and P/E and only one cash flow measure i.e. CFO while negative relation with CFI. As the degree of relationship was very high, the variables were significantly associated with the EVA. Therefore, null hypothesis is rejected.

**Testing of Hypothesis 3**

**Table 3: Correlation Matrix of VA and Financial Variables**

	Residual Income Measure	Residual Income Components		Traditional Value Measures		Cash Flow measures	
	VA	EBIT	EBITDA	EPS	P/E	CFO	CFI
VA	1						
EBIT	0.902243	1					
EBITDA	0.924708	0.995588	1				
EPS	0.784854	0.62185	0.625985	1			
P/E	0.813971	0.689695	0.720827	0.467392	1		
CFO	0.956773	0.846773	0.871923	0.766251	0.875039	1	
CFI	-0.76069	-0.63994	-0.68976	-0.46043	-0.86665	-0.88539	1

Table 3 reveals that VA had positive relation with both the residual income components i.e. EBIT and EBITDA, both the traditional value measures i.e. EPS and P/E and only one cash flow measure i.e. CFO while negative relation with CFI. As the degree of relationship was very high, the variables were significantly associated with the VA. Therefore, null hypothesis is rejected.

**Testing of Hypothesis 4**

**Table 4: Model I      Dependent Variable - EVA,  
Independent Variables - VA, EBIT, EPS and CFO**

Cipla				
Group	DF	SS	MS	F
Regression	4	341005.5	85251.37	851.0508
Residual	2	200.3438	100.1719	
Total	6	341205.8		

Adjusted R <sup>2</sup> = 0.998239 EVA = 169.5763+ (-0.12744*VA) + (1.016104*EBIT) + (0.974575*EPS)+(-0.49998*CFO)				
Lupin				
Group	DF	SS	MS	F
Regression	4	439.0613	109.7653	88.5943
Residual	2	2.477932	1.238966	
Total	6	441.5393		
Adjusted R <sup>2</sup> = 0.983164 EVA = -6.96326+ (-0.0124*VA) + (0.765949*EBIT) + (1.180848*EPS)+(-0.06346*CFO)				
Unichem				
Group	DF	SS	MS	F
Regression	4	8441.984	2110.496	2501.772
Residual	2	1.687201	0.8436	
Total	6	8443.671		
Adjusted R <sup>2</sup> = 0.999401 EVA = 0.724713+ (0.04357*VA) + (0.9893*EBIT) + (0.013624*EPS)+ (-0.01353*CFO)				
Ranbaxy				
Group	DF	SS	MS	F
Regression	4	1223497	305874.3	2.182434*
Residual	2	280305.6	140152.8	
Total	6	1503803		
Adjusted R <sup>2</sup> = 0.440806 EVA = 259.3997+ (-0.26018*VA) + (-1.11439*EBIT) + (14.93753*EPS)+ (1.003595*CFO)				
Orchid				
Group	DF	SS	MS	F
Regression	4	50570.08	12642.52	258.6217
Residual	2	97.76843	48.88421	
Total	6	50667.84		
Adjusted R <sup>2</sup> = 0.994211 EVA = -8.33115+ (0.218875*VA) + (0.527919*EBIT) + (4.487892*EPS)+ (-0.04497*CFO)				
Piramal				
Group	DF	SS	MS	F
Regression	4	80314.2	20078.55	70.33512
Residual	2	570.9395	285.4697	
Total	6	80885.14		
Adjusted R <sup>2</sup> = 0.978824 EVA = -19.7412+ (0.025974*VA) + (0.948455*EBIT) + (-0.42088*EPS)+ (0.065826*CFO)				
Dr Reddy's				
Group	DF	SS	MS	F
Regression	4	1263857	315964.2	553.7252
Residual	2	1141.231	570.6155	
Total	6	1264998		
Adjusted R <sup>2</sup> = 0.997294 EVA = 27.77558+ (0.018559*VA) + (1.050901*EBIT) + (-0.85087*EPS)+ (-0.00365*CFO)				

\*indicates that null hypothesis is accepted.

Table 4 depicts multiple linear regression Model I from which it is clear that the model has a coefficient of determination of 0.998239, 0.983164, 0.999401, 0.440806, 0.994211, 0.978824 and 0.997294 which explains variation of 99.82%, 98.31%, 99.94%, 44.08%, 99.42%, 97.88% and 99.72% in EVA of Cipla, Lupin, Unichem, Ranbaxy, Orchid, Piramal and Dr. Reddy's

respectively for the period of the study. Coefficient of VA suggests that 1 percent change therein leads to increase in EVA of Unichem, Orchid, Piramal and Dr. Reddy's, while decrease in Cipla, Lupin and Ranbaxy. Coefficient of EBIT suggests that 1 percent change therein lead to increase in EVA of all the players under the study except Ranbaxy. Coefficient of EPS suggests

that 1 percent change therein lead to increase in EVA of all the players under the study except Piramal and Dr. Reddy's. Coefficient of CFO suggests that 1 percent change therein leads to increase in EVA of Ranbaxy and Piramal while decrease in the rest of the players under the study. As the calculated value of 'F' is more

than the table value of 'F' at 5% significant level with four degrees of freedom in numerator and two degrees of freedom in denominator in all the selected players except Ranbaxy, null hypothesis is rejected in case of all the players except Ranbaxy.

**Table 5: Model II Dependent Variable - VA,  
Independent Variables - EVA, EBIT, EPS and CFO**

<b>Cipla</b>				
Group	DF	SS	MS	F
Regression	4	1234366	308591.5	67.98143
Residual	2	9078.699	4539.35	
Total	6	1243445		
Adjusted R <sup>2</sup> = 0.978096 VA = 1387.565+ (-5.77523*EVA) + (5.781872*EBIT) + (7.08485*EPS)+(-3.61912*CFO)				
<b>Lupin</b>				
Group	DF	SS	MS	F
Regression	4	8104.256	2026.064	14.83583*
Residual	2	273.1312	136.5656	
Total	6	8377.387		
Adjusted R <sup>2</sup> = 0.90219 VA = -95.4174+ (-1.36646*EVA) + (1.132122*EBIT) + (16.95228*EPS)+(-1.30476*CFO)				
<b>Unichem</b>				
Group	DF	SS	MS	F
Regression	4	58475.91	14618.98	41.79199
Residual	2	699.6068	349.8034	
Total	6	59175.52		
Adjusted R <sup>2</sup> = 0.964532 VA = -17.0608+ (18.06672*EVA) + (-17.8101*EBIT) + (-0.01774*EPS)+(0.751296*CFO)				
<b>Ranbaxy</b>				
Group	DF	SS	MS	F
Regression	4	114150.3	28537.59	0.741422*
Residual	2	76980.7	38490.35	
Total	6	191131		
Adjusted R <sup>2</sup> = -0.20829 VA =601.322+ (-0.07145*EVA) + (-0.03877*EBIT) + (-4.3437*EPS)+(0.381442*CFO)				
<b>Orchid</b>				
Group	DF	SS	MS	F
Regression	4	93970.27	23492.57	29.05123
Residual	2	1617.32	808.6599	
Total	6	95587.59		
Adjusted R <sup>2</sup> = 0.949241 VA = 51.72653+ (3.620709*EVA) + (-1.28013*EBIT) + (-22.3488*EPS)+(0.234395*CFO)				

Piramal				
Group	DF	SS	MS	F
Regression	4	246326.8	61581.7	5.321961*
Residual	2	23142.48	11571.24	
Total	6	269469.3		
Adjusted R <sup>2</sup> = 0.742355				
VA = 113.411+ (1.052851*EVA) + (0.598548*EBIT) + (-1.80948*EPS)+(0.026344*CFO)				
Dr Reddy's				
Group	DF	SS	MS	F
Regression	4	3215302	803825.5	1.435229*
Residual	2	1120136	560067.9	
Total	6	4335438		
Adjusted R <sup>2</sup> = 0.224898				
VA = 401.3183+ (18.21568*EVA) + (-17.4202*EBIT) + (-17.3529*EPS)+(0.029662*CFO)				

*\*indicates that null hypothesis is accepted.*

Table 5 depicts multiple linear regression Model II from which it is clear that the model has a coefficient of determination of 0.978096, 0.90219, 0.964532, -0.20829, 0.949241, 0.742355 and 0.224898 which explains variation of 97.80%, 90.21%, 96.45%, -20.82%, 94.92%, 74.23% and 22.48% in VA of Cipla, Lupin, Unichem, Ranbaxy, Orchid, Piramal and Dr Reddy's respectively for the period of the study.

Coefficient of EVA suggests that 1 percent change therein leads to increase in VA of Unichem, Orchid, Piramal and Dr. Reddy's, while decrease in Cipla, Lupin and Ranbaxy. Coefficient of EBIT suggests that 1 percent change therein lead to increase in VA of Cipla, Lupin and Piramal, while decrease in Unichem, Ranbaxy, Orchid, and Dr. Reddy's. Coefficient of EPS suggests that 1 percent change therein lead to increase in VA of Cipla, and Lupin, while decrease in Piramal, Unichem, Ranbaxy, Orchid, and Dr. Reddy's. Coefficient of CFO suggests that 1 percent change therein leads to increase in VA of all the players under the study except Cipla and Lupin. As the calculated value of 'F' is more than the table value of 'F' at 5% significant level with four degrees of freedom in numerator and two degrees of freedom in denominator in Cipla, Unichem and Orchid, null hypothesis is rejected; while the calculated value of 'F' is less than the table value of 'F' at 5% significant level with four degrees of freedom in numerator and two degrees of freedom in denominator in Lupin, Ranbaxy, Piramal and Dr. Reddy's, null hypothesis is accepted.

## CONCLUSION

From the study, it can be concluded that the majority of the selected variables for this study differ significantly among selected pharma players except traditional value measure i.e. P/E Ratio. It can be concluded that EVA had positive relation with both the residual income components i.e. EBIT and EBITDA, both the traditional value measures i.e. EPS and P/E and only one cash flow measure i.e. CFO while negative relation with CFI. As the degree of relationship was very high, the variables were significantly associated with the EVA. As far as VA is concerned, it can be concluded that VA had positive relation with both the residual income components i.e. EBIT and EBITDA, both the traditional value measures i.e. EPS and P/E and only one cash flow measure i.e. CFO while negative relation with CFI. As the degree of relationship was very high, the variables were significantly associated with the VA. It can be concluded that change in VA leads to increase in EVA except decrease in Cipla, Lupin and Ranbaxy. Change in EBIT suggests increase in EVA of all the players under the study except Ranbaxy. Change in EPS suggests increase in EVA of all the players under the study except Piramal and Dr. Reddy's. Change in CFO suggests increase in EVA of Ranbaxy and Piramal while decrease in the rest of the players under the study. It can be concluded that change in EVA suggests increase in VA of Unichem, Orchid, Piramal and Dr. Reddy's, while decrease in Cipla, Lupin and Ranbaxy. Change in EBIT suggests increase in VA of Cipla, Lupin and Piramal, while



decrease in Unichem, Ranbaxy, Orchid, and Dr. Reddy's. Change in EPS suggests increase in VA of Cipla, and Lupin, while decrease in Piramal, Unichem, Ranbaxy, Orchid, and Dr. Reddy's. Change in CFO suggests increase in VA of all the players under the study except Cipla and Lupin.

#### REFERENCES

Abate, J. A., Grant, J. L., III, S., & Bennett, G. (2004). The EVA Style of Investing. *Journal of Portfolio Management*, 30(4), 61-72.

Anand, M., Garg, A., & Arora, A. (1999). *Economic value added: Business performance measure of shareholders' value*. The Management Accountant, 5, 351-356.

Baginski, S., Wahlen, P., & James, M. (2003). *Residual income risk, intrinsic values, and share prices*. Accounting Review, 78(1), 327.

Bhatt, S. K., & Mistry, D. S. (2010). *Economic value added system as a performance management tool for pharma players in Gujarat*. The Alternative, 9(1), 5-13.

Bhayani, S. (2006). *EVA A Tool for Performance Measurement: A case study of cholamandalam investment and finance co. ltd*. BVIMR, 2(1), 39-45.

Chauhan, P., & Bhayani, S. (2010). *Effect of mergers on shareholders value: Indian evidence*. Management Trends, 7(2), 1-30.

Kaur, M., & Narang, S. (2009). Insights on shareholders value addition from India's wealth club: A study of selected companies. *The ICFAI Journal of Account, Research and Audit Practice*, 8(3 and 4), 20-49.

Khatik, S. K., & Singh, P. K. (2010). Economic value added in Indian perspective. *Journal of Account and Finance*, 24(2), 76-84.

Malik, M. (2004). EVA and traditional performance measures: Some empirical evidence. *The Indian Journal of Commerce*, 57(2), 32-37.

Mistry, D.S. (2011). Role of components of EVA in profit prediction: Evidence from Indian two wheelers industry. *The Indian Journal of Commerce*, 64(3), 42-47.

Panigrahi, A. (2005). *Supremacy of economic value added (EVA) over market value added (MVA)*. Abhigyan, 23(1), 26-35.

Sakthivel, N. (2011). Shareholders' value in Indian pharmaceutical industry: An empirical analysis. *Indian Journal of Commerce*, 2(1), 87-99.

Sharma, A. K., & Kumar, S. (2010). Effectiveness of

economic value added and conventional performance measures in selected Indian companies - An empirical investigation. *NIFM Journal of Public Finance*, 2(1), 43-62.

Stewart, G. B. (1991). *The quest for value: A guide for senior managers*. New York: Harper Business Publisher.

# THE IMPACT OF CEO'S ROLE IN DETERMINING SUCCESSFUL TQM IMPLEMENTATION: A CASE STUDY OF HEALTH SECTOR IN HYDERABAD AND SECUNDERABAD

Rambabu Pentyala\*

## Table of Contents

- Abstract
- Keywords
- Introduction
- Hypotheses of the Study
- Methodology of the Study
- Research Instruments
- Results
- Discussion & Conclusion
- Limitations and Future Research Suggestions
- References

## ABSTRACT

*The role of leadership in health care priority setting remains largely unexplored. While the management leadership literature has grown rapidly, the growing literature on priority setting in health care has looked in other directions to improve priority setting practices-to health economics and ethical approaches. Consequently, potential for improvement in hospital priority setting practices may be overlooked. A qualitative study was done to describe the role of leadership in priority setting through the perspective of hospital leaders. For the first time, I report a framework of leadership domains including vision, alignment, relationships, values and process to facilitate priority setting practices in health services' organizations. Total Quality Management (TQM) has been documented as an inevitable success factor for organizations to endure today's competitive global arena. Where efforts to reinforce hard elements of TQM have ruled the literature and industry previously, the significance of the soft elements of TQM are being recognized lately. This study is also an attempt to respond to issues regarding leaders' behavioral integrity in assessing TQM implementation and corresponding organizational performance in the public health sector of Andhra Pradesh. Taking the sample of 100 respondents from lower and middle management of public hospitals in Twin cities, viz., Hyderabad and Secunderabad, the study was carried out by using simple random sampling technique. Findings revealed strong moderating role of Leaders' Behavioral Integrity*

*in the relationship of both TQM philosophy and successful TQM implementation and organizational performance. Implications and future research suggestions are also discussed. I believe this fledgling framework forms the basis for the sharing of good leadership practices for health reform. It also provides a leadership guide for decision makers to improve the quality of their leadership, and in so doing, I believe, the fairness of their priority setting.*

**KEYWORDS:** Behavioral Integrity, Organizational Performance, Total Quality Implementation and Total Quality Management.

## INTRODUCTION

Total Quality Management is a buzzword for the organizations to safeguard their growth and sustainability in today's strongly competitive and turbulent global scenario. Total quality management refers to dealing with the strategies for refining the quality of products and services by the organizations to meet and treat the patients' requirements and satisfaction. The recurrent changes in the environment, technology, social and personal attitudes have also enforced the organizations in the developing countries like India to engross the importance of proper quality management program and its implementation as growth imperative and for its sustainability even. TQM philosophy and implementation has been numerously found to increase the performance of the service organizations and hospitals specifically in terms of patients' attraction, satisfaction, retention, greater intra-organizational exchanges, problem rectification and fewer errors. It is strongly argued in the literature that health sector needs to retain its patients by providing excellent quality services with minimum or no defects. Studies related to patient's inclination towards choice between public and private hospitals showed their greater tendency towards public hospitals which may be a factor of their low incomes and trust. It is argued that public hospitals are supposed to give importance to quality improvement or their patients may switch over to private hospitals. This calls for special interest and efforts of the top-management

\*Associate Vice President-HR and Operations Process Weaver Inc., Hyderabad, India.

of public hospitals to disseminate the TQM philosophy of continuous improvement, continuous learning, and patient's satisfaction across the whole organization to ensure its successful implementation. The importance of considering the behavioral issues related to TQM philosophy also rather than stressing upon the cost and performance related strategies has also been numerously discussed. Furthermore, the employees' trust on the TQM philosophy as espoused by the top-management greatly determines the practicability of its successful implementation and any incongruity between the espoused and enacted TQM strategies may lead to inappropriate results from it. The defining role of TQM implementation in predicting better organizational performance of health sector and lack of this empirical research specifically in Andhra Pradesh urged me to explore the relationship of TQM philosophy, TQM implementation and organizational performance and role of leaders' behavioral integrity in defining these relationships.

#### **HYPOTHESES OF THE STUDY**

In today's escalating global competition, the organizations opt for providing and maintaining the absolute quality of products and services to get a competitive edge on their competitors. TQM is recognized as an effective tool for organizational growth and sustainability in this scenario. TQM philosophy involves the continuous improvement of products and services, continuous learning and improved customer satisfaction. The proper adoption of TQM philosophy and TQM implementation not only leads to add new patients but also to retain them in the long run; whereas, the inefficient way of implementing TQM may result in the retrenchment of the patients, wasted costs and loss of sales. Furthermore, it has been found to be significantly related to high customer satisfaction and organizational performance. Following the rationale, I hereby put the hypothesis:

**H1:** TQM philosophy (TQMP) is positively related to organizational performance (OP) of public hospitals. Researchers argue that the effective and efficient use of the strategic implementation of the TQM philosophy in the organizations can lead to fruitful results regarding TQM program and organizational performance. Once quality program is planned the issue regarding the strategic implementation of this program jumps in, which, in literature, is demonstrated as the backbone of the successful TQM program. It is found that the technical tools of quality improvement may be well developed, but its theory and practice lag far behind.

Companies often misconstrue the strategic planning of total quality management and its implementation.

Organizations that faced failure in total quality management are found to have ignored focusing upon the key factors for implementing the TQM in their organizations. One of the major factors regarding this failure is that the organizations do not comprehend the distinctiveness of implementing the TQM strategy in an organization according to its mission, vision, structure, culture and processes. Where emphasis for TQM is laid on the manufacturing sector in India, its considered necessity in the service sector is plausibly overlooked. The health sector is also being affected by the growing customer education about alternate health facilities in this competitive world and the public hospitals of Andhra Pradesh specifically are in a dire need for the proper and successful implementation of the TQM philosophy. Having ample support for the significance of TQM implementation in TQM philosophy and organizational performance, I propose that:

**H2:** Successful TQM implementation (TQMPI) is positively related to the organizational performance (OP) in public hospitals.

**H3:** Successful TQM implementation (TQMPI) mediates the relationship of TQM philosophy (TQMP) and organizational performance (OP). Even though the documented worth of strategic implementation of the TQM for the growth of an organization is given in the literature, yet the researchers have found serious pitfalls in planning for implementation of TQM and practically executing it to get the prolific results. Earlier studies regarding configuration of the TQM policy depict the inclination of researchers towards evaluating the importance of hard elements of TQM such as cost, tools and techniques only.

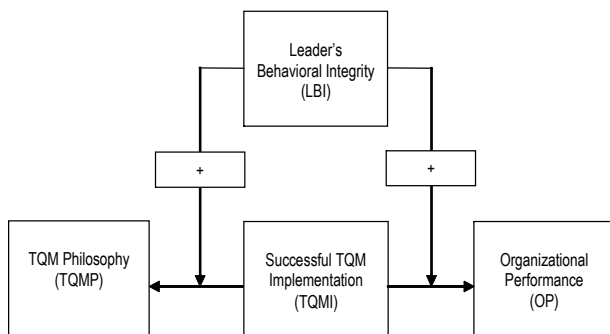
Later on it was realized that soft elements of the TQM philosophy are duly important for the successful implementation of TQM philosophy. The primary focus of TQM philosophy is on the hands and minds that employ the tools and techniques rather than the tools and techniques themselves. However, considerations regarding soft elements which are related to organizational culture comprising of trust, training & development, employee empowerment & retention etc. were somehow ignored from the TQM literature thus making the proper implementation of the TQM philosophy difficult and liable to fail. The objectivity of this dilemma necessitates the leaders' competencies and serious consideration of management and leaders in terms of keeping the

culture of openness, trust, integrity and understanding in all layers of management for better acceptance and realization of TQM philosophy as it directly affects the organizational learning, continuous improvement and innovation.

Nevertheless, the trust in the policies defined and their strategic implementation stems out from leaders' behavioral integrity and the value a leader holds for it to generate sense of acceptance and achievement of this TQM philosophy for better performance outcomes. From research, it is found that leaders mostly provide only lip service for quality improvement whereof their actions do not support it, thus reducing the successful implementation of TQM and beneficial results of this implementation. The discrepancy in formulating and implementing TQM policy is more pronounced when it comes to the implementation of TQM and consequent organizational performance in service sector. Hence it is hypothesized that:

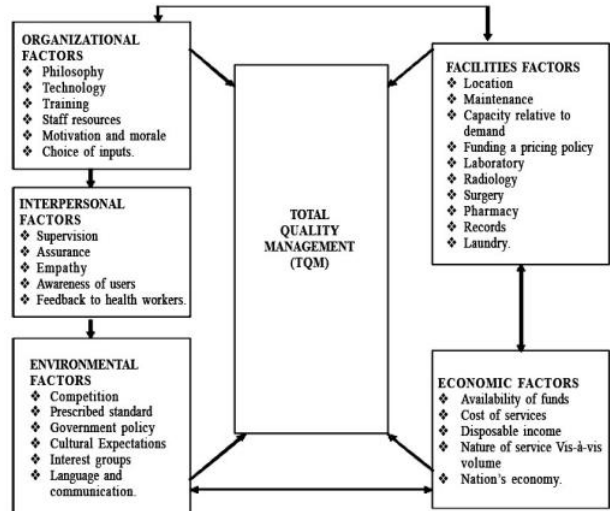
**H4a:** Leader's Behavioral Integrity (LBI) positively moderates the relationship between TQM philosophy (TQMP) and successful TQM implementation (TQMI). It is strongly suggested that leaders should facilitate their employees by resource allocation and supportive culture of learning and improvement to ensure organizational performance. Intermediary role of CEO's personal attributes of open communication, moral and practical support in fostering TQM strategy implementation in Public hospitals of Sri Lanka. However, there is no evidence of research on leaders' behavioral integrity, TQM implementation and organizational performance relationship done in public hospitals. Thus it is hypothesized that:

**H4b:** Leaders' Behavioral Integrity (LBI) positively moderates the relationship between successful TQM implementation (TQMI) and organizational performance (OP) in public hospital.



Adeoti (2008) identified the key variables to be considered under each of the factors shown in Fig. 1.

**Figure 1: TQM determinants schema**



**Theoretical Framework  
Create Alignment**

In setting priorities, CEOs said a vital role for leadership was the creation of alignment. A participant said "when I say alignment, I mean skills culture, resources, physical facilities, and just people's view of what's important". Another CEO said "going into this exercise of setting priorities we need a very, very strong alignment between the community, the board, the senior team and the medical leadership. And we need a decision making model that allows us to do this in a very open and transparent way".

**Leadership Practices and Benefits**

Domain	Leadership practices for priority setting	Benefits
<b>Foster Vision</b>	Determine vision Apply strategic planning Use change management strategies, education and communications Do not lose sight of long-term time horizon Focus on core programs Emphasize alignment Focus on key values	Mobilize stakeholders in common direction Create meaning Enhance feasibility Create alignment Improve services Improve efficiencies
<b>Create alignment</b>	Develop shared institutional understanding of vision, values and roles Ensure 'power triangle' in balance Align stakeholders Engage private sector and governments Collaborate in networks Establish trust	Enhance affordability Enhance fairness Facilitate service integration Improve 'buy in' Shared resources Creates innovation Social capital Retain autonomy
<b>Develop Relationships</b>	Physician: involve in decision making Physician: establish teams Board: respectful relationship Board: provide context, choices and process Staff: Delegation Staff: create trusting milieu Funder: program advocacy	Enhances services to serve public Provides balanced perspectives Enhances inclusivity Increase organizational performance Avoids staff 'push back' Increases revenues

<b>Live values</b>	Transparency: reveals agenda Evidence: use criteria and relevant information Inclusivity: involve relevant stakeholders Trust: establish trust in relationships Honesty: manifest honesty in priority setting	Fairness Self-evaluation Cooperation Affordability Social capital Good Conduct Virtue
<b>Establish Process</b>	Promotes vision, values and criteria Enhance planning Engage stakeholders Align programs Enhance communication Use challenge goals Measure Progress Apply Clinical program management Frame Choices Clarify leadership style	Fairness Consensus Performance Shared direction Quality Alignment Accountability

**METHODOLOGY OF THE STUDY**

**Sample Selection**

The sample of 100 employees was taken from the public hospitals of twin cities, i.e., Hyderabad and Secunderabad for study using simple random sampling technique. Total questionnaires distributed were 160, out of which 60 were discarded for being unfilled/semi-filled leaving 100 behind with 62.5% response rate. Simple Random sampling technique was used to select the sample. The data was collected from the employees from lower and middle management only by using mail survey method.

**RESEARCH INSTRUMENTS**

For the development of research instrument valid scales for all the variables under study were used. All the items were given the response range of 5-point Likert scale ranging from (1) strongly disagreeing to (5) strongly agree except for items of TQM implementation. For TQM implementation scale including almost never (1), Sometimes (2), Often (3), Very Often (4) and Almost Always (5) was used. For TQM philosophy 5-items given by Douglas & Judge (2001) in TQM practices scale was used. For TQM implementation scale modified by Fei & Rainey (2003) was used constituting of 9 scales altogether on management support (6-items), employee suggestion (5-items), use of data (4-items), suppliers relationship (4-items), quality supervision (3-items), team effectiveness (6-items) and customer orientation (5-items). For Organizational Performance 5-items from scale developed and used by Islam & Siengthai (2009) was used. For leaders' behavioral integrity scale of Simons (2003) for behavioral integrity (8-items) was used. The reliability of the scale was confirmed by

Cronbach's Alpha ( $\alpha=0.866$ ) (Table-1).

**RESULTS**

**Table 1: Reliability Analysis**

Cronbach's Alpha	No. of Items
.866	29

Linear regression was applied for the statistical analysis of the proposed hypotheses. Table-2 shows the Model significance with an overall F-value of 17.15 ( $p<0.05$ ). Results from regression analysis supported our entire hypotheses.

**Table 2: Model Summary**

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	37.555	3	12.518	17.155	.000 <sup>a</sup>
Residual	70.056	96	.730		
<b>Total</b>	<b>107.611</b>	<b>99</b>			

a. Predictors : (Constant), TQMP, LBI, TQMI  
b. Dependent Variable: ORGP

Moreover, the direction of the hypothesized relationships was also the same. Results shown in Table-3 of coefficients regarding all variables show that TQM philosophy was positively related to Organizational Performance ( $p=.000$ ) and TQM implementation was positively related to Organizational Performance ( $p=.000$ ).

**Table 3: Coefficients**

Predictor Variables	Dependent Variables				
	Model - 1 OP	Model - 2 OP	Model - 3 OP	Model - 4 OP	Model - 5 OP
TQMP	.436*		.221*	.325*	
Mediator TQMI		.540*	.429*		.216*
Moderator LBI				.424*	.419*

TQM implementation was also found to have strong indirect mediation in the relationship of TQM philosophy and Organizational Performance ( $p=.000$ ) as the beta coefficient of TQMP ( $\beta=.436$ ) in model 1 reduced to  $\beta=.221$  in model 3 when TQMPI was added to the regression model as mediator. Furthermore, the beta coefficients of the two predictors (TQMI and TQMP) show that TQMI ( $\beta=.540$ ) contributes more to the variance in the response variable OP than TQMP ( $\beta=.436$ ). Results in model 4 and 5 of Table-3 (See Appendices) show moderating effect of Leaders' Behavioral integrity on TQM philosophy and TQM implementation and TQM implementation and Organizational Performance showed its significant effect as ( $p=.000$ ) and ( $p=.034$ ) respectively. Descriptive

statistics showed that most of the respondents in my study were young with age ranging from 20-35 approximately and with experience less ranging from 5-10 years.

### DISCUSSION & CONCLUSION

The central idea of the study was to identify the importance of TQM implementation in the organizational performance of public hospitals of twin cities and the role of leaders' behavioral integrity in this regard. My results are in line with most of the studies done in developed nations on the role of TQM in elevating organizational performance and customer satisfaction. Moreover, the leaders' integrity was found to strongly moderate this relationship which also supports the argument by Douglas & Judge (2001) who noticed the lack of successful TQM implementations in organizations even after having TQM philosophy as their strategic tool due to leaders' inefficiency to bring alignment in the espoused and enacted TQM strategies. Moreover, my results are comparable to comparative studies of soft and hard elements of TQM where the soft elements concerning leadership issues have the prime importance over the hard elements.

Although, behavioral integrity is considered to be related to and effected by past experiences (Simons, 1999) the descriptive analysis on age and experience shows that even the young and less experienced employees of public hospitals in twin cities are more susceptible to accept TQM philosophy and work for its successful implementation more if they perceive their leaders' integrity more. This may be due to more value for integrity of top-management is given by the employees from public health sector of twin cities due to more uncertain and frequently changing governmental policies. The top-management of public hospitals in twin cities is therefore required to attain word-action alignment in their TQM strategies for more fruitful performance results. This empirical study has also been able to identify three additional factors that are crucial to TQM implementation in health care delivery system. They are the inventory of drug factors, information technology factors. The economic factors were redundant because financial status does not determine treatment in government hospitals. Employees' involvement and funding appears to be the dominant factors out of the eight. The implication of this result is that, if the government gives adequate funding and the employee involvement is superb, then the quality of health service delivered in the state government hospital would be significantly enhanced and efficient.

### LIMITATIONS AND FUTURE RESEARCH SUGGESTIONS

The present study with all its significance to the successful TQM implementation and consequent organizational performance of public hospitals in twin cities has some limitations also. The data was collected from the public hospitals of twin cities only thus the results cannot be generalized to the overall public health sector of twin cities. Moreover, the construction of behavioral integrity is developmental in nature and may change with the course of time. Thus future research by longitudinal study on the performance of public hospitals in terms of TQM and leaders behavioral integrity is suggested to bring in more knowledge about this relationship. A similar comparative study of public and private health sector of twin cities is also suggested for future research due to large differences of culture of Public and Private sector.

### REFERENCES

- Ham C, Robert G, editors (2003). *Reasonable rationing: international experience of priority setting in health care*. London: Open University Press.
- Daniels N, Sabin JE. (1998). *The ethics of accountability in managed care reform*. Health Affairs, 17, 50-64.
- Grint K. (2002). Management or leadership? *Journal of Health Services Research & Policy*, 7, 248-51.
- Ginter PM, Swayne LE, Duncan JW. (2002). *Strategic management of health care organizations, 4th eds*, Malden. MA: Blackwell Publishing.
- Daniels N. (2000). *Accountability for reasonableness in private and public health insurance*. In: Ham C, Coulter A, editors. *The global challenge of health care rationing*. Buckingham, UK: Open University Press, 89-106.

# A STUDY OF EFFICIENCY MEASUREMENT OF GENERAL INSURERS OF INDIA THROUGH THE APPLICATION OF DATA ENVELOPMENT ANALYSIS (DEA)

Kuldip S. Chhikara\*  
Sangita Rani\*\*

## Table of Contents

- Abstract
- Keywords
- Introduction
- Review of Literature
- Objectives of the Study
- Research Methodology
- Results and Discussion
- Conclusion
- References

## ABSTRACT

*The paper is an attempt to evaluate the relative efficiencies (Technical, Pure Technical, and Scale Efficiency) of 16 general insurance companies operating in India, on the basis of secondary the data for 2009-10 and 2010-11, with the help of Data Envelopment Analysis (DEA) model. The study included 'Net Premium' and 'Claims Incurred' as outputs and 'Operating expenses including Commission' and 'No. of Offices' as inputs. The empirical results confirmed that ICICI Lombard General Insurance Co. Ltd. and IFFCO Tokio General Insurance Co. Ltd. were the best performers at all the three fronts (OTE, PTE and SE) of comparative efficiency measurements and The Oriental Insurance Co. Ltd. and United India Insurance Co. Ltd. topped the list of defaulters, for the period under the study. It was advised through the Future Generali India Insurance Co. Ltd., Reliance General Insurance Co. Ltd. Royal Sundaram Alliance Insurance Co. Ltd., TATA AIG General Insurance Co. Ltd., and Universal Sompo General Insurance Co. Ltd. to increase their scale of operations to get the perfect levels of the efficiencies.*

**KEYWORDS:** Data Envelopment Analysis (DEA), Insurance Sector, General Insurance Companies, Technical Efficiency, DMUs (Decision Making Units).

## INTRODUCTION

The growth and development of an economy

is influenced in several ways by the insurance industry which is an integral part of the financial system. The importance of insurance in the economic activities can be recognized through the pronouncement of United Nations Conference on Trade Development (UNCTAD) in 1964, "A sound national insurance and reinsurance market is an essential characteristic of economic growth" (Das). A well-functioning financial sector facilitates efficient intermediation of financial resources. The more efficient a financial system is in resource generation and in its allocation, the greater is its contribution to economic growth (Mohan, 2005). The Indian general insurance sector witnessed a robust growth in the past due to a booming economy ignited through the process of liberalization and entry of private companies in the sector, the Indian insurance sector started showing signs of significant changes. But now a days, The insurance industry of the Indian economy (third-largest economy of the world in terms of Purchasing Power Parity), is facing double challenges of economic slowdown and lower margins due to freeing up of premium rates. An emergence series of scandals have also dented the image of the economy and consequently, India's ranking in the world insurance market has dropped four places (from number 11 in 2010 to number 15 in 2011) because of a sharp drop in insurance business in 2011-12.

The increasing global insurance competition has also put significant pressure on companies to become more efficient, enhance their technology-related processes and amend their business models; and they are trying to enhance the efficiency of their underwriting process, cut their overheads and reduce claims leakage since returns from investment are shrinking. As efficiency and productivity measures indicate towards strength and weaknesses of the related sector and help the regulator to take corrective steps as and when required. Moreover, the efficiency is useful to policymakers to assess the success or failure of policy initiatives. In this regard, the present study throws light on the issue.

## REVIEW OF LITERATURE

Bawa, Sumninder Kaur and Kaur, Navjeet (2011), through their study compared 10 Indian General Insurance Companies (4 Public Sector and 6 Private

\*Professor, Department of Commerce, M.D. University, Rohtak-124001, Haryana, India.

\*\*Research Scholar, Department of Commerce, M.D. University, Rohtak-124001, Haryana, India.

Sector) from the year 2002-03 to 2009-10 with the help of the Data Envelopment Analysis by taking the 'Claims incurred' as the output and the 'Investment income' as well as the 'Net premium income' as the inputs, to arrive at the efficiency levels of the companies under study and found National Insurance Company, and New India Assurance Company as the most efficient and inefficient company respectively among the public sector insurers. The private insurers were found working at increasing returns to scale over the years, which was a sign of the emergence of healthy competition in the Indian General Insurance market. The study also found the overall technical efficiency results of general insurers as improving over the period. On the other hand, the sector-wise performance analysis exhibited the technical efficiency (96 per cent) of the public sector insurers which was more than the private sector companies (89 per cent).

Cummins et al. (1996), analyzed through their paper the technical efficiency and productivity growth in the Italian Insurance market based on a sample of 94 Italian insurance companies for the year 1985, by using Malmquist indices which were decomposed into technical efficiency change and technical change. The study used 'benefits' plus 'changes in reserves' as output in life insurance and 'incurred losses' plus 'invested assets' as output in non-life insurance and 'labour expense', 'administrative labour expense', 'fixed capital' and 'equity capital' were used as input. The research concluded that technical efficiency in the Italian insurance industry ranged from 70 to 78 per cent but on the other hand, productivity declined significantly over the sampled period, with a cumulative decline of about 25 per cent. The study concluded that the insurers used more inputs to produce their outputs at the end of the period than at the beginning.

Garg and Deepti (2008), compared through their study the technical and scale efficiency of twelve general insurance companies in India from 2002-03 to 2005-06, by using output-oriented Data Envelopment Analysis (DEA). The results showed that, among the public sector general insurance companies, New India Assurance Co. Ltd. is the only company which was found to be technically efficient, both on constant returns to scale and variable returns to scale, for the whole period of study. Among the private insurers, HDFC Chubb managed to retain 100 per cent efficiency for the last three years both on VRS & CRS. Average efficiency results indicated that, though, private insurers lag behind the public insurers, they were fast catching

up and the efficiency scores of private insurers seemed to be improved.

Sinha (2009), evaluated the technical efficiency of four public sector and six private sector general insurance companies using data envelopment analysis from 2003-04 to 2005-06. 'Net premium income' and 'operating income' were considered as outputs and 'operating expenses' was considered as inputs. The study showed a decline in the mean technical efficiency in 2004-05 relative to 2003-04, but it showed improvement in 2005-06, Reliance General Insurance Co. Ltd. and New India Assurance Co. Ltd. consistently occupied the top two slots among the sampled companies during the period under study.

Verma, Ruchita (2012), examined the perceptiveness and productivity as well as change in productivity of public sector health insurance business, and also, investigated various drivers behind such change, through the study considering a period of 8 years from 2002-03 to 2009-2010, by using Data Envelopment Analysis (DEA), taking 'premium' as 'Output and Capital' and 'Cost to the insurers' as Inputs. The study exposed that Total Factor Productivity Change (TFPC), which comprises of EC, TC, PTEC and SEC has followed diverse path. The TFPC of Oriental Insurance and New India Assurance Company limited was dropped and of United India and National Insurance Company Limited was improved. United India and National Insurance Company Limited were found to be more technical and scale efficient.

Abidin, Zaenal and Cabanda, Emilyn (2011), evaluated the relative efficiency of 23 Non-Life Insurance companies in Indonesia by using Data Envelopment Analysis and Tobit Analysis. Empirical results found bigger insurance companies to be more efficient than smaller ones; companies with captive market and the companies' group with non-captive market have relatively the same results. It was also indicated that captive market, listed companies, and government ownership did not influence the efficiency performance.

Shahroudi et al (2012), examined the efficiency of 14 private insurance companies during 2007-2009, by using traditional DEA and two-stage DEA model and considering Marketing and investment sub-processes in two-stage DEA model. The results indicated that the investment weakness was the main reason of insurance companies' deficiencies. Results of two-stage DEA model showed that the Iran Moein company has the highest overall efficiency with a score



of 0.94. Two other companies- Iran Moein and Pasargad, were also found to be efficient (score 1). The study also indicated that the real problem of inefficiency was due to marketability efficiency rather than profitability efficiency.

Bawa, Sumninder Kaur and Ruchita (2011), analysed the efficiencies of 10 health insurance companies operating in India including 4 public sector companies, covering a period of 8 years from 2002-03 to 2009-10 by using the 'equity capital' and 'labour' (including commission, agents' fees, referral and other expenditure) as inputs and 'net premium' as output. The sector-wise performance analysis indicated that private sector companies were technical more efficient in comparison to public sector Companies. It was further observed that private sector companies were operating on increasing returns to scale and taking the advantages of pure technical efficiency and scale efficiency while, public sector companies were becoming mature, started operating on decreasing returns to scale, and due to competition the position of public sector companies was taken over gradually by private sector companies.

Eling, Martin and Luhn, Michael (2008), conducted a study of 3,555 insurers from 34 countries to measure frontier efficiency in the insurance industry. The study gave valuable insights into the international competitiveness of insurers in various countries. It was found that there was a steady technical and cost efficiency growth in international insurance markets from 2002 to 2006, with large differences across countries.

#### OBJECTIVES OF THE STUDY

- To adjudge the technical, pure technical, and scale efficiencies of Non-Life Insurance Companies in India;
- To analyze the slacks in inputs and outputs of the sampled Non-Life Insurance companies; and
- To make feasible suggestions on the basis of findings.

#### RESEARCH METHODOLOGY

##### Sample of the study

All Insurance Companies (life and non-life) operating in India constitute the universe of the study. All 25 general insurance companies (as per 'Annual Report' of IRDA, 2010-11) forms the population of the study. The researchers have selected 16 general (non-life insurance) companies as sample of the study to measure their various types of efficiencies.

##### Data collection

The study is purely based on secondary data, which is mainly drawn from the 'annual reports' of the IRDA, and various studies conducted in this area. The data for the year 2009-10 and 2010-11 have been taken into consideration for drawing inferences related to the sampled 16 non-life insurers operating in India.

##### Statistical Tool: DEA (Data Envelopment Analysis)

DEA is a non-parametric technique used to evaluate the relative performance of decision making units (DMUs), which was first propounded by Charnes, Cooper and Rhodes (1978) and has an input-oriented model with constant return to scale (CRS). The basic DEA is an extension of "Farrell's measure to multiple - input multiple - output situations and was operationalized by using mathematical programming" (Emrouznejad, 2000: 17). DEA has objectivity and ability to handle multiple inputs and outputs measurable in different units. The technique aims to measure how efficiently a DMU (here the Indian general Insurance companies) uses the available resources to generate a set of outputs and can also handle multiple outputs as well as multiple inputs. DEA makes it possible to identify efficient and inefficient units in a framework where results are considered in their particular context. In addition, DEA also provides information that enables the comparison of each inefficient unit with its "peer group". The unit is considered efficient if the efficiency is equal to 1 and inefficient if it is less than 1. The efficiency score in the presence of multiple inputs and outputs is defined as:

$$\text{Efficiency} = \frac{\text{Weighted Sum of Outputs}}{\text{Weighted Sum of Inputs}}$$

The technique has been used to assess the relative efficiency of Indian general insurance companies under the study.

##### Choice of Input and output factors

The first and very crucial step in conducting a DEA is the determination of inputs and outputs and important point in this process is that the input/output variables should be chosen in accordance with the type of efficiency being assessed (Sherman & Rupert, 2006). Through the study of related literature it was noticed that the researchers have a general agreement on the selection of input indicators such as labor, capital and materials Grace and Timme (1992), Gardner and Grace (1993), Cummins and Zi (1998). In case of outputs, there are three principal approaches to measure outputs. The first, intermediation approach, views the insurance company as a financial

intermediary that manages a pool of assets, borrowing funds from policyholders, investing them on capital markets, and paying out claims, taxes, and costs (Brockert et al, 1998). The value-added approach, second one, assumes that the insurer provides three main services- risk-pooling and risk-bearing (collecting premiums from policyholders, and redistributing most of them to customers, who have incurred losses); "real" financial services relating to insured losses (such as financial planning); and the third service is intermediation (Cummins/Nini, 2002).

We have selected two indicator of input as 'Operating expenses including Commission' and 'Number of Offices' ; and two indicator of output as

'Net Premium' and 'Claims Incurred', by adopting intermediary approach, which are as follows:

Outputs: 'Net Premium' and 'Claims Incurred'.

Inputs: 'Operating expenses including Commission' and 'No. of Offices'.

## RESULTS AND DISCUSSION

The Comparative analysis of sampled non-life insurance companies, which is highlighted through the Table 1, found ICICI Lombard General Insurance Co. Ltd. and IFFCO Tokio General Insurance Co. Ltd. as the best performers for the period under the study at all the three fronts (OTE, PTE and SE) of comparative efficiency measurements. It was further indicated

**Table 1: Efficiency Summary of the Sampled General Insurers in India**

	OTE (2010-11)	OTE (2009-10)	PTE (2010-11)	PTE (2009-10)	SE (2010-11)	SE (2009-10)	RTS (2010-11)	RTS (2009-10)	Peer Count (2010-11)	Peer Count (2009-10)
New India Assurance Co. Ltd.	0.693	0.719	1	1	0.693	0.719	drs	Drs	1	4
National Insurance Co. Ltd.	0.752	0.663	1	0.884	0.752	0.75	drs	Drs	2	0
The Oriental Insurance Co. Ltd.	0.596	1	0.756	1	0.788	1	drs		0	5
United India Insurance Co. Ltd.	0.609	0.71	0.797	0.955	0.765	0.744	drs	Drs	0	0
Bajaj Allianz General Insurance Co. Ltd.	0.856	0.802	1	0.912	0.856	0.879	drs	Drs	0	0
Bharti AXA General Insurance Co. Ltd.	0.464	0.191	1	0.794	0.464	0.241	irs	Irs	0	0
Cholamandalam MS General Insurance Co. Ltd.	0.743	0.511	0.744	0.615	0.999	0.831	drs	Irs	0	0
Future Generali India Insurance Co. Ltd.	0.46	0.325	0.649	0.562	0.71	0.579	irs	Irs	0	0
HDFC Ergo General Insurance Co. Ltd.	0.736	0.622	0.811	0.722	0.907	0.862	irs	Irs	0	0
ICICI Lombard General Insurance Co. Ltd.	1	1	1	1	1	1			4	4
IFFCO Tokio General Insurance Co. Ltd.	1	1	1	1	1	1			5	6
Reliance General Insurance Co. Ltd.	0.763	0.519	0.8	0.758	0.953	0.684	irs	Drs	0	0
Royal Sundaram Alliance Insurance Co. Ltd.	0.764	0.687	0.781	0.738	0.978	0.931	irs	Irs	0	0
Shriram General Insurance Co. Ltd.	1	0.62	1	1	1	0.62		Irs	5	4
TATA AIG General Insurance Co. Ltd.	0.855	0.71	1	1	0.855	0.71	irs	Irs	0	1
Universal Sampo General Insurance Co. Ltd.	0.431	0.221	1	1	0.431	0.221	irs	Irs	3	4
Mean Efficiency	0.733	0.644	0.896	0.871	0.822	0.736				

Source: Authors' Calculations

through the table that three companies- ICICI Lombard General Insurance Co. Ltd., IFFCO Tokio General Insurance Co. Ltd., and Shriram General Insurance Co. Ltd. performed perfectly (score 1) at the front of PTE for both the years under study further Shriram General Insurance Co. Ltd., TATA AIG General Insurance Co. Ltd., and Universal Sampo General Insurance Co. Ltd. also registered a significant growth in their OTE and SE scores over the previous year but New India Assurance Co. Ltd. which is perfect at OTE front during both the years showed a negative growth during 2010-11 at OTE and SE front in comparison to 2009-10. Shriram General Insurance Co. Ltd., in particular, also attained the level of perfect efficiency in OTE and SE fronts in comparison to its previous year performance. On the other hand, the Oriental Insurance Co. Ltd. exhibited a significant drop in its performance at all the three fronts of OTE, PTE and

SE from perfect to 0.596, 0.756 and 0.788 respectively which are below the mean efficiency scores of 0.733, 0.896 and 0.822 respectively for 2010-11. The Bajaj Allianz General Insurance Co. Ltd. and Bharti AXA General Insurance Co. Ltd. managed to enhance their PTE from 0.912 and 0.794 to 1 each respectively over the previous year and further, were capable in surging their OTE and SE scores. The analysis shows that only three companies (National Insurance Co. Ltd., United India Insurance Co. Ltd. and Bajaj Allianz General Insurance Co. Ltd.) other than the perfect scorers, were able to score more than the mean score (0.871) of PTE in 2009-10; but United India Insurance Co. Ltd., showed a decrease in during 2010-11 as compared to previous year and if it was below the mean score of 0.896. It is evident from the analysis that the general insurance business in India has surged at all the fronts of OTE, PTE and SE from 0.644 to 0.733;

**Table 2(a): Actual and Target values of Inputs and Outputs (2009-10)**  
(Amounts in Rs. Lakh)

Insurance Company Name	Net Premium (Actual)	Net Premium (Target)	Claims Incurred (Actual)	Claims Incurred (Target)	Operating Expenses Including Commission (Actual)	Operating Expenses Including Commission (Target)	No. of Offices (Actual)	No. of Offices (Target)
New India Assurance Co. Ltd.	600263	<b>600263</b>	513245	513245	230743	230743	1039	1039
National Insurance Co. Ltd	397765	397765	324536	324536	145019	<b>128185.06</b>	1220	<b>632.30</b>
The Oriental Insurance Co. Ltd	3962532	3962532	326018	326018	139203	139203	1000	1000
United India Insurance Co. Ltd	419016	419016	332924	332924	138993	<b>132778.81</b>	1437	<b>651.63</b>
Bajaj Allianz General Insurance Co. Ltd.	197167	197167	138657	138657	58028	<b>52932.47</b>	232	<b>211.63</b>
Bharti AXA General Insurance Co. Ltd.	18669	18669	8619	<b>8771.87</b>	16644	<b>10653.90</b>	50	<b>39.71</b>
Cholamandalam MS General Insurance Co. Ltd.	51463	<b>51992.51</b>	34434	34434	21540	<b>13238.64</b>	106	<b>65.15</b>
Future Generali India Insurance Co. Ltd.	26647	<b>30453.22</b>	16915	16915	16000	<b>8985.77</b>	91	<b>51.11</b>
HDFC Ergo General Insurance Co. Ltd.	58868	58868	39586	39586	22021	<b>15890.53</b>	78	<b>56.29</b>
ICICI Lombard General Insurance Co. Ltd.	231409	231409	194838	194838	57620	57620	350	350
IFFCO Tokio General Insurance Co. Ltd.	99083	99083	73267	73267	27446	27446	60	60
Reliance General Insurance Co. Ltd.	142872	<b>150687</b>	118569	118569	83582	<b>48378.32</b>	212	<b>160</b>
Royal Sundaram Alliance Insurance Co. Ltd.	75460	75460	50907	50907	26474	<b>19531.56</b>	80	<b>59</b>
Shriram General Insurance Co. Ltd.	22420	22420	9500	9500	4745	4745	55	55
TATA AIG General Insurance Co. Ltd	58000	58000	39637	39637	27245	27245	47	47
Universal Sampo General Insurance Co. Ltd.	14817	14817	5749	5749	9029	9029	39	39

0.871 to 0.896; 0.736 to 0.822 respectively during the period under study, but yet the companies like Universal Sompo General Insurance Co. Ltd., Bharti AXA General Insurance Co. Ltd., Future Generali India Insurance Co. Ltd., etc., which were underperforming during 2009-10 at OTE front are still performing on the same lines during 2010-11. Cholamandalam MS General Insurance Co. Ltd., Future Generali India Insurance Co. Ltd., and Royal Sundaram Alliance Insurance Co. Ltd. are notable underperformers at the front of PTE during both the years. Universal Sompo General Insurance Co. Ltd., Future Generali India Insurance Co. Ltd., and Bharti AXA General Insurance Co. Ltd. are the most inefficient companies at the front of SE during the analysis period. The IFFCO Tokio

General Insurance Co. Ltd. and ICICI Lombard General Insurance Co. Ltd. with the highest number of peer counts during both the years emerged out as the leaders among all private non-life with their robust performance at all the fronts of efficiency measurements. Though Shriram General Insurance Co. Ltd. is also having high peer counts but lagging behind the two top companies due to its previous year's poor performance. The analysis indicates that New India Assurance Co. Ltd., National Insurance Co. Ltd., the Oriental Insurance Co. Ltd., United India Insurance Co. Ltd., Bajaj Allianz General Insurance Co. Ltd., and Cholamandalam MS General Insurance Co. Ltd. are performing with extra scales and hence are required to curtail their scales to be efficient but on the other

**Table 2(b): Actual and target Values of Inputs and Outputs 2010-11**

(Amounts in Rs. Lakh)

Insurance Company Name	Outputs				Inputs			
	Net Premium Actual	Net Premium Target	Claims Incurred Actual	Claims Incurred Target	Operating Expenses Including Commission Actual	Operating Expenses Including Commission Target	No. of Offices Actual	No. of Offices Target
New India Assurance Co. Ltd.	719223	719223	652487	652487	259190	259190	1041	1041
National Insurance Co. Ltd.	538971	538971	462328	462328	170289	170289	1219	1219
The Oriental Insurance Co. Ltd.	461158	461158	406536	406536	185844	140484.32	1146	792
United India Insurance Co. Ltd.	511694	511694	438564	440421	199692	159075.07	1436	1114.092
Bajaj Allianz General Insurance Co. Ltd.	231050	231050	170127	170127	68648	68648	199	199
Bharti AXA General Insurance Co. Ltd.	43468	43468	27596	27596	24880	24880	51	51
Cholamandalam MS General Insurance Co. Ltd.	72686	72686	48578	51257.5	23489	17478.105	96	71
Future Generali India Insurance Co. Ltd.	40395	42575.9	27902	27902	20658	13403.855	94	60
HDFC Ergo General Insurance Co. Ltd.	77514	77514	53230	57868.8	26784	21730.187	78	63
ICICI Lombard General Insurance Co. Ltd.	303318	303318	273064	273064	73409	73409	315	315
IFFCO Tokio General Insurance Co. Ltd.	125229	125229	99046	99046	33375	33375	66	66
Reliance General Insurance Co. Ltd.	115480	157413	133138	133138	46939	37571.002	212	169
Royal Sundaram Alliance Insurance Co. Ltd.	96250	96250	66022	73244.1	32553	25440.042	84	65
Shriram General Insurance Co. Ltd.	44688	44688	25508	25508	9335	9335	68	68
TATA AIG General Insurance Co. Ltd.	87553	87553	54311	54311	31321	31321	54	54
Universal Sompo General Insurance Co. Ltd.	22566	22566	14216	14216	12415	12415	54	54

Source: Actual amounts from IRDA Website and targeted amounts have been extracted and by the Authors

hand Bharti AXA General Insurance Co. Ltd., Future Generali India Insurance Co. Ltd., Reliance General Insurance Co. Ltd. and Royal Sundaram Alliance Insurance Co. Ltd., TATA AIG General Insurance Co. Ltd., and Universal Sompo General Insurance Co. Ltd. are advised to increase their scale of operation to get the perfect level of the efficiency. Reliance General Insurance Co. Ltd. as shifted from increasing to decreasing returns to scale during the period under study, which requires a serious managerial attention for further improvement.

The analytical Table 2(a) explains the variations between actual and targeted values of outputs and inputs of sampled general insurance companies for 2009-10, while Table 2(b) explains the situation for 2010-11. It was evident from the table 2(a) that the actual and targeted outputs of all the sampled general insurers were fully matched except in case of Bharti AXA General Insurance Co. Ltd. which was short of target in case of 'Claims Incurred' and Cholamandalam MS General Insurance Co. Ltd., Future Generali India Insurance Co. Ltd., and Reliance General Insurance Co. Ltd. whose 'Net Premium' could not be attained during 2009-10. But on the other hand, a very significant number of insurers (nine) were not capable of utilising both of their inputs as per the targeted amounts and hence felt short of performance during 2010-11 in comparison to only four companies during 2009-10 in achieving targeted amount of outputs. Bharti AXA General Insurance Co. Ltd. improved its performance during 2010-11 with a perfect achievement in comparison to the previous year, while United India Insurance Co. Ltd., HDFC Ergo General Insurance Co. Ltd., and Royal Sundaram Alliance Insurance Co. Ltd. are the insurers who perform worse at the front of outputs during current

year. An improvement was noticed in use of inputs by sampled insurers taken together, as only seven companies defaulted during current year in comparison to nine during the previous year.

The further analyses of slacks in outputs during 2009-10 and 2010-11 have been described through Table 3(a) and 3(b). Future Generali India Insurance Co. Ltd., Reliance General Insurance Co. Ltd., and Cholamandalam MS General Insurance Co. Ltd. were the companies having app. slack of 14 per cent, 5.15 per cent and 1 per cent respectively in 'Net Premium' and Bharti AXA General Insurance Co. Ltd. showed a slack of 1.77 per cent in 'Claims Incurred'. The highest variation of app. Rs.7815 lakh was observed in case of Reliance General Insurance Co. Ltd. during 2009-10. The position regarding attainment of output 'Net Premium' seemed to be improved during 2010-11 as only two companies Future Generali India Insurance Co. Ltd. And Reliance General Insurance Co. Ltd. fell short of performance as compare to three companies in the previous year. While Future Generali India Insurance Co. Ltd. controlled and contracted its slacks of 'Net Premium' from Rs. 3806 lakh (14.28 per cent) to Rs. 2180 lakh (5.39 per cent) only, Reliance General Insurance Co. Ltd. found its performance deteriorated with a gap of Rs. 41933.41 lakh (36.31 per cent) in comparison to Rs. 7814.617 lakh (5.5 per cent) in input during the same period.

During 2010-11, four companies detracted from their path in achieving 'Claims Incurred' substantially in comparison to only one company with a comparative small of default during 2009-10.

Underperformance (slacks) was noticed in both inputs (Operating Expenses including

**Table 3(a): Output Slacks (2009-10)**  
(Amounts in Rs. Lakh)

Insurance Company Name	Output I				Output II			
	Net Premium Actual	Net Premium Target	Slacks/ Deviations	% of Slacks/ Deviations	Claims Incurred Actual	Claims Incurred Target	Slacks/ Deviations	% of Slacks/ Deviations
Bharti AXA General Ins. Co. Ltd.	18669	18669	0	0	8619	8771.87	152.87	1.77
Cholamandalam MS General Ins.Co. Ltd.	51463	51992.5	529.512	1.028	34434	34434	0	0
Future Generali India Ins. Co. Ltd.	26647	30453.2	3806.223	14.283871	16915	16915	0	0
Reliance General Insurance Co. Ltd.	142872	150687	7814.617	5.469	118569	118569	0	0

Source: Actual amounts from IRDA Websites and targeted amount have been extracted by the authors

**Table 3(b): Outputs slacks 2010-11***(Amounts in Rs. Lakh)*

Insurance Company Name	Output I				Output II			
	Net Premium Actual	Net Premium Target	Slacks/ Deviations	% of Slacks/ Deviations	Claims Incurred Actual	Claims Incurred Target	Slacks/ Deviations	% of Slacks/ Deviations
Future Generali India Insurance Co. Ltd.	40395	42575.93	2180.93	5.39	27902	27902	0	0
United India Insurance Co. Ltd	511694	511694	0	0	438564	440420.55	1856.55	0.42
Cholamandalam MS General Insurance Co. Ltd.	72686	72686	0	0	48578	51257.53	2679.534	5.51
HDFC Ergo General Insurance Co. Ltd.	77514	77514	0	0	53230	57868.75	4638.75	8.71
Reliance General Insurance Co. Ltd.	115480	157413.41	41933.41	36.31	133138	133138	0	0
Royal Sundaram Alliance Insurance Co. Ltd	96250	96250	0	0	66022	73244.13	7222.131	10.93

Source: Actual amounts from IRDA Websites and targeted amount have been extracted by the authors

**Table 3(c): Input Slacks 2009-10***(Amounts in Rs. Lakh)*

Insurance Company Name	Input I				Input II			
	Operating Expenses Including Commission (Actual)	Operating Expenses Including Commission (Target)	Slacks/ Deviations	% of Slacks/ Deviations	No. of Offices (Actual)	No. of Offices (Target)	Slacks /Deviations	% of Slacks /Deviations
National Insurance Co. Ltd.	145019	128185.057	16833.943	11.608	1220	632.301	587.699	48.17
United India Insurance Co. Ltd	138993	132778.805	6214.195	4.471	1437	651.632	785.368	54.65
Bajaj Allianz General Insurance Co. Ltd.	58028	52932.466	5095.534	8.781	232	211.628	20.372	8.781
Bharti AXA General Insurance Co. Ltd.	16644	10653.899	5990.101	35.989	50	39.714	10.286	20.57
Cholamandalam MS General Insurance Co. Ltd.	21540	13238.642	8301.358	38.539	106	65.148	40.852	38.53
Future Generali India Insurance Co. Ltd.	16000	8985.771	7014.229	43.83	91	51.107	39.893	43.83
HDFC Ergo General Insurance Co. Ltd.	22021	15890.529	6130.471	27.839	78	56.285	21.715	27.83
Reliance General Insurance Co. Ltd.	83582	48378.321	35203.679	42.118	212	160	52	24.52
Royal Sundaram Alliance Insurance Co. Ltd.	26474	19531.561	6942.439	26.224	80	59	21	26.25

Source: Actual amounts from IRDA Website and targeted amounts have been extracted by the Authors.

**Table 3(d): Slack values of Inputs 2010-11**  
( Amounts in Rs. Lakh)

Insurance Company Name	Input I				Input II			
	Operating Expenses Including Commission on Actual	Operating Expenses Including Commission on Target	Slacks/ Deviations	% of Slack Deviations	No. of Offices Actual	No. of Offices Target	Slacks/ Deviations	% of Slack Deviations
The Oriental Insurance Co. Ltd.	185844	140484.3	45359.68	24.41	1146	792	354	30.89
United India Insurance Co. Ltd.	199692	159075.1	40616.93	20.34	1436	1114.092	321.908	22.41
Cholamandalam MS General Insurance Co. Ltd.	23489	17478.11	6010.895	18.87	96	71	25	26.04
Future Generali India Insurance Co. Ltd.	20658	13403.86	7254.15	25.59	94	60	34	36.17
HDFC Ergo General Insurance Co. Ltd.	26784	21730.19	5053.813	35.12	78	63	15	19.23
Reliance General Insurance Co. Ltd.	46939	37571	9367.998	19.96	212	169	43	20.28
Royal Sundaram Alliance Insurance Co. Ltd.	32553	25440.04	7112.958	21.85	84	65	19	22.62

**Source:** Actual amounts from IRDA Website and targeted amounts have been extracted by the Authors

Commission and No. of Offices) with respect to nine companies each during 2009-10. Future Generali India Insurance Co. Ltd. led the defaulters in 'Operating Expenses including Commission' with a variation of 43.8 per cent followed by Reliance General Insurance Co. Ltd. (42.118 per cent), Cholamandalam MS General Insurance Co. Ltd. (38.53 per cent), Bharti AXA General Insurance Co. Ltd. (35.98 per cent), and HDFC Ergo General Insurance Co. Ltd. (27.839 per cent) notably etc. with a least default of 4.471 per cent by United India Insurance Co. Ltd. albeit Reliance General Insurance Co. Ltd. with a gap of Rs. 35203.67 lakh was found to be the serious defaulter along with the National Insurance Co. Ltd. (with Rs. 6863.94 lakh) at this front.

United India Insurance Co. Ltd. (54.65 per cent), National Insurance Co. Ltd. (48.17 per cent), Future Generali India Insurance Co. Ltd. (43.83 per cent), and Cholamandalam MS General Insurance Co. Ltd. (38.53 per cent), are the notable underperformer as far as 'No. of Offices' are concerned. United India Insurance Co. Ltd. and National Insurance Co. Ltd. defaulted the most on the basis of absolute number

as well during 2009-10. The utilisation of inputs during 2010-11, by the sampled insurers showed an improvement as only seven companies were short of targets as comparison to nine in the previous year. HDFC Ergo General Insurance Co. Ltd. (35.12 per cent), Future Generali India Insurance Co. Ltd. (25.59 per cent), The Oriental Insurance Co. Ltd. (25.49 per cent), Royal Sundaram Alliance Insurance Co. Ltd. (21.85 per cent) were found to be least performers during current year at the front of 'Operating Expenses including Commission' but The Oriental Insurance Co. Ltd. (Rs. 45359.68 lakh) and United India Insurance Co. Ltd. (Rs. 40616 lakh) defaulted the most on the absolute amount.

As far as the target achievement regarding 'No. of Offices' during 2010-11 is concerned, Future Generali India Insurance Co. Ltd. (36.17 per cent), The Oriental Insurance Co. Ltd. (30.89 per cent), Cholamandalam MS General Insurance Co. Ltd. (26.04 per cent) and Royal Sundaram Alliance Insurance Co. Ltd. (22.62 per cent) were the least performers, but again The Oriental Insurance Co. Ltd. and United India Insurance Co. Ltd. with an absolute number of Rs. 354 lakh and

Rs. 321.908 lakh topped the list of defaulters.

### CONCLUSION

The comparative study of 16 general insurance companies operating in India with the help of DEA, revealed that ICICI Lombard General Insurance Co. Ltd. and IFFCO Tokio General Insurance Co. Ltd. were the best performers with perfect efficiencies at all fronts of efficiency measurement during the period under study. The results of the study further showed three companies- ICICI Lombard General Insurance Co. Ltd., IFFCO Tokio General Insurance Co. Ltd., and Shriram General Insurance Co. Ltd. performing perfectly (score 1) at the front of PTE for both the years under study and, Shriram General Insurance Co. Ltd., TATA AIG General Insurance Co. Ltd., and Universal Sampo General Insurance Co. Ltd. also registered substantial growth in their OTE and SE scores over the previous year, but New India Assurance Co. Ltd. which was perfect at OTE front during both the years showed a negative growth during 2010-11 at OTE and SE front in comparison to 2009-10. Shriram General Insurance Co. Ltd., in particular, attained the level of perfect efficiency in OTE and SE in comparison to its previous year performance. It is evident from the analysis that the general insurance business in India has surged at all the fronts of OTE, PTE and SE from 0.644 to 0.733; 0.871 to 0.896; 0.736 to 0.822 respectively during the period under study, but yet the companies like Universal Sampo General Insurance Co. Ltd., Bharti AXA General Insurance Co. Ltd., Future Generali India Insurance Co. Ltd., etc., which were underperforming during 2009-10 at OTE front are still performing on the same lines during 2010-11. Cholamandalam MS General Insurance Co. Ltd., Future Generali India Insurance Co. Ltd., and Royal Sundaram Alliance Insurance Co. Ltd. are notable underperformers at the front of PTE during both the years. The IFFCO Tokio General Insurance Co. Ltd. and ICICI Lombard General Insurance Co. Ltd. with the highest number of peer counts during both the years emerged out as the leaders among all private non-life with their robust performance at all the fronts of efficiency measurements. Future Generali India Insurance Co. Ltd., Reliance General Insurance Co. Ltd. and Royal Sundaram Alliance Insurance Co. Ltd., TATA AIG General Insurance Co. Ltd., and Universal Sampo General Insurance Co. Ltd. are advised to increase their scale of operation to get the perfect level of the efficiency. The companies observing slacks in outputs/inputs are required to correct the same as early as possible to keep the problem of inefficiency at a bay.

### REFERENCES

- Bawa, Sumninder Kaur and Kaur Navjeet (2011). Performance measurement using the frontier efficiency methodology: A study of Indian general insurance sector. *Journal on Banking Financial Services & Insurance*, 1(8), 49-75.
- Cummins, J.D., Giuseppe, T., and Weiss, M.A. (1996). Productivity and technical efficiency in Italian insurance industry, The Wharton School, University of Pennsylvania, Working paper series -10. *Presented at Georgia Productivity Seminar*, November, 1-3, 1-41.
- Garg, M.C. and Deepti (2008). Efficiency of general insurance industry in India in the post-liberalization Era: A data envelopment approach. *The ICAI Journal of Risk and Insurance*, 5(1), 32-49.
- Verma, Ruchita (2012). A Study of perceptive and productivity of health insurance business in India with reference to key determinants. *International Journal of Research in IT & Management*, 2(2), 868-881.
- Das, S.C. (2009). The relationship between Insurance sector development and economic growth: Empirical evidence from India. *Invertis Journal of Management*, 1(1), 35-42.
- Sinha, R.P. (2009). Technical efficiency of Indian general insurance companies: A non-radial approach. *The ICAI Journal of Risk and Insurance*, 6(1), 16-29.
- Abidin, Zaenal and Cabanda, Emilyn (2011). Efficiency of non-life insurance in Indonesia. *Journal of Economics, Business and Accountancy Ventura*, 14(3), 197-202.
- Shahroudi, K., Taleghani, M. and Mohammadi G. (2012). Application of two-stage DEA technique for efficiencies measuring of private insurance companies in Iran. *International Journal of Applied Operational Research*, 1(3), 91-104.
- Bawa, Sumninder Kaur and Ruchita (2011). Efficiencies of health insurance business in India: An application of DEA. *American Journal of Social and Management Sciences*, 2(2), 237-247.
- Eling, Martin and Luhn, Michael (2008). Frontier efficiency methodologies to measure performance in the insurance industry: Overview and new empirical evidence. *Working papers on risk management and insurance*, 56. University of St. Gallen, St. Gallen, Switzerland.
- Verma, S. (2000). Performance appraisal of the general insurance corporation of India. *M.Phil., Thesis*,



Submitted to Department of commerce, Delhi school  
of economics, University of Delhi, Delhi.

<http://timesofindia.indiatimes.com/business/india-business/Indias-ranking-in-world-insurance-market-drops-four-places/articleshow/14464444.cms>, June, 28, 2012.

[www.licindia.in/history.htm](http://www.licindia.in/history.htm).

<http://www.cii.in>.

<http://www.deccanherald.com/content/8079/recession-hits-general-insurance-industry.html>.

<http://articles.economictimes.indiatimes.com>.

# INDIAN BANKS UNDERTAKING THE ROLE OF SOCIALLY RESPONSIBLE CORPORATE CITIZENS

Harish Handa\*

Meera Mehta\*\*

## Table of Contents

- Abstract
- Keywords
- Introduction
- Reverse Mortgage Loans (RML)
- Review of Literature
- Objectives of the Study
- Features of Reverse Mortgage Loans
- RML in India - Present Scenario and Challenges
- RML in India - Future Prospects
- Conclusion
- References

## ABSTRACT

*The demographic trend combined with changes in the old values, higher mobility of the young and the decline in joint family system is creating an explosive situation for the elderly in India since we do not have a generalized social security. The increasing life expectancy along with consumerist culture, even post retirement is intensifying the issue. The Union budget of 2007-08 introduced "Reverse Mortgage Loans" as a tool to provide social security to the elderly thus, the Government taking up the cudgel on behalf of the senior citizens. And thereby assigning the role of Socially Responsible Corporate Citizens (SRCC) to our the banks Senior Citizens usually do not have a regular income and a large part of the savings of senior citizens is tied up in non-liquid assets such as homes and property. If they exhaust their savings, then it gets difficult to meet living expenses without having to sell their house. A Reverse Mortgage is a loan that allows a senior citizen to convert his/her existing property into cash flows, which they can use for meeting their living expenses while continuing to use the mortgaged property. This paper aims at explaining the concept of Reverse Mortgage Loan (RML), its characteristics, tax implications, the challenges in implementing RML and the reasons for failure of RML in India.*

**KEYWORDS:** Reverse Mortgage, Senior Citizen, Joint

Family System, Cash Flows, SRCC (Socially Responsible Corporate Citizens).

## INTRODUCTION

The socio-economic and demographic trends clearly define the present Indian society. At the societal level, the intergenerational contract is changing and with more and more nuclear families, some children no longer feel the obligation to care for their parents. At the economic level, the standard of living is constantly going up and people need more income to meet their aspirations. At the demographic level the birth rate is declining and life expectancy is going up. On the policy front, only 10% of the population has access to a credible pension plan. If we put all these trends together, we have a situation of insufficient income for a sizable elderly population in India. As a result, providing income security to the country's retired population has become a major challenge for the Government. To combat this situation, the government of India has been striving to provide a secure post-retirement life to its citizens and introduction of reverse mortgage loan (RML) scheme constitutes one of such attempts. This scheme, after its introduction via Budget 2007-08, is being regulated by National Housing Bank ('NHB') which plays the role of regulator as well as instructor by issuing continual guidelines to the Primary Lending Institutions ('PLIs') who are the service providers.

## RML - REVERSE MORTGAGE LOANS (RML)

Reverse mortgage is a financial instrument that allows a homeowner to consume some of his housing equity by converting it into an income stream, yet maintain ownership and residence in the home. The reverse mortgage mechanism enables a borrower who owns a house without encumbrance to "sell" his house to a lender and avail a steady cash stream based on the valuation of his house. The unique aspect of this model is that the borrower continues to occupy the house until his demise, or until he sells the house to another party, or moves out of the house permanently. If any one of these exception conditions occurs, the borrower has to repay the loan amount availed from the lender. Under this scheme, citizens aged 60 years

\*Associate Professor, Shaheed Bhagat Singh College, Delhi University, India.

\*\*Assistant Professor, Shaheed Bhagat Singh College, Delhi University, India.

or above will be able to mortgage their house and derive an income either in lump sum or monthly payments while living in it. If one goes for the lump sum amount, one can deposit it in a bank, withdraw from the account according to requirements and keep earning interest on the balance. Thus, reverse mortgage seeks to monetize the value of the house as an asset (without actually selling the house) and specifically the owner's equity in the house. The reverse mortgage loan scheme has various facets such as determination of loan amount, modes of receiving payment, utilization of funds, valuation of residential property, loan disbursement procedure, settlement of loan etc.

### REVIEW OF LITERATURE

According to Pritam P. Hans (2010), reverse mortgage does not keep you away from the benefits of appreciation in the value of your house. The property is revalued regularly (or whenever the bank decides) to reflect the change in its market price. If the value of the property goes up, the bank offers to increase the loan amount. In case of a decline, the bank reduces the loan amount. If the borrower does not agree with the revised terms, further payments are stopped and the interest on the loaned amount keeps accruing. Nirajbhan K Mahajan (2008) with the changing social milieu in India and the collapse of the joint family system, introduction of reverse mortgage products could be a worthwhile experiment. Instead of being dependent on their children for monetary support, this would be a good option for the elderly to continue with a graceful lifestyle. Banks and housing finance companies have already started launching this product and in the near future, they would come out with the reverse mortgage products based on American experience with features like, fixed or floating interest, shared appreciation, interest earning credit-line and mortgage insurance. According to the Pak Banker, Lahore: Apr 19, 2010, RML is aimed at senior citizens when they are in need of funds after their retirement. For people whose biggest financial asset is a home, RML provides an option to avail of periodical payments from a lender against the mortgage of his/her house. Such a loan allows the borrower to continue to occupy his house as long as he lives. They might be in receipt of pension but it may not be sufficient to take care of medical or other big ticket expenses like up gradation / renovation of residential property. However, use of RML for speculative, trading and business purposes is not permissible.

### OBJECTIVES OF THE STUDY

- To find the procedure of reverse mortgage in India.

- To find the challenges in implementing the reverse mortgage in India.

- Also, to find the reasons for failure of such loans in India.

### FEATURES OF REVERSE MORTGAGE LOANS

The draft guidelines of reverse mortgage in India prepared by the Reserve Bank of India have the following features:

- Any house owner over 60 years of age is eligible for a reverse mortgage.

- The maximum loan is up to 60 per cent of the value of the residential property.

- The maximum period of property mortgage is 15 years with a bank or HFC (Housing Finance Company).

- The borrower can opt for a monthly, quarterly, annual or lump sum payments at any point, as per his discretion.

- The revaluation of the property has to be undertaken by the bank or HFC once every 5 years.

- The amount received through reverse mortgage is considered as loan and not income; hence the same will not attract any tax liability.

- Reverse mortgage rates can be fixed or floating and hence will vary according to market conditions depending on the interest rate regime chosen by the borrower.

- Reverse Mortgages have a "non-recourse" feature, which means that the total amount owed can never exceed the appraised value of the home.

### **Eligibility criteria to avail Reverse Mortgage Loan**

- A house owner of more than 60 years of age with 100% equity in property.

- Property should be self-acquired.

- If wife is a co-applicant, she should be above 58.

### **Factors deciding the Amount of Loan**

(a) Age of the borrower and co-applicant (Higher the age, higher the annuity).

(b) Value of property (maximum loan is up to 60% of the value of the residential property).

(c) Rate of Interest (Higher the rate lesser the annuity).

(d) Other factors such as servicing cost, fore closures etc.

### **Formula To Calculate The Periodic Payments Under RML**

The formula to calculate the periodic

payments, as available in the website of NHB, is as under:

$$\text{Installment Amount} = (PV \cdot \text{LTVR} \cdot I) / ((1+I)^n - 1)$$

Where, PV = Property Value;

LTVR = LTV Ratio;

n = No. of Installment Payments;

I = the value of I will depend on Disbursement Frequency selected.

#### **A Hypothetical Example**

Property Value (PV) = 10,00,000

LTV Ratio (LTVR)=80%

Loan Disbursement Period=15 Years

Disbursement Frequency=Monthly

Interest Rate (IR) = 10.5 %

Calculations: On the basis of the inputs:

The disbursement frequency selected is Monthly so 'I' will be IR/12 (i.e. 10.5%/12)

No. of installment payments (n) will be calculated monthly e.g. if 15 is selected then the n=15\*12=180

Putting the values in the formula:

Installment Amount=Rs.1850

#### **Major Banks and Financial Institutions in the role of SRCC**

The major reverse mortgage lenders in India or the banks and financial institutions providing reverse mortgage in India include:

National Housing Bank (NHB)

Dewan Housing Finance Limited (DHFL)

State Bank of India (SBI)

Punjab National Bank (PNB)

Indian Bank

Central Bank of India

#### **Income Tax Implications**

The amount of the payments (whether monthly or otherwise) received by the borrower; i.e. the owner of the house go to increase the amount of loan outstanding against the house. Further, the borrower is charged interest on the amount of loan extended to him against a reverse mortgage. The proceeds from a reverse mortgage being payments received on capital account should be exempt from taxation. Further, if the borrower chooses to pay any interest which is outstanding against the loan, the same may be allowed as a deduction against other taxable income subject to a ceiling. Thus a Reverse Mortgage will be treated as a loan hence there will be no tax payable on the regular cash flows.

#### **RML IN INDIA - PRESENT SCENARIO AND CHALLENGES**

As per NHB Annual report 2010-11, as on June 30, 2011, 23 Scheduled Commercial Banks

and 2 HFCs have launched the RML Scheme and 1740 crores have been sanctioned to 8903 senior citizen borrowers. In contrast the figures stood at Approximately Rs.1,700 crores availed by 7,500 senior citizens across India according to the NHB Annual Report 2009-10. The below figures clearly indicate that a very small percentage of senior citizens seem to have taken advantage of the facility since its inception.

*The reasons for its failure could be:*

- Product not promoted by lenders aggressively i.e. poor marketing.
- Ambiguity about Valuation, Maintenance and Repossession of property.
- High interest rate discourages the borrower as the monthly payments are low due to the high interest rate.
- Tedious procedure, Lack of clear cut legal framework and transparency.
- Sometimes higher rent can be earned by renting out the existing Flat and shifting to smaller one than going for RML.
- No payments to the borrower from the bank/HFC after expiry of loan periods which is presently 20 years, even if the borrower is alive.
- High Processing cost: Influence of children on elderly parents wanting to opt for RML.
- Banks and HFC are not pushing up the product (RML) because of falling property rates and increasing NPA.
- Loan only against self-acquired property is further constraint as most property in the country is ancestral.
- Capping of available loan amount at Rs. 50 Lakhs despite equitable percentage of the property's value may be more, discourages the borrowers.

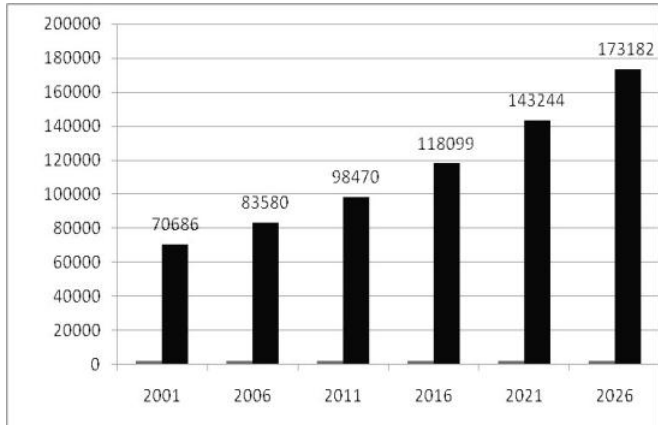
#### **RML IN INDIA - FUTURE PROSPECTS**

Estimates show that India's old age population will increase to 113 million by 2016 and 179 million by 2026. Life expectancy, currently at 77 years could increase to around 80 years by 2020. With the increasing old age population and life expectancy, Reverse Mortgage introduced by Budget 2007, seems to have a potential market in India. Reverse mortgage is a product of the future, with changing demography; banks will have to create a lot of awareness about the concept among senior citizens so that property-rich but cash-poor senior citizens will benefit the most. It is expected that the number of senior citizens would be 140 Million by 2016 and 220 Million by 2030 (Kasbekar, 2008).

Their share in the total population is projected

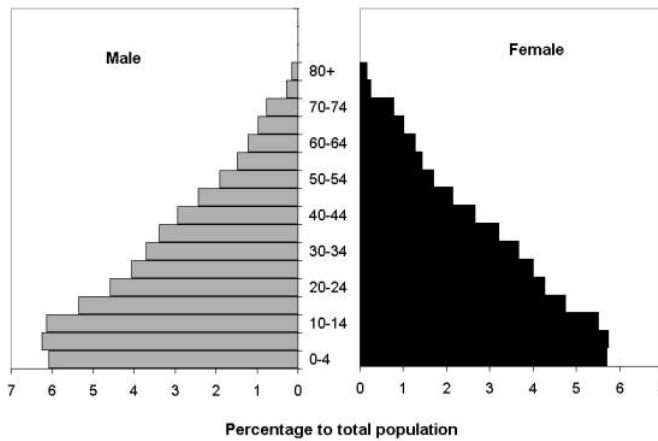
to be 9% by 2016 and 13% by 2026 (Rajgopalan, 2006)(figure-4). Life expectancy at age of 60 years, which

**Figure 1: Total actual and projected population of senior citizens (60 years and above) in India (Figure in '000')**

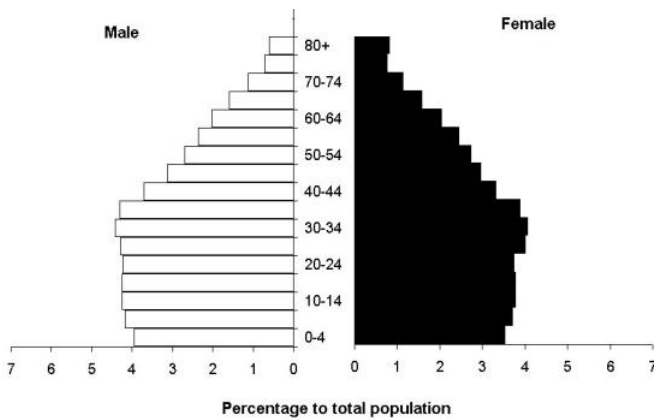


**Source:** [http://www.jsk.gov.in/projection\\_report\\_december\\_2006](http://www.jsk.gov.in/projection_report_december_2006) (Note: figure for 2001 is actual and rest is projected)

**Figure 2: Projected population pyramid : India - 2001**

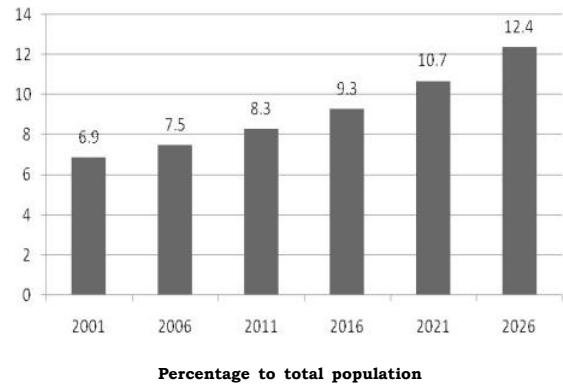


**Figure 3: Projected population pyramid : India - 2026**



**Source:** [http://www.jsk.gov.in/projection\\_report\\_december\\_2006](http://www.jsk.gov.in/projection_report_december_2006)

**Figure 4: Actual and projected % population of senior citizens (60 years and above) in India**



**Source:** [http://www.jsk.gov.in/projection\\_report\\_dec\\_2006](http://www.jsk.gov.in/projection_report_dec_2006)

is around 17 years now, will increase to around 20 by 2020 (IIPS, 2000 and Rudayarajan et. al, 1999).

The above demographic change positively mark India as a significant market for reverse mortgage if its economy continues at its current pace of growth, leading to increase in prosperity, real estate prices, disposable incomes, life expectancy and decrease in fertility rates in the population. The Government of India is promoting it because other social security systems do not exist. RML seems to be advantageous to all the stakeholders i.e. borrowers, lenders and the regulator (GOI). In addition to existing, some more measures are suggested for increasing the reach and affordability. The size and composition of population, ensures that India might turn out to be as big as USD 500 Billion Dollars markets for RML products. This is a sizable market and obviously cannot be ignored by the finance world for long.

**CONCLUSION**

Reverse mortgage is a novel and socially preferred alternative to selling or moving out of the house in order to generate an income stream. Education and counseling about this concept would make the elderly understand the crucial differences between the vulnerability they feel with traditional loans, as opposed to the emotional, social and psychological advantages that reverse mortgages confer. Key to the efficacy of reverse mortgages is the development of a strong financial and regulatory infrastructure that will minimize loopholes, prevent fraud, and make this product successful in serving the needs of the senior citizens in India.

**REFERENCES**

Asher, Mukul G. (2010). Pension Plans, Provident

- Fund Schemes and Retirement Policies: India's Social Security Reform Imperative. *ASCI Journal of Management*, 39(1), 1-18.
- Barr, N. and Peter Diamond (2009). Reforming pensions: Principles, analytical errors and policy directions. *International Social Security Review*, 62(1), 5-29
- Desai, Sapna (2009). Keeping the 'Health' in Health Insurance. *Economic and Political Weekly*, 64(38), 18-21.
- Employees Provident Fund Organization (EPFO) (2007). *Annual Report*. Available at [www.epfindia.com](http://www.epfindia.com).
- Government of India (2001). *Census of India: Office of the registrar general and census commissioner*. Available at: <http://www.censusindia.gov.in>
- Gupta, Indrani and Mayur Trivedi (2005). Social health insurance redefined: Health for all through coverage for all. *Economic and Political Weekly*, September, 17, 4132-4140.
- Halan, M. (2009). Is the new pension system really that cheap? *LiveMint*, May, 6.
- Handique, M. (2009). *Organizing the Unorganized*. *Live Mint*, December, 30.
- Kelkar, Vijay (2004). *India on the growth turnpike, Narayanan Oration*. Australian National University: Canberra.
- National Commission for Enterprises in the Unorganized Sector (NCEUS) (2006).
- Reserve Bank of India (2009). *Handbook of Statistics of the Indian economy*.
- Sarang, B. and Deepti Bhaskaran (2009). *Reverse Mortgage - House-rich, Cash-poor*.

# HEALTHCARE SERVICES IN INDIA: A JOURNEY OF LIFE LINE TO MEDICAL MARKET

Sunita Bharatwal\*  
S.K Sharma\*\*

## Table of Contents

- Abstract
- Keywords
- Introduction
- A Journey of Life Line to Medical Market in India
- Healthcare Industry-The Challenges Ahead
- Initiatives Taken by the Government of India
- Conclusion
- References

## ABSTRACT

*Accessibility of health care is crucial in improving health status and good health in turn is necessary for healthy empowerment. Healthcare is one of India's largest sectors, in terms of revenue of around USD 30 billion and employment to about 4 million people and is booming rapidly. Ensuring access to healthcare helps to minimize absenteeism, enhance labor productivity, and prevents misery. Worldwide all the governments have had a significant role in providing and regulating healthcare services in their respective countries. Their role becomes more crucial particularly in developing countries where their concentration is largely on the poor. Globally, the healthcare is amongst fastest growing sector with total revenues of approximately USD 2.8 Trillion. Within this context, India is viewed as one of the most promising markets among the developing countries with a worth about USD 44 billion as of 2010 and is projected to reach around USD 280 billion by 2020. This review paper gives a comprehensive insight into the soaring Indian healthcare industry. It analyze the wide and diverse spectrum of Indian healthcare, with emphasis on opportunities in the area of medical education & training, hospital infrastructure, pharmaceuticals, medical equipments, diagnostic labs and emerging fields like healthcare tourism, stem cell banking & research and telemedicine. The paper focuses on the Indian healthcare be becoming a complete medical market from mere a lifeline. An increase in lifestyle diseases*

*resulting from the adoption of unhealthy western diets, combined with a growing middle class that has more disposable income to spend on treatment, will provide new opportunities for global pharmaceutical firms. India has emerged as a major supplier of several bulk drugs, producing these at lower prices compared to formulation producers worldwide. The overall industry scope is tremendous, propelled by a growing economy, shifting demographics, rising disposable incomes, high incidence of lifestyle-induced diseases, new investment avenues and a large pool of talented and cost-effective human resource.*

**KEYWORDS:** Healthcare, Healthcare Infrastructure, Medical Market, Medical Tourism, Telemedicine.

## INTRODUCTION

It is quite an enormous challenge to produce good human capital keeping in mind the healthcare resources. According to Wealth Report 2012 by Knight Frank & Citi Private Limited that China will overtake the US to become the world's largest economy by 2020, which in turn will be overtaken by India in 2050. India will be the largest employable persons producing country in the world in 2030. It is very widely acknowledged that health is an important component of human development. Empowerment of people comes from the freedom they enjoy, and this includes, among others, freedom from poverty, hunger, and malnutrition, and freedom to work and lead a healthy life. Importance of health care is critical in improving health status and good health is necessary for good empowerment in the nation. The Governments throughout the globe have been playing a significant role in providing and regulating health services and their role is particularly important in developing countries with large concentration of the deprived section. Despite poor health indicators, Government spending on health care in most low and middle-income countries is well below what is needed. A recent analysis suggests that while low-income countries need to spend USD 54 per capita for a basic package of health services, the average actual per capita health expenditure in these countries is only

\*Assistant Professor, Management Studies, The Technological Institute of Textile and Sciences (TITS), Bhiwani, Haryana, India.

\*\*Professor and Head, Management Studies, The Technological Institute of Textile and Sciences(TITS),Bhiwani, Haryana, India.

USD 27. Low revenue collections, competing demands for revenues, and relatively low spending priority contribute to this insufficient spending. Consequently, limited access to public health care facilities forces people to turn to private ones.

### **Healthcare: A Booming Service Sector**

Healthcare is one of India's largest sectors, in terms of revenue and employment, and the sector is expanding rapidly. During the 1990s, Indian healthcare grew at a compound annual rate of 16%. Today the total value of the sector is more than USD 44 billion. The private sector accounts for more than 80% of total healthcare spending in India. The most vital component of healthcare is pharmaceuticals that accounts for a major part of household health expenditures. This market for allopathic drugs, their production, trade, investment, and employment etc has been growing rapidly in India in terms of production, trade, investment, and employment. Estimates from the above-mentioned survey revealed that three-fourths of the total out-of-pocket health expenditure is spent on drugs. However, the component of drugs and medicines in the overall budget of both the Central and State Governments is only a minor share. In the developing countries like India, healthcare has been a neglected issue in the overall policy framework. The households spend a significant portion of their incomes on food, and little for their healthcare. But unless a restructuring of the budgeting system is done to make it more functional, it would be challenging in meeting healthcare needs in India and will continue to be difficult. Despite widespread poverty and inadequate public healthcare provision, India has much to offer the leading drug makers. An increase in lifestyle diseases resulting from the adoption of unhealthy western diets, combined with a growing middle class that has more disposable income to spend on treatment, will provide new opportunities for global pharmaceutical firms. India has emerged as a major supplier of several bulk drugs, producing these at lower prices compared to formulation producers worldwide. Indian entrepreneurs are also playing a significant role in the healthcare industry. Many of the entrepreneurs have launched chains of standalone intensive care units, cancer care centers and single-doctor clinics in rural areas, seeking to fill some critical gaps in healthcare faculties in the country.

### **Facts & Figures**

As per Confederation of Indian Industries (CII) Report-2011, Healthcare sector in India has estimated

revenue of around USD 30 billion, constituting about 5 percent of the gross domestic product (GDP) and offering employment to about 4 million people. According to Investment Commission of India, the sector has witnessed a phenomenal expansion in the last few years growing at over 12 percent per annum. As per a recent Confederation of Indian Industries-McKinsey Report, the growth of healthcare sector can contribute to 6-7 percent of GDP and increase employment by at least 2.5 million by 2012. It is predicted that the healthcare spending will be double in next 10 years. The Central Government, through the main Council of the Ministry of Health and Family Welfare and various committee recommendations, has shaped health policy and planning in India from time to time. Out of the total expenditure on medical education and research, the Central Government's share is a little over 40 percent. Regarding private spending on healthcare, the National Health Accounts Matrix reveals that 71 percent of the health budget is contributed by the private sector, of which households alone spend 68.8 percent. This is because the Government's health sector policies encourage the growth of the private healthcare sector. Also even though the size of the central health budget has grown considerably, transfers to states as a proportion of the total budget of the Ministry has declined from nearly 57 percent to 44 percent. This shows the increasing role that the Central Government has been assuming in the delivery of health services. To overcome the country's inequity, inequality, and budget deficits, the Government has initiated a mix of mandatory social health insurances, voluntary private health insurances, and community-based health insurances. Various development agencies like the World Bank, Asian Development Bank, African Development Bank, Inter-American Development Bank etc are providing health aid to various developing countries. In 2010 the total global development assistance in health was USD 28.2 billion. Out of which, India got only USD 775 million for development assistance in health (DHA) followed by Tanzania, Ethiopia, Nigeria and Kenya with USD 722, 704, 699 and 615 respectively. Of course it was a very tiny figure i.e. less than 5% of what the both Centre and State government spent on public health care.

### **A JOURNEY OF LIFE LINE TO MEDICAL MARKET IN INDIA**

There is a lot of scope in the healthcare market in India. Much of the areas are yet to be explored. Various scientific research and developments are



continuously are being made to cope up with the needs of the patients to meet their expectations. But India's healthcare sector has not kept pace with the economy's growth and has been inadequate in meeting today's healthcare demands. There is extensive shortage of about 6 lakhs doctors and about 10 lakhs nurses in the country. Our birth record every year is 2.6 crores and every 5th child in the world lives in India. India in the world, fifth country that accounts for more than half the world 3.3 million new born deaths. India sees the highest number of women dying during child birth i.e. 63,000 per annum.

**a. Healthcare Infrastructure:** While India has several centers of excellence in healthcare delivery, still they lack in adequate facilities to drive healthcare standards because of the poor condition of the infrastructure in the vast majority of the country. With a few exceptions, such as the All India Institute of Medical Studies, Delhi (AIIMS), public health facilities are inefficient, inadequately managed and staffed, and have poorly maintained medical equipments. In addition, at least 11 Indian States do not have laboratories for testing drugs, and more than half of existing laboratories are not properly equipped or staffed. India is divided in two categories, the one which has provision of high-quality medical care to middle-class Indians and medical tourists, and the other where the majority of the population lives with limited or no access to quality healthcare. Today only 25% of the Indian population has access to Western (allopathic) medicine, which is practiced mainly in urban areas, where two-thirds of India's hospitals and health centers are located. There is a huge gap between the availability of the beds and requires beds in the hospitals in India. Currently India has approximately 860 beds per million population only. This is only one-fifth of the world average, which is 3,960, according to the World Health Organization. The Government is providing an enormous opportunity for private players to fill the gap. Recently there have been many new investments in healthcare infrastructure facilities in India. For instance, ICICI Venture, the country's largest private equity fund has invested USD 8.6 million in a chain of diagnostics facilities, along with Metropolis Health Services Ltd. With the advent of private insurance and the emergence of India as a medical tourism destination, there also has been a surge of growth in so-called "super specialty" luxury hospitals, which have teams of specialists, sophisticated equipment, links to other medical centers and the ability to treat a broad range of ailments.

**b. Booming Medical Tourism:** One of the major external drivers of growth of the Indian healthcare sector is medical tourism. India provides best-in-class treatment, and in some cases at even less than one-tenth the cost incurred in the US and other global counterparts. India's private hospitals excel in fields such as cardiology, joint replacement, orthopedic surgery, gastroenterology, ophthalmology, transplants and urology. India has the potential to attract one million medical tourists each year, which could contribute USD 5 billion to the economy, according to the Confederation of Indian Industries. In addition to receiving traditional medical treatments, a growing number of people from other parts of the world are traveling to India to pursue alternate medicines such as ayurveda, which has blossomed in Kerala, in south India and has leveraged a good competitive advantage over allopathic treatment.

**c. Emerging Health Insurance Market:** The penetration of health insurance in India has been low that only about four to six percent of all Indian citizens are estimated to be covered under any form of health insurance. It shows that Indian population is not much aware about the benefits of health insurance. And therefore this market is yet to be explored with proper marketing strategies. In terms of the market share, the size of the insurance market is hardly two percent of the total health expenditures in the country. Health insurance will make healthcare more affordable to larger segments of the population, boosting healthcare expenditures per household and driving the demand for quality care. In the post liberalization era, some companies have been licensed to act as third party administrators in health services. With a motive to strengthen the health insurance industry and shaping it more professional. In response to liberalization, large number foreign insurance companies are moving into India and forming joint venture as well as alliances. Two prominent examples are Max New York Life, a joint venture between Max India and New York Life, and ICICI Prudential Life Insurance, a joint venture between the ICICI Group and UK-based Prudential plc. Some companies are experimenting with more targeted forms of insurance coverage.

**d. Emergence of Telemedicine Market:** Telemedicine is a rapidly emerging trend that facilitates the remote diagnosis, monitoring and treatment of patients via videoconferencing or the Internet. Telemedicine is a cusp of the medical sciences and another rapidly growing sector in the country, the Information and Communications Technology (ICT).

Several major private hospitals have adopted telemedicine services, and a number of hospitals have developed Public-Private Partnership (PPPs), to name a few are Apollo, AIIMS, Narayana Hridayalaya and Sankara Nethralaya. This is being absorbed rapidly and accepted widely. Today there are approximately 120 telemedicine centers throughout India. There is a growing practice within India to establish a health grid connecting medical institutions and medical specialists enabling them exchange case studies, compare experiences, and hold virtual conferences to discuss critical disease patterns and thus provide much accurate treatment.

**e. Medical Equipment Market:** Both the healthcare infrastructure expansion in India, the emergence of medical tourism and the market of telemedicine, has driven a strong demand for medical equipments, such as x-ray machines, CT scanners and electrocardiograph machines etc. Reputed foreign companies market most high value medical equipments but the consumables and disposable equipment are made in domestic market. Therefore many foreign companies have entered in the Indian market recently. The competition has intensified with the entry of more global firms into the medical equipment marketplace.

**f. Stem Cell Banking and Research:** Stem cell banking and research has a very high scope in the forthcoming times. The potential of this medical market can easily be gauged from the fact that over 2.6 crores birth take place in the country each year. The potential in regenerative medicine is exciting and is likely to be widely used by mid-2017. Stem cell therapy is estimated to go up to USD 22 billion by the end of this year. The current size of the Indian market itself is estimated to be USD 600 million. India would soon become a hub for this industry. Research work in the field of stem cell therapy and transplants for curing deadly diseases such as cancers, lymphoma, heart diseases etc is increasing. Apart from the limited awareness about stem cell therapy among people, another challenge in this industry is the high cost of stem cell banking service that could range from Rs.77,000 to Rs.3,00,000 depending upon the nature and category of service one opts for. But those who are aware of and afford this facility generally go for availing it. Stem cell banking recently got quite a befitting celeb endorsement when bollywood actor Shilpa Shetty decided to store her new born baby's stem cell banking company.

**g. Pharmaceutical Industry Opportunities and Research:** India has become a major exporter of pharmaceuticals particularly generic drugs to global markets. Many multinational generics companies have been sourcing products from Indian manufacturers for some years. Some also use Indian contract manufacturers to manufacture the finished product. Pharmaceutical research is one area that is expected to achieve tremendous growth in future, due to India's huge and growing population, low per capita drug usage, and increasing incidence of disease. As per Confederation of Indian Industries (CII) - Price Waterhouse Coopers (PWC) Report, India pharma Inc-gearing up for the next level of growth, released recently, predicts that it is likely for India to be among the top 10 global pharma market in value terms by 2020. Global pharmaceutical alliances with Indian drug firms are finally beginning to look like a two-way street, with major R&D deals being struck. GlaxoSmithKline is working with Ranbaxy Laboratories to identify new targets and has partnered with TCS for data management, through a global drug development support center in Mumbai.

#### HEALTHCARE INDUSTRY - THE CHALLENGES AHEAD

Healthcare industry is facing rigorous challenges towards quality healthcare infrastructure in terms of building, availability of beds, well equipped laboratories, most up-to-date equipments, and medical education & research policy, huge shortage of doctors, nurses and trained paramedical staff and their quality. Healthcare industry is also facing greater pressure on margins and this will continue into the future. Structurally driven inflation, salary increases, high interest rates and a weekend rupee have resulted in ballooning medical costs are few of the reasons for that mounting pressure. But due to the economic slowdown and increasingly price-conscious customers, it is getting more difficult to pass on price increases. Medical equipment companies are struggling to cope with a weak rupee that is pushing up the cost of imports, which make up nearly 70 percent of their supplies. Pharma manufacturers are concerned about looming price control legislation threatening to curtail price growth-the government took a major step recently by deciding to cap prices of essential drugs which by some accounts, make up 60 percent of the domestic market. This will affect 348 drugs worth Rs. 290 billion. The government's USD 5.4 billion plan to provide free generic drugs to state run hospitals will be another

challenge for the pharmaceutical industry. Such programme will impact the profits of manufacturers of branded medicines, something they must plan for while, working with authorities to ensure quality medicines at affordable prices. Despite all these existing and new challenges, the long term opportunity is attractive. As per estimate, the Indian health care sector will expand dramatically over the next decade, growing at annual rate of 14 percent, with the larger players expected to grow faster. To capitalize this projected growth and ride out the current turbulence, companies must ensure that they have an effective business model to scale in a cost-efficient manner.

The Indian health financing sector is facing a number of challenges. The healthcare has become a costly affair for a common man especially imposing a high financial burden over the poor. Another crucial segment of the society emerged out of the increasing social trend of nuclear families i.e. the senior citizens are being neglected and are being deprived of any kind of nursing care in any of the healthcare insurance policies. This needs to be revised and more focused. Moreover the healthcare insurance is burdened with the newly emerged lifestyle induced diseases & health risks. Limited Government funding leading to negligence of preventive as well as primary care and public health functions. Health insurance is established in many countries, however, still remains largely untapped in India. Less than 15 percent of India's 1.1 billion people are covered through health insurance. It mostly covers government employees, share of public financing in total health care is just about 1 percent of GDP. Over 80 percent of health financing is private financing, much of which is out-of-pocket payments and not by any pre-payment schemes.

#### INITIATIVES TAKEN BY THE GOVERNMENT OF INDIA

**a. Access to information and capacity-building:** The government needs to access information about the available resources in the private and the public sector in order to design health financing reforms and to build capacity to become a strategic partner that contains costs and quality improvements in healthcare services. Mistakes can result in more harm than good with malpractices etc. In this regard, we are working to provide information on public-private partnerships and training in health financing to the government and private sector.

**b. Positive Regulations:** The government, on its part, is promoting this sector through positive regulations

like the introduction of the Health Bill, to bring all independent bodies like the Medical Council of India (MCI), the Dental Council of India (DCI), the Pharmacy Council of India (PCI) and the Nursing Council of India (NCI) under a centralized authority.

**c. Increasing Public Expenditure on Health Care:** The government is also increasing public expenditure on healthcare to 2.5 percent of GDP from 1 percent. And also encouraging public-private partnerships (PPP) in hospital infrastructure and boosting medical tourism.

**d. Health Insurance Portability:** It is expected to increase the penetration of insurance by not only improving the quality of service levels, but also by raising competition among insurers to retain customers.

**e. Motivation to the Foreign Investors:** Various foreign investors are interested today in the healthcare industry in India. Foreign players who plan to set up hospitals, educational and research institutions, medical equipments firms, pharmaceutical companies and insurance business are encouraged by the government through liberal regulations and other benefits.

#### CONCLUSION

Various reports have analyzed that there is a wide and diverse spectrum of Indian healthcare, with lot of opportunities in the areas of hospital infrastructure, pharmaceuticals, medical education and research, medical equipments, diagnostic labs and emerging fields like medical tourism, stem cell banking and telemedicine. Influenced by a congenial economic environment and demographic changes, the Indian healthcare industry has experienced exceptional growth over the past few years. The overall industry scenario is upbeat, propelled by a growing economy, shifting demographics, rising disposable incomes, high incidence of lifestyle-induced diseases, new investment avenues and a large pool of talented and cost-effective human resource. The segments that are reaping the most benefits are hospitals, pharmaceuticals, medical equipment companies, pathological labs and other service providers. Taking advantage of the prevalent optimistic atmosphere, many foreign players are looking to enter the country, especially in Tier-II and Tier-III cities, which have huge untapped markets. Meanwhile, the generic drugs market is set to expand, since most patents are going to expire in the next 5 years. Simultaneously, health cities and single specialty clinics are gaining prominence in promoting quality healthcare services at affordable prices are having tremendous scope. A multi-pronged approach

from key stakeholders is necessary to address the issue. Both the public and private sector need to work in tandem to make healthcare available, accessible and affordable. The Healthcare Sector Skill Council (HSSC), promoted by CII, NSDC and leading healthcare service providers in India, and Skills-for-Health, UK have signed a Memorandum Of Understanding (MOU) to collaborate and work together in the area of healthcare skills. Such kind of collaborations will absolutely prove to be the boon to this industry.

## REFERENCES

- Anita, J. (2008). Emerging health insurance in India: An overview, *Actuaries of India. 10th Global Conference of Actuaries*, February, 7-8.
- Healthcare in India (2007). *Emerging Market Report. Price Waterhouse Coopers*.
- Heller, P. (2006). The prospect of creating fiscal space for the health sector. *Health policy and planning*, 21(2), 75-79.
- Nagarajan, R. (2013). *Foreign aid 5% of India's total health expenditure*. The Times of India, New Delhi, February, 26.
- Ravichandran, N. (2009). *The Indian healthcare system*. Essay Series: Healthcare systems - India medical solutions, September, at [www.siemens.com/healthcare-magazine](http://www.siemens.com/healthcare-magazine).
- Sen, A.K. (1981). Public Action and the Quality of Life in Developing Countries. *Oxford Bulletin of Economics and Statistics*, November, 43, 287-319.
- Singh Karan (2012). *Turbulence in health care*, *Business India*. Mumbai, December, 9.
- Soma Das (2013). *Entrepreneurs take rural health calls*. The Economic Times, New Delhi, February, 25.
- Stenberg, K., R. Elovainio, D. Chisholm, D. Fuhr, A. M. Perucic, D. Rekve and A. Yurekli (2010). *Responding to the challenge of resource mobilization mechanisms for raising additional domestic resources for health*, *Background Paper 13*. Geneva: World Health Organization.
- Yadav Kiran (2012). *Bank of a different kind*. Business India, Mumbai, August, 5.
- Yadav Kiran (2012). *The business of health*. Business India, Mumbai, December, 23.

# IMPACT OF CONSUMER BEHAVIOUR ON DECISION MAKING TOWARDS MOBILE PHONES IN INDIA

Rajul Dutt\*  
Atul Kashyap\*\*

## Table of Contents

- Abstract
- Keywords
- Introduction
- Objectives of the Study
- Research Methodology
- Statistical Data Analysis
- Summary and Discussions
- References

## ABSTRACT

*The purpose of this research is to study the behavior of consumers who purchase/buy mobile phone in India. Mobile phones plays an important role in today's life style. The fascination of consumers towards this device is because it has got all the important features to be called a perfect gadget such as user friendly, handy, convenient, performance, style and etc. The consumers however consider many aspects while deciding a mobile phone including price. There are many factors which influences the consumer/buyer decision. As a result of the factor analysis, ten factors found to be most appropriate representation of Indian consumers decision making style for mobile phone such as Price, impulse, fashion, social influence, Brand loyalty, Media influence, Quality consciousness, Life style influence, indecisiveness, recreation consciousness. To investigate the consumer style inventory, a convenient sample was selected from the students of engineering college in Meerut city. Meerut city is the educational hub in NCR. Three hundred questionnaires were sent to the sample group, 213 were identified as valid for the study.*

**KEYWORDS:** Consumer Behaviour, Decision-Making, Marketing, Price, Electronic Goods.

## INTRODUCTION

How do consumers decide which particular product, brand or service to purchase? This is an eternal question that marketers continue to ponder over. The consumer buying behavior is an important research area with direct impact on the marketing process of a firm. A firm's ability to establish and maintain satisfying

exchange relationships requires an understanding of buying behavior. Buying behavior is the decision processes and acts of people involved in buying and using product. One of the questions being asked is whether the consumer buying behavior differs where new technology products are concerned? The influence of technology is pervasive. High technological markets are categorized as complex. In addition, they exist under rapidly changing technological conditions that lead to shorter life cycles and the need for rapid decisions (Bridges, Coughlan, and Kalish 1991). Speed is very important in high tech markets and it is driven by increasing competition and the continually growing expectations of customers (Doyle and Saunders 1985). Higher levels of risk caused by these factors will affect both the customer and the producer. As a result of these dynamic market conditions high tech companies frequently depend on a product focus (Dugal and Schroeder 1995, Marcus and Segal 1989). In addition, a product focus is direct by the innovations in technology rather than by the needs of the customer. This subject often leads to neglect of a customer focus that is a key success on today's globally competitive markets. One way to focus on consumers is to study their decisions. Insight into customer decision-making process leads to a better development of an effective marketing strategy. Resulting strategies may be modified or altered depending upon how the consumer acquires, processes, and uses decision-making information when purchasing. Understanding buying-related decision-making behavior of consumers is important for companies' strategic marketing activities, and effective communication with different consumer segments can be helped by understanding the psychological processes that affect consumer behavior.

## OBJECTIVES OF THE STUDY

The present study focusses on the specific objectives for examining the impact of consumer behaviour.

- 1) To find and analyse the factors which influence the consumer decision making.
- 2) To study and evaluate the factors influencing decision making in mobile phones.

## RESEARCH METHODOLOGY

For the purpose of the present study, the following

\*Professor, J.P.School of Business, Meerut, UP, India.

\*\*Lecturer, J.P.School of Business, Meerut, UP, India.

method was adopted for the collection of data:

- The sample element of this research is the customer mobile phones in Meerut & NCR.
- The sampling extent of this project is Meerut & NCR.
- The sample size taken for this project is 213.
- Convenient sampling was used for the purpose of this project. People were surveyed as per convenience.

The data which is collected in this project is basically primary in nature and the report is based more on primary data. However, secondary data is also used in it.

#### **Factors affecting consumer buying decision**

Buying of a product primarily depends on customer's need. No customer buys a product unless they have a problem, a need, a want or a desire. The customer's decision making process is depend on a model which has been developed by Professor Engel Kollat and Blackwell at the Ohio State University. The following table shows general tendency of data from various factors.

**Table 1: Sample Classification: Age Wise**

Age	No. or Respondents	%
18-25	85	40%
26-35	53	25%
36-50	43	20%
50 and above	32	15%

#### **Sample Classification: Occupation Wise**

Occupation	No. of respondent	%
Service	75	35%
Business	53	25%
Student	85	40%

#### **Sample Classification: Income Wise**

Income	No. of respondent	%
Less than 1 Lakh	53	25%
1 to 3 Lakh	64	30%
3 to 5 Lakh	53	25%
5 Lakh and above	43	20%

#### **Sampling Method and Procedures**

The questionnaire was adapted and 51 items contained in it. Questionnaire were Likert-scaled items. Items were on a scale of one to five, with ratings of strongly disagree and strongly agree as end points. The survey instrument divided consumers into eight decision-making styles and effectively measured their behavior in purchasing mobile phone. In addition, three factors were added to measure consumer decision-making styles including social influence, media

influence and lifestyles. Altogether there were eleven factors to be test in this research.

#### **Data Collection Procedures**

The questionnaires were distributed at JPIET, MIET, IIMT and Modi Engineering College. The convenient-sampling method was used in the study. The participants were undergraduate University students in Meerut & NCR. The questionnaire had fifty one questions. Three hundred participants were given the questionnaire pack that contained (a) demographic questions and (b) the adapted CSI questionnaire regarding mobile phone. To prevent errors the researcher used questionnaires as an instrument to interview the respondents by the researcher will ask questions and the respondents will answer all questions to be asked. Of the 300 participants, 213 were identified as valid sample by the researcher.

#### **Reliability Test**

To test the reliability of the fifty-one items in the questionnaire, factor analysis was analyzed by using the Statistic Package for the Social Science (SPSS 12.0) software. The alpha coefficients for each factor in this study are presented in Table 2. The Cronbach's alpha coefficients for factor 1, factor 2, factor 3, factor 4, factor 5, factor 6, factor 7, factor 8, factor 9 and factor 10 were between .707 and .811, indicating satisfactory levels of reliability. However, factor 2 showed low reliability with the alpha coefficient .433, indicating an unsatisfactory level of reliability on consumer shopping characteristics. Even though factor 2 resulted in low reliability, it was decided that the factor could be used in the test of the shopping characteristic, because brand consciousness/price equal quality have marginal reliability. For consistency, it was decided that reliabilities should not be below .4, the same level used by Sproles and Kendall (1986).

**Table 2: Reliability for Consumer Styles Inventory (CSI) Questionnaire**

Factors	Cronbach's Alpha
Quality Consciousness	.785
Brand Loyalty	.433
Fashion	.711
Recreational Purpose	.782
Price (Value for money)	.746
Impulsiveness	.707
Indecivness	.811
Media Influence	.759
Social Influence	.712
Lifestyle Influence	.707



### Correlations between Consumer Decision-Making Styles

According to Table 5, consumer decision making style 2 (Impulse) was slightly positively related with consumer style 9 (Indecivness) at significant level .01. Consumer decision making style 4 (Social Influence) was slightly positively related with consumer

style 7 Quality consciousness) at significant level .05. Consumer decision making style 6 ( Media influence) was slightly positively related with consumer style 10 (Recreation Purpose) at significant level .01. Consumer decision making style 8 (Lifestyle influence) was slightly positively related with consumer style 9 (Indecisiveness) at significant level .05.

**Table 5: Correlations between Decision-Making Styles of Consumer**

Styles	1	2	3	4	5	6	7	8	9	10
1	1.000									
2	.037	1.000								
3	.015	.024	1.000							
4	.084	-.072	.047	1.000						
5	-.001	.011	.086	-.072	1.000					
6	-.088	.028	-.080	-.009	.012	1.000				
7	-.005	.076	-.076	.101*	-.006	-.010	1.000			
8	-.005	.055	-.020	-.081	-.094	.006	.082	1.000		
9	.002	.274**	.037	-.045	.044	-.033	.053	.105*	1.000	
10	-.086	-.033	-.022	-.021	.024	.155**	.056	-.009	.074	1.000

**Note 1.** \*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed).

**Note 2.** Style 1 Price , Style 2 Impulse , Style 3 Fashion consciousness, Style 4 Social Influence, Style 5 Brand loyalty, Style 6 media influence, Style 7 Quality consciousness, Style 8 Lifestyle influence, Style 9 Indecivness and Style 10 Recreation purpose.

Furthermore, price, impulse, media, quality, confusion and recreation consciousness style of consumer was not significantly different based on gender. This means that genders were not different in their price, impulse, media, quality and confusion and recreation consciousness style of shopper. In contrast, fashion, social, habit/brand loyalty and lifestyle consciousness style of consumer was significantly different based on gender. This means that genders were different in their fashion, social, habit/brand loyalty and lifestyle consciousness style of customer. In addition, all ten style of consumer was not significantly different based on ownership. This means that ownership were not different in their price, impulse, fashion, social, habit/ brand loyalty, media, quality, lifestyle and confusion and recreation consciousness style of shopper. Future purchase intention was not different in their price, impulse, social, brand loyalty, media, quality and lifestyle and Indecisiveness style of consumer. In contrast, future purchase intention was different in their fashion and recreation consciousness

style of customer. Income also was not dependent on impulse, social, confusion and recreation consciousness style of consumer. In contrast, income was dependent on price, fashion, brand loyalty, media and quality and lifestyle consciousness style of customer.

### SUMMARY AND DISCUSSIONS

The demographic information on analysis suggests that most owners purchased mobile phones for personal use and similarly most of the potential buyers also indicated same intention. For owners the most popular brands were Sony followed by Nokia and Samsung. Further, consumers tend to purchase established and popular brands in the market rather than those brands that were less known. Moreover, the results showed that the prices which potential buyers intended to spend were the same as the prices paid by the customers who already owned mobile phone.

#### Difference by Gender

Surprisingly, the prices of mobile phones of



female owners was higher than those of the male owners. Although, the owner rate of the female participants was higher than that of the male buyers, the rates for those who intended to buy a mobile phones were almost the same. Marketing managers should therefore focus on female potential buyers as they were a large group of mobile phones buyers in India and the female customers/potential buyers therefore should not be ignored in product design, promotion etc .

#### **Differences between Age Groups**

On analysing, the numbers of potential buyers who owned mobile phones persons in the 18-24 years age group could be considered as key potential consumers in Indian mobile phones market.

Considering the brands owned by participants aged less than 18 to 34 years old, the research found that the consumers purchased famous brands of mobile phones in India such as Sony, Canon and Fuji. Moreover, most respondents had no interest on future purchase of mobile phones and they were looking for a low price mobile phone when they wanted to purchase a new mobile phone. Therefore, marketing managers should design and develop new products to attract these consumers by focusing more on the price of mobile phones.

#### **Differences between Incomes**

The results showed that the consumers in India who were interested in purchasing a mobile phone were mostly in the under Rs.14000 and Rs.14000 to Rs.22000 monthly income groups. Moreover, it was strange that there was a tendency for respondents in the low income groups to own mobile phones. It is possible that the price of mobile phones has come down compared to the past and as mobile phone has become common. In addition, as the technology advances, the price of mobile phone is decreasing and the quality is improving. The future purchase intention for the income group from Rs. 14000 to Rs.22000 was also the highest rate compared to other income groups.

On the other hand, income level seemed to influence the amount spent, or intended to spend on getting a mobile phone in the future. Participants who had high monthly incomes were more likely to have spent less money either on purchasing or planning on a future purchase of a mobile phone. For example, most respondents who had income from Rs.22000 to Rs.29000 were willing to buy a mobile phone with price range from Rs.14000 to Rs.22000. In contrast, participants who had low monthly incomes were more

likely to have spent more money either on purchasing or planning on a future purchase of a mobile phone. For example, most respondents who had income less than Rs.14000 were willing to buy a mobile phone with price from Rs.14000 to Rs.22000. Again Marketing strategists needed to take note of this.

#### **REFERENCES**

- Aaker, David A. (1995). *Building Strong Brands*. The Free Press: New York, 1-13.
- Bridges, E., Coughlan, A. T., & Kalish, S. (1991). New technology adoption in an innovative marketplace: Micro- and macro-level decision making models. *International Journal of Forecasting*, 7(3), 257-270.
- Blankenship, A. B., Dutka, A. F., & Breen, G. E. (1998). *State of the art marketing research*, Lincolnwood, IL: NIC Business Books.
- Bandyopadhyay, S. and M.Martell (2007). Does attitudinal loyalty influence behavioural loyalty? A theoretical and empirical study. *Journal of Retailing and Consumer Services*, 14(1), 35-44.
- Caudron, S. (1993). *Brand Loyalty: Can it be Revived?* Industry Week, April 5<sup>th</sup>, 242(7), 11-13.
- Delgado-Ballester, E. and Munuera-Aleman, J. (2001). Brand Trust in the Context of Consumer Loyalty. *European Journal of Marketing*, 35(11-12), 1238-1258.
- Doyle, P., & Saunders, J. (1985). The lead effect of marketing decisions. *Journal of Marketing Research*, 22(1), 54-65.
- Dugal, S. S., & Schroeder, J. E. (1995). Strategic positioning for market entry in different technological environments. *Journal of Marketing Theory and Practice*, 3(3), 23-37.
- Ehrenberg, Andrew S.C. (1991). New Brands and the Existing Market, *Journal of the Market Research Society*, 33(4), 285-99.
- Fornell, C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience? *Journal of Marketing*, 56(1), 6-21.
- Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty, and profitability: An empirical study? *International Journal of Service Industry Management*, 7(4), 27-42.
- Leona Tam, Wendy Wood, and Mindy F. Ji. (2009). *Brand loyalty is not habitual*. Handbook of brand relationship, 43-62.

Levy, S. J. (1999). *Brands, consumers, symbols, & research*. Thousand Oaks, CA: Sage.

Marcus, A. I., & Segal, H. P. (1999). *Technology in America: A brief history (2<sup>nd</sup> ed.)*, Fort Worth, TX: Harcourt Brace College Publishers.

Mowen, J. C., & Minor, M. S. (2001). *Consumer behavior: A framework*. Upper Saddle River, NJ: Prentice-Hall.

Oliver, R. L. (1999). Whence Consumer Loyalty? *Journal of Marketing*, 63.

Reichheld, F.F. (1993). Loyalty-based Management. *Harvard Business Review*, 71(2), 64-72.

## BANKING INFRASTRUCTURE IN BIMARU STATES

Bakshi Amit Kumar Sinha\*

### Table of Contents

- Abstract
- Keywords
- Introduction
- Research Methodology
- Contribution of Banking and Insurance in State Domestic Product
- Infrastructure of Commercial Bank
- Human Resources of Commercial Banks
- Conclusion
- References

### ABSTRACT

*Banking infrastructure promotes growth through effective mobilisation of savings into productive capital and channelises this capital to its most productive use. This paper analyses the position of banking infrastructure in Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh (BIMARU) vis-à-vis all India average. We also examine the growth and contribution of banking and insurance sector to the Gross Domestic Product (GDP). This study is based on the assumption that the banking infrastructure in the BIMARU states is quite inadequate. Banking infrastructure in these states is much below the national average. This study also reveals the lack of human resources in the banking sector of these states. However, in recent years, banking and insurance sector of GDP has grown at a faster rate in these states compared to the national average, but contribution of this sector to GDP in BIMARU states remained less than the all India average.*

**KEYWORDS:** Banking, BIMARU, GDP, Infrastructure, Insurance.

### INTRODUCTION

Infrastructure, in general, facilitates growth. Banking infrastructure promotes growth through effective mobilisation of savings into productive capital and channelises this capital to its most productive use. Bank plays an important role in the growth of an economy. It takes savings from the customers and diverts to investment and loans. They provide loans to

create capital and assets as also to individuals for different purposes. It also provides loan for specific purposes like agriculture, education, setting up of small, medium and large scale industries. To provide these facilities, the state should have adequate banking infrastructure for proper and timely service delivery. This study discusses the position of BIMARU states of India in relation to banking infrastructure therein.

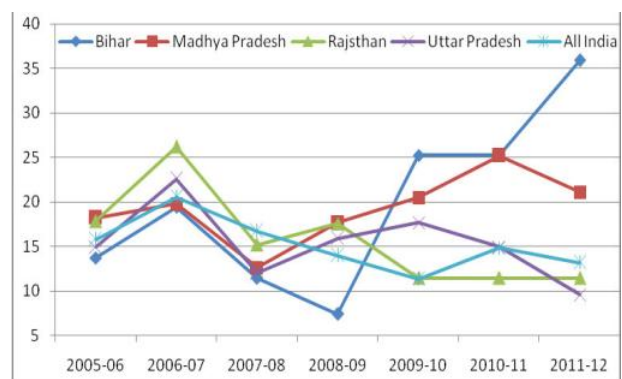
### RESEARCH METHODOLOGY

This paper analyses the position of banking infrastructure in Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh (BIMARU) vis-à-vis all India average. We examine the growth and contribution of banking and insurance to the Gross Domestic Product (GDP) across these states with national average from 2004-05 to 2011-12. Banking infrastructure may include bank branches network and the human resources with them. We further inquire the position of bank branch network in urban, semi-urban and rural areas. This study also focuses on the position of employees of banks. Employees of the banks may further be categorised into Officers, Clerks and Subordinates. We analyse the position of female employment across the state in banks. This paper also examines the trend of banking infrastructure among the BIMARU states as well as all India Average.

### CONTRIBUTION OF BANKING AND INSURANCE IN STATE DOMESTIC PRODUCT

Banking and insurance are important economic activities and classified under the service sector.

**Picture 1: Yearly growth of banking and insurance (%)**

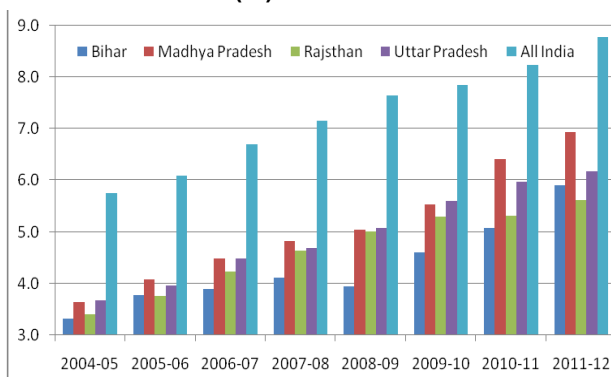


\*Research Associate, Centre for Economic Policy and Public Finance (CEPPF), Asian Development Research Institute (ADRI) Off Boring, Patna, Bihar, India.

The growth of all the BIMARU states as well as all India has been more than 10 percent during 2005 to 2012, except Bihar (7 percent) for 2008-09. Madhya Pradesh led with growth of 18.9 percent followed by Bihar (18.2 percent), Rajasthan (15.8 percent) and Uttar Pradesh (15.7). Growth in banking and insurance registered 15.1 percent in India as a whole.

As is discerned from, the trend of growth of banking and insurance sector during last four year (2008-12) in Bihar and Madhya Pradesh has accelerated to 28.4 percent and 22.5 percent respectively compared to the lower growth of Rajasthan (11.4), Uttar Pradesh (14.1) and also all India average (13.3). Bihar has been significantly growing since 2008-09 and crossed 35 percent mark in 2011-12. All BIMARU states are not only doing well, but are better than the national average in context of growth of banking and insurance sector.

**Picture 2: Year-wise composition of banking and insurance to GDP (%)**



Banking and insurance sector contributed less than 4 percent of the GDP in all BIMARU states and 5.8 percent of national average in the year 2004-05. The contribution of this sector to GDP in case of all India average (8.8 percent) is still higher than the BIMARU states (less than 7 percent) in 2011-12. However, share of banking and insurance sector in GDP has been increasing in BIMARU states as well as at all India level. Madhya Pradesh had increased by 3.3 percentage point followed by all India (3.0), Bihar (2.5), Uttar Pradesh (2.5) and Rajasthan (2.2). The contribution of banking and insurance sector to GDP is lesser than the national average.

One may view the long tower of all India in picture 2. As a result, the growth of banking and insurance has been accelerated but the share of this sector is still behind. Therefore, this sector needs to be strengthened and use their potential. To strengthen this sector, adequate banking infrastructure is required.

## INFRASTRUCTURE OF COMMERCIAL BANK

Table 1 given below shows the distribution of area, offices and centres of commercial bank and cooperative banks and population across the BIMARU states. One may notice that the population share of all states under study is much more than the banking network in India. As may be seen, the total area of 30 percent consists of 37 percent of population compared to 29.4 percent banking network in these four states. This reflects the unavailability and inadequacy of the bank infrastructure in these states. The dependency of population in both, rural and urban area on bank in BIMARU states is higher than the national average. There is 38.1 thousand population in Bihar which depends on one branch in rural area as against 27.3 thousand population in urban area. Again 36.9 thousand population depends on a single commercial bank branch in urban area in Madhya Pradesh compared to 30.7 thousand population in rural area.

**Table 1: Share of Area, Population & Infrastructure of Commercial Banks**

	Area (percent)	Commercial Banks (percent)		Population (percent)	Population Per Branch (000 <sup>1</sup> )	
		Centres	Offices		Rural	Urban
Bihar	2.9	7.4	4.6	8.6	38.1	27.3
Madhya Pradesh	9.4	5.0	4.8	6.0	30.7	36.9
Rajasthan	10.4	5.4	4.9	5.7	28.1	31.3
Uttar Pradesh	7.3	14.8	12.0	16.5	30.3	36.4
All India	100	100	100	100	25.0	31.6

**Sources:** Ministry of Agriculture, Government of India and Reserve Bank of India

As a result, the banking infrastructure in BIMARU states is not as good as even for all India average. For betterment of banking infrastructure in these states, new branches both in rural as well as urban area may have to be opened. In this context, it is worth mentioning that a major initiative is being taken by the state governments in association with the central government and the banks for providing bank branches in all the villages with a population of 5000 or more, either through brick and mortar branches or ultra-small branches.

## INFRASTRUCTURE OF COOPERATIVE BANK

The data for the State and District Central Cooperative Banks are shown in table 2. Trend of bank branches of cooperative bank is also similar to commercial bank in these states. Cooperative bank centres in Bihar is only 3.7 percent for 8.6 percent of population. This reflects the lack of bank branches in these states. People who depend on one cooperative centre/ offices for banking services in Bihar is 380

thousand followed by Rajasthan (343 thousand), Uttar Pradesh (275 thousand) and Madhya Pradesh (198.6 thousand) which is much higher compared to the national average of 103 thousand person in rural area. The condition of cooperative bank infrastructure in urban area is comparatively better than the rural area. This is because of lower urbanisation in these states and bank is more interested to open a branch in urban areas.

**Table 2: Share of Area, Population & Infrastructure of Cooperative Banks**

	Area (percent)	Cooperative Banks (percent)		Population (percent)	Population Per Branch (000')	
		Centres	Offices		Rural	Urban
Bihar	2.9	3.7	4.2	8.6	380.5	86.4
M.P.	9.4	5.3	4.8	6.0	198.6	153.3
Raj.	10.4	3.0	3.3	5.7	343.6	192.6
U.P.	7.3	9.1	10.1	16.5	275.0	192.8
India	100	100	100	100	103.7	225.6

**Sources:** Ministry of Agriculture, Government of India and Reserve Bank of India

#### HUMAN RESOURCES OF COMMERCIAL BANKS

Bank is operated and served by its employees. Bank appoints employees in different grades to provide services to its customers. They may be officers or clerks or subordinates. Table 3 portrays the grade wise employees of banks. In Bihar 41 percent of officers, 37 percent of clerks and 21 percent of subordinates constituted 36362 employees in the commercial banks. Female employee in Bihar is only 6.7 percent of the total employees. Bihar has only 3 percent of the total and only 1 percent of female employees compared to the all India. Madhya Pradesh (43/39/19), Rajasthan (46/35/19) and Uttar Pradesh (41/39/19) also have the same trend of officers, clerks and subordinates respectively compared to all India average of 45 percent officers, 38 percent of clerks and 17 percent of subordinates. Employees in Madhya Pradesh (4 percent), Rajasthan (4 percent) and Uttar Pradesh (10 percent) are quite inadequate compared to total employee in the rest of the country. The situation is much worse in the context of female employees. Only 11 percent female are working in this part of country compared to 36.7 percent of population residing in these four states.

This reflects the lack of human resource in banking sector in the BIMARU states in India. This is also a factor for poor performance of banking services and facilities in these states.

**Table 3: Grade-wise employees of commercial banks**

	Total Employees				of Which : Females			
	Percentage Distribution			Total (No.)	Percentage Distribution			Total (No.)
	Officers	Clerks	Subordinates		Officers	Clerks	Subordinates	
Bihar	41	37	21	36362	35	52	13	2443
MP.	43	39	18	43243	31	62	7	5997
Raj.	46	35	19	38229	36	49	16	3771
U.P.	41	39	19	101487	33	53	14	9176
All India	45	38	17	1050885	36	54	10	186784

**Source:** Basic Statistical Returns of Scheduled Commercial Banks in India, 2011-12

#### CONCLUSION

Banking infrastructure in BIMARU state is lagging behind. The position of banking branch network is not as good as national average. These states are also densely populated states. In addition, the dependency of people on bank branch is very high as compared to all India. The situation of banking infrastructure is much worse in rural areas. For betterment of banking infrastructure, a major initiative by the state government in association with the central government and the banks in providing of bank branches in all villages with a population of 5000 or more, either through brick and mortar branches or ultra-small branches may have to be taken. Lack of human resource in banking sector in the BIMARU states in India is also a key factor for poor performance of banking services and facilities in these states. This study reveals that there is lack of banking infrastructure in the BIMARU states. Banking infrastructure in these states is less than the national average. In recent years, banking and insurance sector has been growing at a faster rate compared to the national average. The contribution of this sector is even less than the all India average.

#### REFERENCES

- Department of Finance, Government of Bihar. (February, 2013), *Economic Surveys*, Saraswati Press Ltd.
- Reserve Bank of India. (2012). *Statistical Tables Relating to Banks in India*, RBI.
- Reserve Bank of India. (March, 2009). *Branch Banking Statistics*, Vol. 4, RBI.
- Reserve Bank of India. (June, 2012). *Report on Trend and Progress of Banking in India*.
- Rajiv Lall and Anupam Rastogi. (April, 2007). *The political economy of infrastructure development in post-independence India*. IDFC occasional paper series.
- Reserve Bank of India. (September, 2012). *The Handbook of Statistics on the Indian Economy*, 14th series.

**STATEMENT ABOUT OWNERSHIP AND OTHER PARTICULARS OF THE JOURNAL  
GURUKUL BUSINESS REVIEW (GBR)**

---

**FORM-5**  
(See Rule 8)

1. Place of publication : Haridwar, Uttarakhand
2. Periodicity of its publication : Annual
3. Printer's Name : Professor A.K. Chopra  
Nationality : Indian  
Address : Registrar, Gurukula Kangri  
Vishwavidyalaya, Haridwar.
4. Publisher's Name : Professor A.K. Chopra  
Nationality : Indian  
Address : Registrar, Gurukula Kangri  
Vishwavidyalaya, Haridwar.
5. Editor's Name : Professor V.K. Singh  
Nationality : Indian  
Address : Head & Dean, FMS, Gurukula Kangri  
Vishwavidyalaya, Haridwar.
6. Name and addresses of the individuals who own the newspaper and partners or shareholders holding more than one per cent of the total capital : Gurukula Kangri Vishwavidyalaya,  
Haridwar.
7. Printed at : Kiran Offset Printing Press  
Kankhal, Haridwar.

I, Professor A.K. Chopra, hereby declare that particulars given above are true to the best of my knowledge and belief.

**Professor A.K. Chopra**  
Registrar  
Gurukula Kangri Vishwavidyalaya,  
Haridwar.



## FEEDBACK FORM

Would you take a moment to evaluate the papers/articles you have read in the 9<sup>th</sup> issue of the "Gurukul Business Review(GBR)"? Your valuable comments will help shape future issues. Thank you!

	Highly Appreciable	Somewhat Appreciable	Not Appreciable
1. SOCIO-ECONOMIC CHALLENGES AND FINANCIAL.....IN SWAZILAND	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. RECRUITERS' EXPECTATIONS VS. STUDENTS' ..... SKILLS IN OMAN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. A REVIEW PAPER.....PROFIT CHAIN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. AN ORGANIZATIONAL CULTURE FRAMEWORK.....TUDY OF HEEP, BHEL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. IMPACT OF FIRM'S CHARACTERISTICS .....INDUSTRY IN INDIA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. A STUDY ON FACTORS AFFECTING TRAINING.....ROORKEE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. A STUDY OF SHAREHOLDER'S.....EMPIRICAL ANALYSIS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. THE IMPACT OF CEO'S.....SECUNDERABAD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. A STUDY OF EFFICIENCY MEASUREMENT .....ANALYSIS (DEA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. INDIAN BANKS.....CITIZENS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. HEALTHCARE SERVICES.....MEDICAL MARKET	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. IMPACT.....MOBILE PHONES IN INDIA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. BANKING INFRASTRUCTURE.....BIMARU STATES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

We'd appreciate your comments and suggestions about articles in this issue of the "Gurukul Business Review" in general: \_\_\_\_\_

Name : Mr. / Ms. \_\_\_\_\_ Designation : \_\_\_\_\_ Phone : \_\_\_\_\_

Address : \_\_\_\_\_



## SUBSCRIPTION FORM

I wish to subscribe my subscription to "Gurukul Business Review" for 1 / 2 / 3 year (s). A bank draft bearing no. \_\_\_\_\_ dated \_\_\_\_\_ for Rs. / US\$ \_\_\_\_\_ drawn in favour of "Registrar, Gurukula Kangri Vishwavidyalaya, Haridwar", toward subscription for \_\_\_\_\_ year(s) is enclosed.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Pin \_\_\_\_\_

Country \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

E-mail \_\_\_\_\_

Signature with date

Subscription Rates			
Category	1yr	2yr	3yr
<b>Indian (in Rs.)</b>			
• Institutions	200	350	500
• Individuals	100	175	225
• Alumni	75	125	175
<b>Foreign (in US\$)</b>			
• Air-Mail	15	25	40

POST

STAMP

TO,

EDITOR  
GURUKUL BUSINESS REVIEW (GBR)  
FACULTY OF MANAGEMENT STUDIES(FMS)  
GURUKULA KANGRI VISHWAVIDYALAYA  
HARIDWAR-249 404 (U.K.) INDIA

-----

POST

STAMP

TO,

EDITOR  
GURUKUL BUSINESS REVIEW (GBR)  
FACULTY OF MANAGEMENT STUDIES(FMS)  
GURUKULA KANGRI VISHWAVIDYALAYA  
HARIDWAR-249 404 (U.K.) INDIA