



# PJMTR

## Presidency Journal of Management Thought & Research

Vol. IV No. 1

January – June 2014

ISSN 2229-5275

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# Presidency Journal of Management Thought & Research

A Peer-reviewed Biannual

Vol. IV No. 1, 2014

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**Published by:** Centre for Management Studies, Presidency College, Kempapura, Hebbal, Bangalore -560 024, India.

**Printed at:** Rainbow Graphics, # 959, 8th 'A' Main, Rajajinagar 3rd Stage, Bangalore - 560 021. for and on behalf of Centre for Management Studies, Presidency College, Kempapura, Hebbal, Bangalore.

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### Guidelines for Submission of Papers

- The cover page of the article should contain:
  - The title of the article (Times New Roman 16, in bold)
  - An abstract of the paper in about 200-250 words that clearly include the purpose, design/methodology/approach, findings, research limitations, practical implications and value addition. (Times New Roman 12, in *italics* and single spacing).
  - Keywords (4-6).
  - Name(s) of author(s), professional affiliation, postal address and email id.
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- The identity of the author(s) should not be revealed in the paper except on the cover page.
- The manuscript must be submitted in duplicate on A4 size paper, printed only on one side with 1.5 line spacing. A soft copy of the manuscript must also be emailed to [jnl.presidency.blr@gmail.com](mailto:jnl.presidency.blr@gmail.com), with <Paper for PJMTR> in the subject line.
- The paper may be an empirical research study, a conceptual article, a case study or a book review. Well-described anecdotes from the field of management may also be considered.
- A paper should not exceed 8000 words including charts, tables and other annexure. The text should be justified both sides and typed in Times New Roman, font size 12.
- Figures and tables used in the paper may be black-and-white or in color. They must be numbered by using Roman numerals with a brief title.
- Any reference in the text should be indicated by giving the name of author(s) and the year of publication in parentheses.
- All references should be alphabetically listed at the end of the paper in the standard APA format.
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## From the Editor's Desk ....

Dear Reader,

Here's wishing you a Happy New Year at the dawn of 2014, which coincides with the third anniversary of the *Presidency Journal of Management Thought & Research* (PJMTR)!

This opening issue of PJMTR's Volume-IV brings to you an assortment of ten entries for your reading pleasure and thought stimulation: five research papers, two articles, two book reviews and, for the first time, an extract of an HBR publication.

Several financial scams have off and on been popping up in the recent past the world over. India is gearing up to implement the International Financial Reporting Standards (IFRS) by 2015 to fortify itself against such scams. Pramod Kulkarni and Raju Hyderabad give us a miniature dipstick reading of how ready or otherwise we are for the task at hand, by studying the awareness level of IFRS in a sample of practicing Chartered Accountants.

Option pricing, a crucial factor in the operations of hedgers and speculators, is said to have found useful tips from the Black-Scholes model. Panduranga's study of select banking-stock options, examines the relevance of the model for the pricing of banking stocks. A case study by Upender Vennam and Rama Prasad gives us a taste of our age-old postal service and identifies the current training needs of the frontline postal employees for enhancing their operational effectiveness by studying the post offices in North Andhra.

What makes citizens go for e-governance? Jaya Iyer and Srivastava identify the major determinants through their study of 148 users of the e-government portal in Maharashtra. Could there be significant differences of employee-relations practices in various units of the same organization? The case study by Indranil and Subha may have an answer.

Of the two articles included in this publication, one gives a framework for addressing the issues and challenges that lie ahead in the Indian capital market, while the other traces the various labels that have been in vogue in the past for what is now known as Just-in-Time. Is JIT just old wine in new bottle?

In one of the two book reviews, Mrunal Joshi brings to you Richard Branson's what they won't teach you at business school. In the other, Swati Agrawal gives you a glimpse of Sachit Jain's Ready-to-Take-Off leadership story. And... for the first time, an extract of an HBR article has been included here. Kindly let us know if such extracts are welcome.

Letters to the editor are welcome from you. Wishing you a productive 2014,

*M. J. Arul*  
Chief Editor

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# Implementation of IFRS in India: A Study of Awareness among Practicing Chartered Accountants

Pramod Kulkarni\* & Raju L Hyderabad\*\*

## Abstract

*The International Financial Reporting Standards (IFRS) have become the accepted norms of accounting and reporting of business transactions. In India, the Institute of Chartered Accountants of India and the Ministry of Corporate Affairs, Government of India are leaving no stone unturned to make Indian accounting world IFRS convergent. The date of implementation has been postponed from April 2011 to April 2015. It all seems that India has no further escape route and the mind set has to change for IFRS. The present study examines the level, extent and sources of awareness of IFRS among practicing chartered accountants in one of the major cities of India and finds that the awareness level among practicing CAs is less than satisfactory and only conceptual. Lack of a clientele base in the city could be a reason. Strenuous efforts are called for among the members and the ICAI branch to update the knowledge base and to motivate the members to accept the challenges involved in adopting IFRS.*

## Introduction

The march towards a unified accounting language crossed a big milestone after the introduction of International Financial Reporting Standards (IFRS). Accounting bodies the world over aim to converge country-specific accounting standards with IFRS and India is no exception. IFRS adoption would lend an element of respectability to the financial statements and would lead to increased flow of capital and technology across nations. However, IFRS are more technical and complex and their introduction would require a vast pool of human resources in the form of accountants capable of implementing them. There has to be concerted and directed efforts in preparing the people responsible for recording and reporting of transactions on IFRS lines. The accountants, be it university graduates or students of ICAI be well equipped to handle the work arising out of IFRS adoption. The implementation is smoother when the accounting professionals are groomed on IFRS lines.

## Need for the Study

Accounting at corporate level is highly formalized and institutionalized. The process is mandated by the provisions of corporate law and guidelines issued by the accounting professional body, the Institute of Chartered Accountants of India (ICAI). The body develops a pool of talented people capable of discharging accounting and reporting responsibilities to the satisfaction of management, investors and regulators. The accounting system has been made predictable through the promulgation of standardized methods of measuring, recording and reporting. These methods were country specific initially and of late have been harmonized across nations through the issue of common set of guidelines in the form of IFRS. The move to adopt the IFRS has created a wide gap between the requirements and availability of human talents. The professional bodies and governmental agencies involved in the process of mandating IFRS need to create an edifice of talented people convergent with the nuances of IFRS. How resourceful the Chartered Accountants (CAs)

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with regard to IFRS adoption and technicalities? What measures and initiatives have been used both at the national and regional levels in training the CAs? Do these measures are continuous and spread over all parts of the country?

The awareness level of CAs in IFRS is a major determinant of the success of converging Indian accounting standards with IFRS. This is in view of the fact that CAs function both as internal and external auditors in corporate world. The discharge of these twin functions call for audacious and judicious use of IFRS. Poor preparedness among Indian accountants would open up the sector to foreign or externally trained accountants. The General Agreement on Trade in Services (GATS) mandates the member-countries to open up the service sector to foreign professional and India is no exception to this pressure. An examination of the level and depth of the awareness among local CAs would provide a whole lot of information at policy level. The gaps in knowledge could be bridged through the conduct of special campaigns in the form of workshops, training camps and rebuilding the course curriculum.

### **Review of Literature**

The empirical research on IFRS in India is limited and lacks sound theoretical explanation. The studies so far carried out are descriptive and repetitive. A majority of them concentrate on highlighting the challenges involved in IFRS compliance and legal hurdles to be overcome (ICAI's Concept paper on Convergence with IFRSs in India, 2006, Jain, 2011, Bansal and Bansal, 2010, Yadav and Sharma, 2012). A few of the studies have focused on assessing awareness level of IFRS among accountants and managers. Kathiriya (2013) studies IFRS awareness and attitude towards IFRS implementation prevailing in Small and Medium Enterprises (SMEs) of Amreli district of Gujarat. The study finds relatively less awareness among SMEs and highlights the difficulties that they may face while implementing IFRS (including cost of hiring experts with IFRS knowledge). Malhotra (2011) studies the general awareness and perception levels about need for converging

Indian GAAPs with IFRS among the academicians teaching papers in finance and accounting in National Capital Region, Delhi. The study finds that most of the academicians are of the opinion that professionals and tax officials are not well prepared for IFRS implementation. Anbalgan (2013) conducts a similar study on auditors' perception relating to convergence of accounting standards with IFRS in Salem district of Tamilnadu. The study finds a higher awareness level regarding convergence of Indian GAAPs with IFRS among the auditors and a majority of them in favour of the convergence process.

In view of limited empirical works on awareness levels amongst the accountants in India, the present study assumes greater significance. Moreover, the study is confined to a smaller city poised to grow in the future to understand the level of preparedness amongst the accountants.

### **Objectives of the Study**

**The objectives of the study are:**

1. To identify efforts made by ICAI in developing knowledge base of IFRS among CAs.
2. To examine level of awareness of IFRS among sample CAs in study area
3. To evaluate satisfaction level for the programmes of ICAI in general and its Branch at Hubli.

### **Research Methodology**

The study is based on a survey method and selects a random sample of practicing CAS in Hubli-Dharwad, twin city in Karnataka. The twin city Hubli-Dharwad is the second largest city in Karnataka in terms of population and geographical area. In view of the state government's desire to develop two-tier cities the city is poised to receive the major attention from investing community in the years to come. It houses a second largest industrial estate in the state and is the pi-centre of commercial activity in the north Karnataka.

A sample of fifty practicing CAs is selected out of 176 plus CAs in the city as on March 31, 2013.

The primary data is collected through the administration of structured, closed-ended interview schedule among sample CAs. The *secondary* data is gathered from journals and websites. The secondary data is collected for 2008 to 2012 period. The data gathered has been systematically tabulated and charts have been used where ever necessary in order to draw conclusions.

### **Efforts of ICAI in Training CAs for IFRS**

The Concept paper on Convergence with IFRS, issued by ICAI in 2006, brings out the role of ICAI as an educator/ trainer in preparing its existing and prospective members for adoption of the IFRS. Accordingly ICAI has come up with various initiatives to prepare its members for IFRS.

### **Continuing Professional Education (CPE)**

With a view to enable its members to maintain the requisite professional competence and ensure high quality standards in the professional services that they render, the ICAI has identified Continuing Professional Education (CPE) as a major area of focus for the members. ICAI has been providing continued inputs to its members through seminars, lectures, workshops, technical literature, e-learning, web-based training, etc.

CPE Programme Organising Units (POUs) are responsible for organising CPE programmes or CPE learning activities. POUs include the Council, Committee(s) of the Council, Regional Councils, Branches, ICAI Accounting Research Foundation and XBRL India constituted under the terms of the relevant notifications of the Council. They also include entities such as CPE Study Chapters, CPE Study Circles, CPE Study Groups or any other unit which may be recognized by Council from time to time for conduct of CPE learning activities and grant of CPE hours credit to members. (ICAI's Statement on Continuing Professional Education 2003, Amended – 2011). As per the latest amended statement on CPE (2011), the members are classified into:

#### **A] Members (aged less than 60 years) holding Certificate of Practice and residing in India.**

#### **CPE Requirements:**

- Completion of at least 90 CPE credit hours in each rolling 3-year period. Of which 60 CPE credit hours should be of structured learning.
- Completion of minimum 20 CPE credit hours of structured learning in each year.

#### **B] Members (aged less than 60 years) who are not holding Certificate of Practice or members who are residing abroad (whether holding Certificate of Practice or not)**

#### **CPE Requirements:**

- Completion of at least 45 CPE credit hours of either structured or unstructured learning (as per their choice) in each rolling three-year period
- Completion of minimum 10 CPE credit hours of either structured or unstructured learning (as per their choice) in each calendar year.

#### **C] Members (aged 60 years and above) who are holding Certificate of Practice**

#### **CPE Requirements:**

- Completion of at least 70 CPE credit hours of either Structured or Unstructured Learning (as per their choice) in each rolling three-year period.
- Completion of minimum 10 CPE credit hours of either Structured or Unstructured Learning in the first calendar year.
- Completion of minimum 20 CPE credit hours of either Structured or Unstructured Learning (as per their choice) in the second and third calendar years

#### **D] Members (aged 60 years and above) who are not holding Certificate of Practice**

#### **CPE Requirements:**

- Completion of at least 35 CPE credit hours of either Structured or Unstructured Learning (as per their choice) in each rolling three-year period.

- Completion of minimum 5 CPE credit hours of either Structured or Unstructured Learning in the first calendar year.

Structured or Unstructured - Learning in the second and third calendar year.

### **Conferences, Conventions and Panel Discussions, Seminars, Lectures and Study Circle Meetings**

Conferences are formal meeting of CAs in larger numbers, conducted at branch, regional, national and international levels annually. Conferences and seminars are organised for not less than six hours duration (full day) and are conducted in two/three-day sessions. The conferences are on topics / issues on which members have to develop new competencies (other than their core competencies). Conventions are normally conducted on full day basis so as to devote on issues of contemporary nature on which members have to develop their competencies/ understanding further. Panel Discussions are conducted with 1 to 3 hours duration. They are helpful for hearing views on a particular topic from experts from different walks of life or background on the same issue. Budget discussions session are mostly organised in this form. The lecture series are conducted with duration of not less than two hours – for a topic on which members need updation (ICAI's CPE Advisories, 2011).

Table 1 (refer appendix) summarises the conferences, conventions, seminars and refresher courses held by ICAI as well as by regional councils between the period 2008 and 2012 at the international and national levels.

The conferences and conventions held by ICAI exceed that of regional councils. For the year 2012, the ICAI has held 15 national level and two international level conferences and conventions. Only SIRC and EIRC have held conferences in 2012. No conference/convention on IFRS has been held both by the ICAI and regional councils in 2012 while ICAI has held 8 conferences on IFRS in 2011.

Compared to conferences/conventions, the regional councils are more active in holding

seminars and refresher courses. The SIRC has held higher number of seminars compared to ICAI and other regional councils. However, the seminars on IFRS are few and sparse. Year 2012 saw no seminars on IFRS while in year 2011 only SIRC and WIRC held seminars on IFRS.

### **Workshops / Residential Programmes/ Modular Training**

These programmes are conducted for duration of not less than 6 hours per day for a period ranging from one week to fifteen day on topics / issues on which members have to develop their core competencies in line with the current developments. They make use of Case Study approach where in the topics are taken up and discussed in detail to enable the members to develop deep knowledge and insights about the issues involved and find out appropriate solutions under the guidance and supervision of the resource persons. Members get CPE hours credits for attending such workshop/training programs (ICAI's CPE Advisories, 2011).

Table 2 (refer appendix) summarises workshops/residential programmes and other training programmes held by ICAI between the period 2008 and 2012, at the national level and also those workshops:

The regional councils do better in terms of number of workshops held compared to ICAI. Further, there are no workshops in 2011 and 2012. It is only SIRC which has held three workshops each year in 2008 and 2009 compared to ICAI and other councils.

Training programmes are target oriented and meet specific objectives. They are more effective than workshops, seminars and conferences and inculcate required skills in particular aspects. However, such training events are few both at the ICAI level and council levels. One IFRS related training programmes was held in 2011 by SIRC and WIRC and one by NIRC in 2012.

### **Certificate Course on IFRS**

The council of ICAI conducts certificate course on subjects on which members of CA fraternity have to develop professional core competence. Such courses add to the qualification of a CA.

The ICAI has launched a Certificate Course on International Financial Reporting Standards for its members. The objective of this Course is to enhance the knowledge as well as to provide benefit to the members in the global service market.

### **Journals, Newsletters and Magazines**

The ICAI national level journal "The Chartered Accountant" features articles on areas related to Accounting, Auditing, Taxation, Corporate and Allied laws, Corporate Governance, Banking and Finance, Information Technology, Industry specific topics and general personality development topics. The CA journal has been carrying at least one article on IFRS in almost every issue during the past three to four years. Each of the 5 regional councils publish a monthly newsletter at the regional level. They cover articles of auditing, taxation etc, legal updates and announcements. The SIRC publishes "SIRC Newsletter".

Reading articles on the journal can be part of unstructured learning activities. Members can avail credit on reading article and filling crossword puzzles by making declarations in the annual self-declaration forms.

### **Teleconferencing**

The ICAI has joined hands with IGNOU and Gyandarshan TV channel and the Board of Studies and CPE committees of ICAI conduct lectures on the television. Members can participate in teleconferencing session directly at the POU's and get CPE hour credits. Alternatively members can also watch such session at their place of convenience and get CPE credits under unstructured learning activities.

### **E-learning Course and Web Portal**

E-learning is "instructional content or learning experiences delivered or enabled by electronic technology". Electronic technology encompasses everything from Computer-Based Training (CBT), to compact disks (CDs), to Web-based applications. ICAI has come up with e-learning packages for subjects like Service Tax,

CAAT/GAS, Information Systems Audit, IFRS, Due Diligence, FDI, Transfer pricing, Investment banking, Bank Audits, MS Excel 2007 as Audit tool, BASEL II, Treasury Management, SOX, etc.

### **Dedicated Website**

During 2009-10 a separate dedicated website was set up with the domain name [www.ifrs.icaic.org](http://www.ifrs.icaic.org) in order to serve as "Blended learning portal" for learning IFRS. The website is used to register for certification/e-learning course on IFRS.

### **Other Sources of IFRS Awareness**

#### **CPE Study Circles**

A Study Circle is a forum of members of the ICAI residing/practicing/serving in a particular geographical locality and who constitute themselves as such for the purpose of carrying out the objectives of Continuing Professional Education.

#### **Accounting Research Foundation**

ICAI has set up ICAI Accounting Research Foundation (ICAI-ARF) in January, 1999 as a Section 25 Company – a core research body in the areas of accounting, auditing, capital market, fiscal policies, monetary policies and other related disciplines. Since then, ICAI-ARF has undertaken many projects involving basic and applied research.

#### **Study Tours**

Study tours provide opportunities to learn from best practices in other countries. Central Committees, Regional Councils and Branches organize educational tours abroad independently or jointly with each other with the prior approval of the CPE Committee.

#### **Hubli Branch of SIRC**

The Hubli branch of SIRC of ICAI came into existence on 16<sup>th</sup> September, 1985. The branch has a membership of 176 CAs practicing in areas of Central North Karnataka like Hubli, Dharwad, Dandeli, Gadag, Haveri, Jamkhandi, Koppal, Navalgund, Sirsi etc. The branch is engaged in conducting various activities like seminars, workshops, budget-discussion sessions,

conferences, public awareness programs and career counselling session. It publishes a monthly newsletter covering important notifications, amendments in law, case laws, latest changes, branch events etc. The branch was awarded as ‘The Best Branch’ at all-India level in 1995, 2005 and 2012.

Table 3 gives details of CPE programs organised by the branch between 2008 and 2012.

**Table 3: CPE Programmes held between 2008-2012 by Hubli branch**

	Conferences	Study Circle Meetings	Seminars	Workshops	Tele-Conferencing Sessions	Panel Discussions and Others
IFRS*	0	0	1	0	1	0
Others	1	0	17	1	11	2
<b>Total</b>	<b>1</b>	<b>0</b>	<b>18</b>	<b>1</b>	<b>12</b>	<b>2</b>
IFRS*	1	0	0	0	0	0
Others	0	5	13	3	10	4
<b>Total</b>	<b>1</b>	<b>5</b>	<b>13</b>	<b>3</b>	<b>10</b>	<b>3</b>
IFRS*	0	0	2	0	2	0
Others	1	4	8	1	8	1
<b>Total</b>	<b>1</b>	<b>4</b>	<b>10</b>	<b>1</b>	<b>10</b>	<b>1</b>
IFRS*	1	0	0	0	1	0
Others	0	6	12	1	25	0
<b>Total</b>	<b>1</b>	<b>6</b>	<b>12</b>	<b>1</b>	<b>26</b>	<b>0</b>
IFRS*	0	0	0	0	0	0
Others	3	2	5	9	27	0
<b>Total</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>9</b>	<b>27</b>	<b>0</b>

\*Denotes CPE programs containing IFRS as one of the topics being dealt.

**Source: Based on primary data: Oral interview with the branch-in-charge and Annual activity report of the Branch**

The Hubli branch of SIRC has made some efforts in improving the knowledge base of its members relating to IFRS. In five-year period, the branch has held two conferences, three seminars and four teleconferencing sessions in which IFRS-related matters were discussed and deliberated.

During the calendar year of 2008, a half-day seminar was conducted at the branch, with the topic “IFRS – the professional opportunity for Indian CAs”. Even in the CA-students conference, there was a session on ‘Convergence with IFRS’. One of the teleconferencing sessions facilitated by the branch was on the topic of ‘Convergence of Indian Accounting Standards with IFRS’.

In 2009, the 23<sup>rd</sup> annual conference, which was organised by the branch, featured a technical session on “Convergence with IFRS – challenges and strategies with reference to SMEs.” In 2010, the CPE teleconferencing session facilitated by the branch included two topics on “Convergence with IFRS” and “Road map to IFRS”. During this year, the branch hosted a half day seminar on ‘Recent Developments in IFRS Convergence’; which was presented by Padmashree CA T. N. Manoharan, Past President of ICAI. In the same year a National Seminar was hosted by the branch. It had a technical session on “New Professional Opportunities in IFRS Convergence”. During 2011, one of the teleconferencing sessions included the topic on IFRS converged accounting standards - “IND AS”. The sub-regional annual conference had a session on “IND AS, comparison with existing AS”. However, in 2012 most of the activities conducted during the year dealt with topics other than IFRS.

### Analysis and Interpretation of Data

The accounting world is fast changing and professionals involved in the process of accounting need to adjust and adapt to the emerging situation. The IFRS dominated accounting is fast approaching and there is a need to appraise the efforts made by the institutions and the individuals in developing the skills related to IFRS. The present work aims to identify the efforts of Hubli branch of SIRC and the knowledge base of its members. A sample of 50 privately practicing CAs has been selected in Hubli-Dharwad. A pre-tested interview schedule was circulated among the sample CAs and the required information was obtained. The following pages presents details relating to the analysis carried out.

### Extent Awareness about IFRS

Do CAs in Hubli-Dharwad aware of IFRS? If so, what is the extent of awareness? What kind of awareness and what are the sources for awareness? The awareness could differ. The awareness could be a mere knowledge or a complete knowledge. The survey reveals that 94% of the sample CAs surveyed is aware of

IFRS. Table 4 explains the extent of awareness prevailing among those who have IFRS awareness.

**Table 4 Extent of IFRS Awareness**

Extent of IFRS awareness	No	%
Only conceptual	27	56%
Know the major differences between Indian AS and IFRS	18	38%
Have full knowledge of IFRS, but yet to apply them	0	0%
Have already involved in implementation of IFRS at some level	2	4%
<b>Total</b>	<b>47</b>	<b>100%</b>

**Source: Survey Data**

Out of 47 CAs who are aware, 56% possess only conceptual idea while 38% have both conceptual idea and major differences between Indian Accounting Standards and IFRS. Two CAs have already involved in implementation of IFRS at some level.

**Sources of IFRS Awareness**

The study hypothesizes that awareness or knowledge of IFRS could come from study material in case fresh graduates, from attending seminars/conferences/workshops/training programmes, reading journal articles, etc.

Table 5 indicates sources of awareness.

**Table 5: Sources of IFRS Awareness**

Source	No (out of 47)	% (out of 100%)
CA course study material	9	19%
CA Journal	34	72%
ICAI Website	15	32%
Conference/Seminar/Workshop	37	79%
Others	2	4%

**Source: Survey Data**

A perusal of Table 5 shows that 79% of CAs sampled by the study became aware of IFRS through attending conference/seminar/workshop and 72% through the reading of CA Journal. The ICAI web site has been used by 32% to understand IFRS.

**How Important IFRS Knowledge in Profession?**

Mere awareness is not enough. The use of knowledge in practice cements the awareness level. Lack of use in practice could make CAs to be little interested in IFRS. Presently, IFRS

knowledge is less required for all CAs as their mandatory compliance is postponed. Hubli-Dharwad city has limited number of listed domestic or foreign companies. In spite of all these reasons, the future practice of CAs is going to be dictated by IFRS only. Against this background, CAs were asked on the importance placed by them on IFRS. Table 6 shows the importance placed by the CAs on the knowledge about IFRS.

**Table 6: Importance of Knowing IFRS**

Importance of IFRS knowledge	No	% (out of 100%)
It earns CPE credits	9	19%
Helps to gain academic knowledge	25	53%
Helps in providing services to clients	30	64%
Others	0	0%

**Source: Survey Data**

64% of CAs having awareness level opined that IFRS are useful in providing services to clients while 53% regard it as mere academic knowledge. 19% CAs find IFRS useful in accumulating CPE credits.

**Relevance of IFRS for Accounting and Reporting**

The study enquires on the usefulness of IFRS for accounting and reporting. IFRS represent statements which affect both recording and reporting practices of accountants. They are being advocated as standards of reporting the world over. Do sample CAs subscribe to this view? Table 7 tabulates data in this regard.

**Table 7: Relevance of IFRS in Accounting and Reporting**

Opinion on relevance of IFRS for accounting and reporting	No	%
Cannot say	10	21%
Not at all relevant	1	2%
Makes no much difference against Indian GAAPs	3	6%
Can improve transparency and reliability of financial reports(as against Indian GAAPs)	25	53%
Very much essential for better reporting and governance	8	17%
<b>Total</b>	<b>47</b>	<b>100%</b>

**Source: Survey Data**

53% of 47 CAs agree that IFRS improve transparency and reliability of financial reports as against Indian GAAPs while 17% felt IFRS are very necessary for governance also. Only 6% of opined IFRS make no much difference in accounting and reporting quality as against Indian GAAPs.

**Importance of IFRS for Practice in Hubli-Dharwad Area**

Table 8 gives details relating to the importance of IFRS for Hubli-Dharwad.

**Table 8: Importance of IFRS for Practice in Hubli-Dharwad**

Opinion	No	%
Not very useful presently as most of the clients are only individuals	14	30%
No scope as area does not have listed companies	3	6%
No audit of any clients whose business involves use of IFRS	16	34%
IFRS application in rare occasions while working for clients	11	23%
IFRS is common while working for clients, hence very important	3	7%
<b>Total</b>	<b>47</b>	<b>100%</b>

Source: Survey Data

A perusal of the table indicates that out of 47 CAs having knowledge of IFRS 34% opined that their clients need not comply with IFRS and 30% felt their clients are only individuals. 23% respondents apply IFRS occasionally.

**Knowledge of IFRS in Hubli-Dharwad**

Knowledge relating to IFRS need not be uniform across CAs. Young graduates are expected to have better understanding of IFRS as ICAI syllabi include detailed study of IFRS. On the other hand, the existing and old members are unlikely to have good exposure unless the members are attending seminars/conferences, reading materials or involved in audit of IFRS compliant clients. Table 9 elaborates the responses obtained for the question.

**Table 9 Opinion on CAs Having Better IFRS Knowledge**

Who possesses better knowledge?	No	%
Young CAs	18	38%
All CAs, because of CPE	11	23%
Experienced CAs, due to client profile	15	32%
Cannot say	3	6%
<b>Total</b>	<b>47</b>	<b>100%</b>

Source: Survey Data

Among the 47 CAs, 38% felt young CAs would have better knowledge because of their exposure to IFRS in their study material, study circles, student journal, etc. 32% felt that experienced CAs would have better knowledge due to their client profile. Only 23% felt that all CAs would have knowledge due to CPE norms.

**IFRS Education**

The IFRS knowledge is imparted by the efforts made by the ICAI and regional councils. These organizations are holding seminars/conferences/workshops/teleconferencing/panel discussions/training programmes. Even branches of various councils are not falling behind in holding these programmes. An incumbent CA can update himself through the means of these programmes. An analysis of the ways employed by CAs in the study area is made in the following sections.

Table 10 gives details relating to conferences attended by the respondents:

**Table 10: Attendance of Conferences and Visit to Website**

Importance of IFRS knowledge	No	% (out of 100%)
<b>Attendance of Conferences</b>		
Not attended	0	0%
Attended at Branch level	50	100%
Attended at Regional level	32	64%
Attended at National level	11	22%
International level	4	8%
<b>Watching Programmes on ICAI's Webcast</b>		
Yes	21	42%
No	29	58%
<b>Total</b>	<b>50</b>	<b>100%</b>

Source: Survey Data

Table 10 shows that all the respondents have attended conferences at the branch level, 64% regional level conferences, 22% attended national level conferences and 8% international conferences. 42% of the CAs have watched programmes like conferences, etc. on ICAI’s webcast. Table 11 provides information relating to seminars attendance by the respondents:

**Table 11: Participation in Seminars**

	No	%
<b>Participation in Seminars</b>		
No	1 <sup>1</sup>	2%
Branch level	49	98%
Regional level	29	58%
National level	10	20%
International level	3	6%
<b>Number of Seminars Attended</b>		
Enough to cover minimum CPE requirements	7	14%
Additional seminars of interest, over and above basic CPE requirements	33	66%
Rarely miss any seminar, covering far above basic CPE requirements	10	20%
<b>Total</b>		
Attendance of seminar on IFRS and related topics	50	100%
Yes	33	66%
No	17	34%
<b>Total</b>	<b>50</b>	<b>100%</b>

**Source: Survey Data**

<sup>1</sup> Was a recently qualified CA to whom exemption from CPE requirements may be given and hence need not affect the overall conclusion.

Regarding the number of seminars attended, 14% of CAs have attended only so many seminars as required to cover the CPE requirements. 66% attended some additional seminars over and above CPE requirements. 20% rarely miss any seminars. It would be fair to conclude that majority of respondents attend seminars well above CPE requirements. 66% of the CAs attended a seminar on IFRS and related topics.

Table 12 explains the extent of participation in IFRS related workshops.

**Table 12: Participation in IFRS Workshops**

	No	%
<b>Attendance of Workshop on IFRS</b>		
Yes	14	28%
No	36	72%
<b>Total</b>	<b>50</b>	<b>100%</b>
<b>Effectiveness of Workshop</b>		
Greatly helpful	7	50%
Something to learn	6	43%
Not much value adding	1	7%
<b>Total</b>	<b>14</b>	<b>100%</b>

**Source: Survey Data**

Only 14 CAs in the sample (28%) attended a workshop on IFRS. Of those who attended, 50% felt it greatly helpful, 43% of them felt they had something to learn.

**Tutorial Courses**

The ICAI has a certificate course on IFRS. Further, certain other organizations run IFRS related on-line based coaching programmes. Table 13 tabulates information relating to such courses.

**Table 13: Tutorial Course on IFRS**

	No	%
<b>Completion of any tutorial course on IFRS</b>		
Yes <sup>1</sup>	2	4%
No	48	96%
<b>Total</b>	<b>50</b>	<b>100%</b>
<b>Reasons for not undergoing tutorial course on IFRS</b>		
Not interested	6	13%
Provides only working knowledge of IFRS	4	8%
No time to undergo such course due to workload	14	29%
Planning to undergo in near future	23	48%
Cannot say	1	2%
<b>Total(Footnotes)</b>	<b>48</b>	<b>100%</b>

**Source: Survey Data**

Only two responding CAs have attended a tutorial course on IFRS run by private institutions like “Flexi guru”, “Sukhsagar” etc. None of the sample CAs have undergone certification course on IFRS organised by ICAI. As far as reasons for not attending any tutorial course shows that 48% of are planning to undergo such a course in near future while 29% lack of time to undergo such course due to workload pressures.

### Use of E-learning Courses

As far as e-learning course is concerned, none of sample CAs has undergone any e-learning course on IFRS offered by ICAI.

### Use of Dedicated Website for IFRS Information

The ICAI has developed a separate website for IFRS known as [www.ifrs.icai.org](http://www.ifrs.icai.org). Table 14 tabulates the data relating to use of the website by the respondents.

**Table 14: Use of IFRS Website**

Frequency of Visit		
Never	26	52%
Once in a year	3	6%
Once in six months	7	14%
Once in a month	12	24%
Regularly	2	4%
<b>Total</b>	<b>50</b>	<b>100%</b>

Source: Survey Data

Only 2% of the sample respondents use regularly the IFRS dedicated website and 52% are yet to visit the site.

### IFRS Education Through Gyan Darshan TV and CPE Teleconferencing Sessions

The ICAI runs specialized programmes on Doordarshan maintained education channel, i.e., Gyandarshan and also CPE teleconferencing sessions. Table 15 gives the details:

**Table 15: Watching of CPE Teleconferencing Sessions**

	No	%
<b>Watching of IFRS Related CPE Teleconferences</b>		
Yes	12	24%
No	38	76%
<b>Total</b>	<b>50</b>	<b>100%</b>
<b>Participation in Teleconference</b>		
Yes	3	25%
No	9	75%
<b>Total</b>	<b>12</b>	<b>100%</b>

Source: Survey Data

Only 24% of the CAs surveyed indicate watching of IFRS related CPE teleconferencing sessions and three CAs of the sample area took participation in question and answer sessions.

### Use of Institute Publications for IFRS Education

The ICAI publishes books, e-books, CD/DVDs, etc., on IFRS. Further, it also brings out monthly journal entitled 'Chartered Accountant.' The Accounting Research Foundation of ICAI also brings out a research publication. These are the good sources of information relating to IFRS. Table 16 tabulates details relating to use of these materials by sample CAs.

**Table 16: Use of Institute's Publication on IFRS**

Purchase of Books, e-books or CD/DVDs on IFRS	No	%
No	24	48%
Did not answer	1	2%
Yes,		
Institute publications only	10	20%
Private publications only	10	20%
Both	5	10%
<b>Total</b>	<b>50</b>	<b>100%</b>

Source: Survey Data

50% of the CAs surveyed had purchased books, e-books, CDs or DVDs on IFRS topics. The use of institute and private publications is prevalent among the subscribers.

### Overall Satisfaction Relating to Efforts of ICAI on IFRS

The Institute is leaving no stone unturned in developing knowledge base of its members relating to IFRS. The efforts of the institute are commendable. However, members' interest is far from desirable. Table 17 tabulates the views of members relating to efforts of ICAI:

**Table 17: Overall Satisfaction Level**

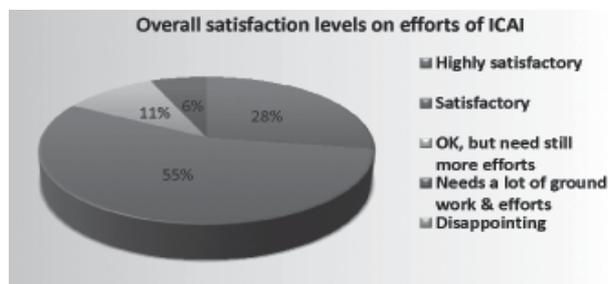
Satisfaction level	No	%
Highly satisfied	13	28%
Satisfactory	26	55%
OK, but need still more efforts	5	11%
Needs a lot of ground work and efforts	3	6%
Disappointing	0	0%
<b>Total</b>	<b>47</b>	<b>100%</b>

Source: Survey Data

When asked about their satisfaction level regarding the efforts of ICAI in training CAs for IFRS, of the 47 CAs who answered, 28% expressed high satisfaction levels. Table 21

explains that 55% of the 47 CAs who answered, felt it satisfactory. 11% of them appreciated the efforts, but felt that it needs still more efforts for ICAI to train CAs for IFRS. 6% felt that a lot of ground work and effort is needed to train CAs for IFRS.

**Chart 1: Overall Satisfaction Levels**



**Time for Implementation of IFRS in India**

Table 18 summarises the views relating to the time required to implement IFRS in India.

**Table 18: Time for IFRS Implementation**

Time for IFRS implementation	No	%
Next year, (well ahead of target)	1	2%
Within 2-3 year, (almost as per planned target of 2015)	25	53%
Needs at least 5 years or so (to get a successful response)	18	38%
Never	2	4%
Did not answer	1	2%
<b>Total</b>	<b>47</b>	<b>100%</b>

**Source: Survey Data**

The ICAI and the Government of India plan to implement IFRS in India from April 1, 2015. However, views of sample CAs are not uniform. Only 53% agree that IFRS would be implemented on time while 38% opine a need for minimum 5 more years.

**Conclusion**

The IFRS are expected to dominate the accounting world in India from year 2015 onwards. There has been a delay in adopting these norms and the process of adoption was postponed in 2011. The road map for adoption has already been prepared by ICAI, National Advisory Committee on Accounting Standards and the Ministry of Corporate Affairs, Government of India. In view of these reasons, there is a need on the part of chartered

accountants, both young and aged, fresh graduates and those already in practice, to update the knowledge base and provide new services to modern clients. The failure to realize this can lead to the entry of foreign MNC accounting and audit firms.

The Hubli-Dharwad twin city is regarded as the upcoming area for industrial growth in future. The city has a branch of SIRC and has been recognized for its professional work in developing skills, knowledge and values among the members. The present study aims to identify the preparedness of the branch and the members in accepting the IFRS regime. The analysis reveals that the ICAI has done tremendous work in ushering into the world of IFRS. It has started a certificate course on IFRS, designed a separate website for IFRS, conducts teleconferencing programmes on IFRS on Doordarshan, has made available reading materials in the form of books, e-books, CDs/DVDs, etc., on IFRS, etc. However, only a few seminars/conferences/workshops, etc., on IFRS have been held. Though the members value the importance of IFRS in providing services, in reporting and governance the majority of respondents possess only conceptual knowledge rather than all the technical aspects of IFRS. The conferences/seminars/workshops, though are held regularly by the branch, earmarking such seminars for IFRS is conspicuous by its absence. The enrolment for specialized course on IFRS of ICAI among the members is poor. Even the visits to the specialized website on IFRS maintained by the ICAI are less than satisfactory. Lack of listed corporate clients in the area is taken as one of the reasons why members are showing lower interest level.

The branch of SIRC at Hubli, with the co-operation of the regional council at Chennai and the head office of ICAI, should chalk out programmes in the years to come on IFRS and should motivate the members to update both conceptual and technical knowledge base. Such programmes may use the expertise of international accounting/audit firms or of the ICAI itself. Further, on an experimental basis, the local members may be deputed to work in

international audit firms through a mechanism of MOU between the branch and international audit firms. All these measures would augur well for the overall improvement in the IFRS knowledge base of CAs in the study area which is poised to attract top listed companies in the years to come.

### **References**

1. Advisory of Study Tours, Institute of Chartered Accountants of India, New Delhi
2. Anbalgan, R (2013). Auditors Perception and Convergence of Accounting Standards to IFRS – A Study, Indian Journal of Applied Research, Vol. 3, No. 5.
3. Bansal A and Bansal, S (2010). Challenges for IFRS Implementation in India - An Accounting Revolution, International Journal of Research in Commerce and Management, Vol. 1, No.4.
4. Concept paper on Convergence with IFRSs in India-2006, The Institute of Chartered Accountants of India.
5. CPE Advisory (2011). Institute of Chartered Accountants of India, New Delhi
6. Jain P (2011). IFRS Implementation in India: Opportunities and Challenges, World Journal of Social Sciences, Vol. 1, No.1, pp. 125-136. [www.wbiconpro.com/106/Pawan.pdf](http://www.wbiconpro.com/106/Pawan.pdf)
7. Kathiriya, A, Challenges in IFRS Convergence in SMEs in India, Abhinav - National Monthly Journal of Research in Commerce and Management, Vol. 2, No. 5
8. Malhotra, A (2011). Need for Converging to IFRS: The New Global Reporting Language, International Journal of Research in Computer Application and Management, Vol. 1, No. 4.
9. Norms for CPE study circles, Institute of Chartered Accountants of India, New Delhi
10. Statement on Continuing Professional Education 2003, as amended in 2011, Institute of Chartered Accountants of India, New Delhi
11. Study Material on Financial Reporting (2011). Vol. I, Board of Studies, The Institute of Chartered Accountants of India, New Delhi
12. Vijay Kumar M P (2012). First Lessons in Accounting Standards, Prime Knowledge Series, Snow White Publication, Mumbai
13. Yadav S and Sharma D (2012). Convergence to IFRS: What needs to be Done by Indian Corporate to Meet the Emerging Challenges? IJCEM International Journal of Computational Engineering and Management, Vol. 15, No. 6

**Appendix**

**Table – 1: Conferences and Seminars held on IFRS and Other Topics**

Year	Events on	Workshops/Residential Programmes							Seminars and Refresher Courses					
		International	National	SIRC	WIRC	NIRC	EIRC	CIRC	National	SIRC	WIRC	NIRC	EIRC	CIRC
2008	IFRS*	2	4	1	1	0	1	0	1	0	0	1	0	0
	Others	2	2	2	1	0	1	0	4	0	0	0	0	2
	Total	4	6	3	2	0	2	0	5	0	0	1	0	2
2009	IFRS*	0	2	3	0	0	1	1	0	0	0	0	0	0
	Others	2	11	1	1	0	1	1	3	2	0	0	0	0
	Total	2	13	4	1	0	2	2	3	2	0	0	0	0
2010	IFRS*	0	8	0	0	0	1	0	2	1	0	0	2	2
	Others	2	6	0	1	0	1	3	1	4	2	2	6	1
	Total	2	14	0	1	0	2	3	3	5	2	2	8	3
2011	IFRS*	0	8	0	0	0	0	0	0	1	2	0	0	0
	Others	0	7	0	0	0	2	0	8	0	0	2	0	3
	Total	0	15	0	0	0	2	0	8	1	2	2	0	3
2012	IFRS*	1	0	0	0	0	0	0	0	0	0	2	0	0
	Others	1	15	1	0	0	2	0	8	10	4	2	3	4
	Total	2	15	1	0	0	2	0	8	10	4	4	3	4

\*Denotes CPE programs containing IFRS as one of the topics being dealt  
 Source: Compiled from announcement of events in the journal "The Chartered Accountant"

**Table 2: Workshops/Residential Programmes and Other Training Programmes held on IFRS and Other Topics**

Year	Events on	Workshops/Residential Programmes						Other Training Programmes						
		National	SIRC	WIRC	NIRC	EIRC	CIRC	National	SIRC	WIRC	NIRC	EIRC	CIRC	
2008	IFRS*	0	3	1	0	0	0	0	0	0	0	0	0	0
	Others	0	6	9	2	2	0	1	2	4	1	0	0	2
	Total	0	9	10	2	2	0	1	2	4	1	0	0	2
2009	IFRS*	2	3	0	0	0	0	0	0	0	0	0	0	0
	Others	1	5	3	1	0	1	1	4	3	2	1	1	1
	Total	3	8	3	1	0	1	1	4	3	2	1	1	1
2010	IFRS*	0	0	1	0	2	0	0	0	0	0	0	0	0
	Others	3	1	2	2	4	3	0	0	1	0	0	0	0
	Total	3	1	3	2	6	3	0	0	1	0	0	0	0
2011	IFRS*	0	0	0	0	0	0	0	1	1	0	0	0	0
	Others	2	5	6	4	3	9	1	0	0	0	0	0	0
	Total	2	5	6	4	3	9	1	1	1	0	0	0	0
2012	IFRS*	0	0	0	0	0	0	0	0	0	0	1	0	0
	Others	4	28	33	2	4	16	0	0	2	0	0	0	0
	Total	4	28	33	2	4	16	0	0	2	1	0	0	0

\*Denotes CPE programs containing IFRS as one of the topics being dealt  
 Source: Compiled from announcement of events in the journal "The Chartered Accountant"

# Relevance of Black-Scholes Model for Banking Stocks – A Study of Select Stocks

Panduranga V\*

## Abstract

Option pricing is a crucial factor for hedgers as well as speculators in the options market. Black-Scholes model is a widely accepted option pricing model. An attempt is made in this paper to study the relevance of Black-Scholes model in the Indian Derivative market with specific reference to select banking stock options. Results of the paired sample T-test revealed that there is no significant difference between the expected option price calculated by the Black-Scholes Model and the market price of the options, in three out of four cases. It can be inferred that the model is relevant for banking stocks.

## Introduction

Option pricing is a very important in the derivatives market. Proper pricing of options eliminates the arbitrage opportunity. Mainly hedgers and speculators are found the derivatives market. Quantum of speculation is more in case of stock market derivatives. Pricing is relevant for both speculators and hedgers. There are two important models for option pricing – Binomial Model and Black-Scholes Model. Black-Scholes model is widely accepted. The present study is an attempt to study the relevance of Black-Scholes model in Indian Derivative market with specific reference to select banking stock options.

## Review of Literature

Fischer Black and Myron Scholes (1973) the actual options prices deviate in certain systematic ways from the values predicted by the formula. Option buyers pay prices that are consistently higher than those predicted by the formula. Option writers, however, receive prices that are at about the level of predicted by the formula. There are large transaction costs in the option market, all of which are effectively paid by option buyers. The difference between the price paid by option buyers and the value given by the formula is greater for options on low-risk stocks than the options on high risk stocks. Gurdip B, Charles C and Zhiwu (1997) regardless of performance yardstick, taking stochastic

volatility into account is the first order importance in improving upon the Black-Scholes formula. To rationalize the negative skewness and excess kurtosis implicit on option prices, each model with stochastic volatility requires highly implausible levels of volatility return correlation and volatility variation. S. Mc Kenzie, D. Gerace and Z. Subedar (2007) the Black Scholes model is relatively accurate. Comparing the qualitative regression models provides evidence that the Black Scholes model is significant at the 1 per cent level in estimating the probability of an option being exercised. All variables of each regression model exert expected signs of economical significance. The results based on a method of maximum likelihood indicate that the factors of the Black-Scholes collectively are statistically significant. The qualitative regression models also illustrates the significance of the Black-Scholes model under a logistic distribution is superior to a lognormal distribution. Indicating that the use of a jump-diffusion approach increases the tail properties of the lognormal distribution increases the statistical significance of the Black-Scholes model. The second stage least squares approach to test significance of the qualitative regression models provides significance at the 1% level.

Shyam Lal Dev Pandey and Mihir Das (2013), GAARCH (1,1) and Black-Scholes model can be

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used for pricing of index (call and put) and stock (put options) in the Indian stock market. The differences between model and actual prices varies based on time effect. GAARCH and BS Model provides better results for put options and call options with lesser volatility and fewer days to expiry. The results of paired sample T-test show that there is no significant difference between the model and market values. J. Orlin Grabbe (1983) has explored a set of inequality-equality constraints on rational pricing of foreign currency options, and has developed exact pricing equations for European puts and calls when interest rates are stochastic. The assumption that relevant variables follow diffusion processes allows us to set up a riskless hedge that uses no wealth, and which therefore must have a zero return in equilibrium. The construction of this hedge yields a partial differential equation whose solution is the European call option value. The put option equations are obtained immediately from the call equations through a put-to-call conversion equation that holds for FX options. Finally, it was shown that for sufficiently high values (low values) of the spot rate relative to the exercise price, American calls (puts) will be exercised prior to maturity. Hence (for positive interest rates) American FX options have values strictly greater than European FX options.

Ramazan G and Aslihan S (2003), Black-Scholes model is not the proper pricing tool in high volatility situations especially for very deep out-of-the-money options. Feed forward networks provide more accurate pricing estimates for the deeper out-of-the money options and handles pricing during high volatility with considerably lower errors for out-of-the-money call and put options. This could be invaluable information for practitioners as option pricing is a major challenge during high volatility periods. For the deepest out-of-the-money options, the Black-Scholes prices overestimate market prices whereas market prices are underestimated for the deeper and near out-of-the money options. In particular, the performance of the Black-Scholes model in explaining the observed market prices is quite poor for the deepest out-of-the-money options. Emilia Vasile and Dan Armeanu

(2009) the operators take into consideration the moneyness of an option and the duration up to the due term thereof, when they calculate the volatility on account of which they evaluate the option. This is a direct consequence of the fact the Black-Scholes model cannot be applied in its original form: the prices of the financial assets do not follow log-normal distribution laws. David Chappell (1992) One problem with the Black-Scholes analysis, however, is that the mathematical skills required in the derivation and solution of the model are fairly advanced and probably unfamiliar to many economists. For the riskless rate of return one could use as a proxy the T-Bill rate or LIBOR, suitably adjusted to provide an instantaneous rather than annual rate. For the variance rate, standard deviation various possibilities exist for its estimation.

### Objectives

1. To forecast the volatility of the underlying stocks of select of options.
2. To study the relevance of Black-Scholes Option pricing model.

### Hypothesis

**Ho:** There is no significant difference between the model prices and market prices.

**Ha:** There is a significant difference between the model prices and market prices.

### Research Design

This study is an applied research as it intends to find the relevance of Black-Scholes Model in Indian Derivative Market. Study population constitutes all the stock options traded on NSE. Deliberate Sampling method is applied. Banking stock options are selected, as banking stocks are less volatile. Two actively traded banking stock options are selected, one is public sector bank and the other one is private sector bank. Sample comprises Canara Bank and HDFC Bank. The historical data has been collected from the NSE website. Annualised volatility has been computed based on the daily closing prices of the calendar year 2012. Interest on 6.9 Government securities 2019 is taken as proxy for risk free rate. Actual option prices of January, February and March 2013 are used for

comparing with the model prices. Pricing is made in one month advance for two strike prices, one at the ITM and the another one OTM.

**Black – Scholes Option Pricing Model**

The Black-Scholes model for pricing stock options was developed by Fischer Black, Myron Scholes. It is widely accepted option pricing model. The model takes into account, spot price, variance, strike price, time to expiry and risk free rate. The formula for computing option price is as under:

**Call Option Premium**

$$c = SN(d_1) - Ke^{-rT} N(d_2)$$

$$d_1 = \frac{\ln(\frac{S}{K}) + (r + \frac{\sigma^2}{2})T}{\sigma\sqrt{T}}$$

$$d_2 = \frac{\ln(\frac{S}{K}) + (r - \frac{\sigma^2}{2})T}{\sigma\sqrt{T}} = d_1 - \sigma\sqrt{T}$$

**Put Option Premium**

$$p = Xe^{-rT}N(-d_2) - S_0N(-d_1)$$

**Relevance of Black-Scholes Model**

The call and put option price for calculated of select stocks through Black-Scholes Option Pricing Model. The inputs used for the study are: Annualised volatility computed on the basis of Calendar year 2012 data (Canara Bank – 0.3735 and HDFC Bank - 0.2008), risk free rate is 6.9 Government Securities 2019 ( existing rate - 0.809) and rest of the inputs are portrayed in the relevant tables. Paired sample T-test is applied to compare the actual option prices prevailing in the market with the option prices calculated as per Black-Scholes Option Pricing Model.

**Table 1 – Canara Bank Call Option Premium**

Observed date (Underlying closing price in Rs.)	Date of expiration	Strike price (Rs.)	Market premium (Rs.)	Model Premium* (Rs.)
December 28, 2012 (493.30)	January 31, 2013	480	23.25	30.14
		500	13.85	19.65
February 1, 2013 (472.2)	February 28, 2013	460	29.50	28.54
		480	14.25	18.19
March 1, 2013 (419.75)	March 28, 2013	400	30.85	31.01
		420	17.00	19.30

\* Expected Premium is calculated through Black -Scholes Option Pricing Model.

**Table 2 - SPSS Output for Paired Sample T-Test for Canara Bank Call Option**

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Market Premium - Model Premium	-3.02167	3.10129	1.26610	-6.27627	.23294	-2.387	5	.063

The p value of SPSS output as shown in Table 2 is greater than 0.05. Hence, null Hypothesis is accepted. There is no significant difference between the expected price and actual price of the Canara Bank call options.

**Table 3 – Canara Bank Put Option Premium**

Observed date (Underlying closing price in Rs.)	Date of expiration	Strike price (Rs.)	Market premium (Rs.)	Model Premium (Rs.)
December 28, 2012 (493.30)	January 31, 2013	480	8.40	13.62
		500	18.25	22.19
February 1, 2013 (472.2)	February 28, 2013	460	10.75	13.25
		480	20.60	22.76
March 1, 2013 (419.75)	March 28, 2013	400	7.25	8.56
		420	12.90	16.73

**Table 4 - SPSS Output for Paired Sample T-Test for Canara Bank Put Option**

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Market Premium - Model Premium	3.16000	1.42541	.58192	4.65588	1.66412	5.430	5	.003

The p value of SPSS output as shown in Table 4 is less than 0.05. Hence, null Hypothesis is

rejected. There is a significant difference between the expected price and actual price of the Canara Bank put options.

**Table 5 – HDFC Bank Call Option Premium**

Observed date (Underlying closing price in Rs.)	Date of expiration	Strike price (Rs.)	Market premium (Rs.)	Model Premium (Rs.)
December 28, 2012 (677.65)	January 31, 2013	660	30.15	28.90
		680	16.30	16.78
February 1, 2013 (640.15)	February 28, 2013	640	16.30	17.08
		660	8.00	8.51
March 1, 2013 (622.50)	March 28, 2013	620	17.05	17.89
		640	8.80	8.89

**Table 6 - SPSS Output for Paired Sample T-Test for HDFC Bank Call Option**

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Market Premium - Model Premium	-24167	.77778	.31753	-1.05789	57456	-.761	5	.481

The p value of SPSS output as shown in Table 6 is greater than 0.05. Hence, null Hypothesis is accepted. There is no significant difference between the expected price and actual price of the HDFC Bank call options.

**Table 7 – HDFC Bank Put Option Premium**

Observed date (Underlying closing price in Rs.)	Date of expiration	Strike price (Rs.)	Market premium (Rs.)	Model Premium (Rs.)
December 28, 2012 (677.65)	January 31, 2013	660	5.30	6.82
		680	12.00	14.56
February 1, 2013 (640.15)	February 28, 2013	640	11.30	12.63
		660	22.25	23.93
March 1, 2013 (622.50)	March 28, 2013	620	13.10	11.23
		640	23.55	22.09

**Table 8 - SPSS Output for Paired Sample T-Test for HDFC Bank Put Option**

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Market Premium - Model Premium	.62667	1.82907	.74672	-2.54616	1,29283	-.839	5	.440

The p value of SPSS output as shown in Table 8 is greater than 0.05. Hence, null Hypothesis is accepted. There is no significant difference between the expected price and actual price of the HDFC Bank put options.

**Conclusion**

Pricing of an option is very important for the buyers and sellers of the option contract. Black-Scholes option pricing model is applied for banking stocks in this study. Paired sample T-test results indicate that this model can be applied for banking stock options. However, in one out of four cases, there is a difference between expected price and market price of the option. Options may be underpriced or overpriced in the market. It is advised to find expected option price through BSOP Model can be computed before entering into an option contract.

**References**

1. David Chappell, On the Derivation and Solution of the Black-Scholes Option Pricing Model: a Step-by-step Guide, Spoudai, Juy-December 1992, Vol.42, No. 3-4, pp. 193-207
2. Emilia Vasile and Dan Armeanu, Empirical Study on the Performances of Black-Scholes Model, Romanian Journal of Economic Forecasting, 2009, pp. 48-62.
3. Fischer Black and Myron Scholes, The Pricing of Options and Corporate Liabilities, The Journal of Political Economy, Vol. 81, No. 3, May - June 1973, pp. 637-654.
4. Gurdip B, Charles C and Zhiwu, Empirical Performance of Alternative Options Pricing Models, The Journal of Finance, Vol. LII, No. 5, December 1997, pp. 2003-2049.
5. Hull, J., Options: Futures and other Derivatives, PHI
6. J. Orlin Grabbe, The Pricing of Call and Put Options on Foreign Exchange, Journal of International Money and Finance, 1983, pp. 239-253.
7. Kumar SSS, Financial Derivatives, PHI

8. Navaneet and Manish Bansal, Derivatives and Financial Innovations, TMH Business and Finance, Volume 1, No. 4, 2007, pp. 71-82.
9. Ramazan G and Aslihan S, Degree of Mispricing with the Black-Scholes Model and Nonparametric Cures, Annals of Economics and Finance, 4, 2003, pp. 73–101.
10. S. Mc Kenzie, D. Gerace and Z. Subedar, An Empirical Investigation of the Black-Scholes Model: Evidence from the Australian Stock Exchange, Australasian Accounting
11. Shyam Lal Dev Pandey and Mihir Das, Application of the GAARCH Model in Pricing in Indian Options Market, Proceedings of Tenth AIMS International Conference on Management, 2013.

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# Measuring Skill-Gaps of Frontline Employees in Marketing Services by Applying SERVQUAL Tool – A Case Study of North Andhra Post Offices

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## Abstract

India Post is a human resource intensive and service delivery oriented Government Department with over 158 years of public service. The study uses the SERVQUAL Three Column format model by linking the service quality with that of competencies of frontline staff. Statistical techniques namely, Zone of Tolerance charts, Regression analysis, one way ANOVA, exploratory factor analysis of expectations and perceptions of skill as analysed via SPSS 16.0 are used. The results arrived at are likely to strengthen the research on linking appropriate training to overall organisational performance. The Postal Assistant, despite being an employee, is an internal customer to the Department and hence he/she is the face of the Post Office and therefore a model is required to understand what dimensions of training quality are required to focus on to improve operational effectiveness. In this backdrop, the scale constructed is hoped to bridge the gap to reorient the training design focussing on the Core Knowledge, Winning Customers and cultivating the Ownership Skills at induction stage itself.

## Introduction

The Post Office worldwide is in a state of transformative change. The drivers are the impact of globalised trade, severe competition, speedy technological advancements and fast changing customer preferences. India Post is also not an exception to this. The Frontline employees in the Indian Postal Department are Postal Assistants (Group 'C' Category) who will sit behind the service counter and perform various transactions of the customers during the specified business hours on any given day. The customer will perceive the image of the department based on the service encounter across the counter. The Postal Assistant is expected to do about 3,000 transactions per month which means that he or she need to handle about 120 customers a day. Despite this, he or she needs to answer the queries of customers on various items of Postal Work which are not directly related to his current

functions. At times, the Postal Assistant has to make special efforts to give suitable replies to the customer. A great deal of time will be spent in clarifying the queries of the public. Added to this, there will be grievances from the users of Post Office. The Post Office offers over 30 Mail Products, 7 Savings Schemes, two types of Postal Life Insurance and many more services of other Companies/Institutions under retailing of services scheme like Sale of Application Forms, Acceptance of Fees etc. Adding to this, Post Office sells different kinds of stamps. The Postal Assistant who sits in the counter is expected to perform all these tasks with the help of desktop computer. His job is perceived to be routine and sedentary in nature. As his/her job is dependent on proper functioning of software and hardware, stress on account of these works is a common phenomenon.

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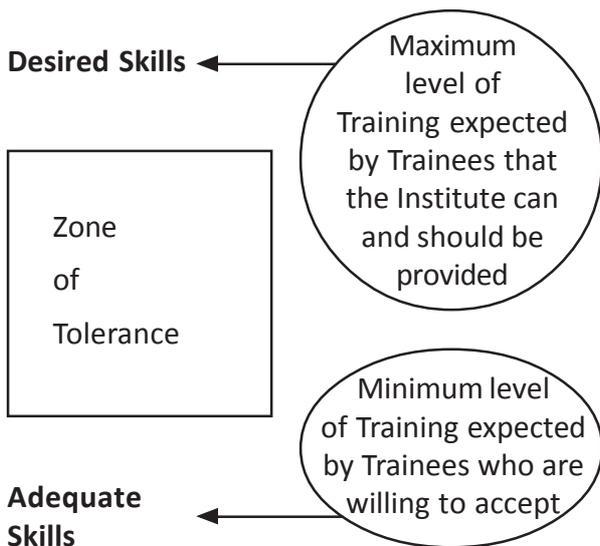
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**Literature Survey**

Parasuraman, Zeithaml and Berry (1993) developed a conceptual model of “zone of tolerance” (ZOT) defining it as the area between a customer’s “adequate expectations” (would) and “desired expectations” (should), revealing that customers estimate service performance against two standards; what they “desire for” and what they “feel acceptable” and that, a zone of tolerance separates desired service from adequate service. If performance is below “adequate” level (the minimum level), considered acceptable to the customers, the customers will be frustrated and their satisfaction with the provider will be undermined. Where performance exceeds desired service, customer will be delighted. ZoT is, thus, the range in which customers do not notice service performance (Figure 1). The ZoT is simply calculated by arithmetically subtracting the “minimum mean value” from the “desired mean value” of training level. The ZoT is narrow for important service attributes; implying that the service receivers are likely to be less willing to relax their expectations. Here, as a trainee employee of post office, he or she will be influenced by the training quality received in terms of expectations and perceptions.

**Figure 1 Nature of Trainee’s Expectations**



**Source: Modified illustration to Gap Model of V.A. Zeithaml, A. Parasuraman, & L.L. Berry**

The zone of tolerance represents the range of service performance that customers consider satisfactory (Peter Hennon, 2002).

The concept of SERVQUAL model can be applied to measure the skill-gaps which have direct bearing on the service quality rendered. The position of a postal assistant’s perception of training quality on the continuum depends on the nature of discrepancy between the expected training and the training perceived by the postal assistant. When the expected training is more than the actual training received, training quality is less than satisfactory. It will move towards totally unacceptable quality as the negative discrepancy between expected and perceived training increases. When expected training is less than perceived training, perceived training quality is more than satisfactory and will tend towards ideal quality with increased positive discrepancy between expected the perceived training levels. In this situation, when expected training is equal to perceived training, training quality is satisfactory. Training Quality (TQ) is thus computed as performance (P) minus expectation (E) (computed disconfirmation) to provide a means to Trainers for assessing and managing their training quality levels by working on how important parameters of trainee perception (P) and expectations (E). According to this perspective, the way to maximize the training quality is to maximize the difference between these measures, ‘P’ and ‘E’ i.e., to exceed the trainee’s expectations.

In a multi-sector study conducted by PZB (1994 b), SERVQUAL was augmented and refined to capture not only the discrepancy between perceived service and desired service – labelled as Measure of Service Superiority (or MSS) – but also the discrepancy between perceived service and adequate service – labelled as Measure of Service Adequacy (or MSA). The three-column format SERVQUAL instrument is proved most useful for diagnostic purpose and maximizing predictive power (Parasuraman et al., 1994; Kettinger and Lee, 1997; Caruana et al., 2000). The three-column format SERVQUAL has high evaluation on several indicators including ease of use, confidence, reliability and validity and

provided more detailed and accurate information (Parasuraman et al., 1994).

**Scope of the Problem**

The Department of Posts is on a path of substantial renewal. The transformation agenda over next few years will demand a change in the transactional factors at the Post Office level more so in the functioning of Postal Assistants. The training needs are to be assessed given this agenda of transformation. The success of transformation largely depends on how positively an employee in the counter has imbibed the spirit of planned change and aligned himself/herself with the Organisational Objectives so that the frontline employee would render quality service.

**Objectives**

**Objective Number 1**

“To analyse the Expectations and Perceptions of the Postal Assistants in terms of ‘Skills Required’ and ‘Skills Had’ and to construct ‘Zones of Tolerance’ for various parameters in order to measure the Training Quality.”

**Objective Number 2**

“To study the predictors of the training quality dimensions by way of Regression Analysis and also to study the Happiness Level of an employee of his/her Job-fit in terms of Age-wise, Educational Qualification-wise by conducting One Way ANOVA besides examining the correlation between the perception of training received and the overall happiness level as postal assistant.”

**Objective Number 3** “To ‘discover the factor structure’ and to subject the data to factor analysis so as to arrive at the principle factors that explain the underlying factors of the training quality to augment skills.”

**Research Design**

The study was undertaken through a structured closed-ended questionnaire administered by post to the Postal Assistants. Initially, focus group interviews were undertaken with the experts and the target group so as to establish the Content Validity. Based on this, suitable

changes were made and the final questionnaire consisting of twenty questions making up five dimensions was prepared taking cue from the Service Quality model by Parasuraman, Zeithaml and Berry (popularly known as PZB) SERVQUAL-three column format.

The five dimensions are:

1. Job - related Knowledge of Postal Assistant;
2. Marketing Skills;
3. Customer Handling Skills;
4. Job Ownership Skills; and
5. Innovative Skills.

The questionnaire is enclosed at Appendix- I.

**Sample Design**

**Table I: Demographic Profile of the Respondents**

Independent Variable	Attribute	Frequency	Percent
Designation	Supervisor	50	12.04
	Postal Assistant	365	87.95
	<b>Total</b>	<b>415</b>	
Service (Years)	< 1 Yr	105	25.30
	1-5	58	13.97
	5-10	37	8.915
	10-25	175	42.16
	> 25	40	9.63
	<b>Total</b>	<b>415</b>	
Age Group	Below 25	106	25.54
	26-35	50	12.04
	36-45	135	32.53
	46 & above	124	29.87
	<b>Total</b>	<b>415</b>	
	SSC	50	12.04
	Intermediate	81	19.51
	Graduation-Arts	99	23.85
	Graduation-Science	81	19.51
	Graduation-Computers	5	1.204
	Graduation-Engineering	42	10.12
	Post Graduation-Arts	33	7.951
	Post Graduation - Science	13	3.132
	Post Graduation - Comp	9	2.16
	Post Graduation - Engineering	2	0.48
	<b>Total</b>	<b>415</b>	

Simple random sampling method was resorted to for collecting the sample. The questionnaire was sent by post to the target population. The Questionnaire which was received back was

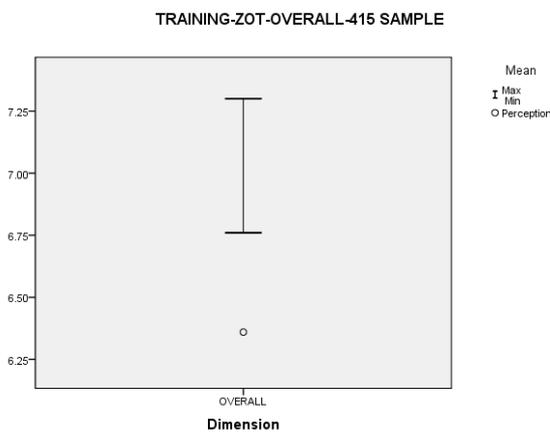
thoroughly scrutinized to include effective sample and a final sample of 415 was used for the analysis. The sample is collected randomly from across the Postal Region covering four Revenue Districts namely, Srikakulam, Vizianagaram, Visakhapatnam and East Godavari districts of Andhra Pradesh State. The sample characteristics in terms of experience, age, education level and nature of designation are presented at Table I.

**Data Analysis, Findings and Interpretation**

**Results of Objective Number 1**

**a. Overall Sample and the Zone of Tolerance**

**Graph I**



As seen from the Graph I, the minimum level of training expectation is averaged at 6.76 and the maximum which is the desired level of expectation of training required is recorded with mean 7.3. However, the perception of training received is 6.36. The Zone of Tolerance recorded a zone interval of 0.54 points. The gap between the perception and the minimum expectation which is called Measure of Training Adequacy (MTA) is (-) 0.4 points and the gap between the perception and the maximum expectations, which is called as the Measure of Training Superiority (MTS) is (-) 1.04 points. This only highlights the need to focus on the training parameters as noted in the Appendix-I keeping the needs of the Postal Assistants in order to push the perception close to minimum expectations.

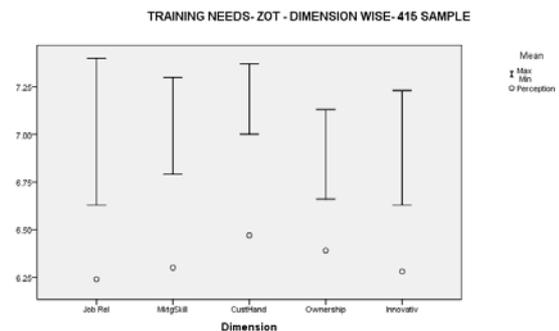
**b. Dimension-wise Zone Of Tolerance**

There are five dimensions as stated above and the skill needs analysis is depicted in the Graph II. As seen from this High and Low graph, the Job-Related Knowledge dimension has a band (gap) of 0.77 which is highest among all dimensions indicating the fact that the Trainees are “not very serious” about this dimension in relation to other Dimensions. The ZoT intervals for other Dimensions are- Marketing Skills: 0.51; Customer Handling Skills: 0.37; Ownership Skills: 0.47 and for Innovative Skills: 0.60. The Dimension Customer Handling Skills has a low band width of 0.37 which implies that the Trainees’ tolerance of Minimum (adequate) and Maximum (desired) is within a narrow margin and they are “very serious” about this dimension and they are less willing to tolerate the extent of skills inputs in this dimension. Therefore, the Trainer has to be very careful with the items relating to Customer Handling Skills (Question No from 7 to 12).

The relative importance of dimensions from high to low in terms of perceptions is as follows:

Customer Handling Skills, Job Ownership Skills, Marketing Skills, Innovative Skills and Job related Knowledge as Postal Assistant.

**Graph II**



**c. Parameter (Question) -Wise Zone of Tolerance (ZOT)**

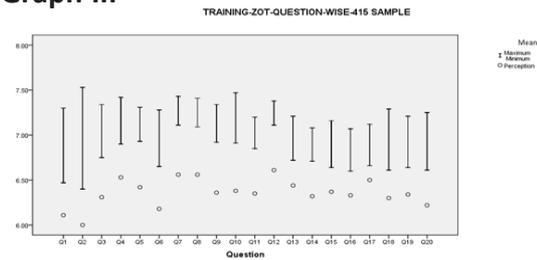
With the help of Means worked out Question-wise from the overall sample, Question-wise ZoT is constructed as shown in the Graph III.

The lowest means for adequate (minimum) expectations, desired expectations and perceptions were recorded for question numbers 16 (Planning Tasks well in advance (Scheduling):

Job Ownership Skills Dimension), 16 (Planning Tasks well in advance (Scheduling): Job Ownership Skills Dimension) and 2 (Command over Rules and Procedures related to Job: Job Knowledge Dimension) with mean values 6.6, 7.07 and 6.0 respectively. The implication is that the inputs on Question No 2 are not “very much required”. In fact, this input relates to strategy on a macro scale. The Postal Assistant is seldom contacted on the strategic issues. However, the question deals with the day to day tasks and planning within the sphere of the duty chart of the postal assistant. The findings are quite interesting revealing the fact that the job-description of this category of employees is routine nature and they do not plan well in advance which is again not in the interest of Organisation Development. On the other hand, the highest means for adequate expectations, desired expectations and perceptions were recorded for question numbers, 7 and 12 (Ability to listen carefully to the needs of the Customers: Customer Handling Skills Dimension and Relations with Colleagues in the counter and Supervisors: Customer Handling Skills Dimension ), question no 2(Command over Rules and Procedures related to Job: Job-related Dimension) and question no 12 (Relations with Colleagues in the counter and Supervisors: Customer Handling Skills Dimension), with mean values 7.11(Q. No 7), 7.11(Q. No 12), 7.53(Q. No 2) and 6.61(Q. No 12) respectively. Knowing and listening to the needs of the Customers across the Counter and having relations with the colleagues and supervisors are the most expected parameters from the view point of a Postal Assistant. Also, the Postal Assistant will generally maintain good relations with his/her colleagues and supervisors which were also attested by the perceptions score. Apart from these findings it is noteworthy to observe the ZoT intervals of parameters. From the Graph III, it is seen that the Question No.2 (Command over Rules and Procedures related to Job: Job-related Dimension) has ZoT band width more than any other parameter. This indicates that the Trainee’s expectations are spread over and they are “not very sensitive” to this parameter. They are willing to allow a gap of 1.13 points

(Perceptions – Minimum expectations of Q.No.1). For Question No.7 and 8 (Ability to listen carefully to the needs of the Customers and Ability to serve customers speedily and correctly of Customer Handling Skills Dimension), the ZoT interval (the mean difference between the minimum and maximum expectations) is only 0.32 which means that the Trainees are less willing to relax their expectations.

**Graph III**



**d. The Training Adequacy and the Superiority of the Training Quality**

The difference between the perceptions and minimum and maximum expectations will give the Measure of Training Adequacy (MTA) and the Measure of Training Superiority (MTS). Perceptions can never exceed the desired expectations which are the maximum expectations. Therefore, the perception’s scores generally are to operate within the ZOT band. Should the difference score results in negative, it implies that the trainer needs to redesign the course content and also work on the training methods by which the trainee will meet his/her minimum expectations.

**Table II: Analysing Measures of Training Adequacy and Superiority**

Q. No	MTA(P-Min)	Question No	MTS(P-Max)
Q7	-0.55	Q10	-1.53
Q9	-0.55	Q1	-1.19
Q10	-0.53	Q4	-1.1
Q8	-0.53	Q8	-1.1
Q5	-0.52	Q11	-1.03
Q11	-0.49	Q7	-0.98
Q6	-0.47	Q2	-0.89
Q3	-0.45	Q3	-0.89
Q2	-0.41	Q5	-0.87
Q4	-0.37	Q6	-0.85
Q1	-0.36	Q9	-0.85

As seen from the Table II, except the question numbers one and four, the other questions recorded the difference score more than the average of (-) 0.40 in case of Training Adequacy. Whereas in case of Training Superiority, question numbers One, Four, Seven, Eight, Ten and Eleven recorded difference scores more than the average of (-) 0.93. It implies that the perception is much less, than the Expectations in these parameters. Further, the parameters No 7 (Ability to listen carefully to the needs of the Customers and 10(Ability to instil confidence in the mind of a Customer) suggest very high expectations contrastingly with very low perception. On the other hand, question numbers One (Knowledge on the Postal Products and Services) and Six (Ability to cross sell the postal products and services across the counter) and Nine (Ability to solve the grievances of the Customers) recorded relatively more perception score vis-à-vis high expectation, ultimately resulting a negative score.

**Table III: MTA-Dimension-wise**

Question No	MTA(P-Min)
Customer Handling Skills	-0.53
Marketing Skills	-0.49
Job Related Knowledge	-0.39
Innovative Skills	-0.35
Ownership Skills	-0.27

As seen from the Table III, the dimensions are arranged in the order of decreasing gaps. In case of MTA the gap is more in Customer Handling Skills suggesting low perception and high expectation with small gap in Job Ownership Skills dimension. Two dimensions, namely, Marketing Skills and Customer Handling Skills recorded difference score more than the average of (-) 0.41.

The relative importance order of Dimensions in terms of MTA (high expectations to low) is as follows:

Customer Handling Skills, Marketing Skills, Job Related Knowledge as Postal Assistant, Innovative Skills and Job Ownership Skills.

**Table IV: MTS- Dimension-wise**

Question No	MTS(P-Max)
Job-related Knowledge	-1.16
Marketing Skills	-1
Innovative Skills	-0.95
Customer Handling Skills	-0.9
Ownership Skills	-0.74

Further in case of MTS at Table IV, the gap was more in case of Job-related Knowledge and relatively less in case of Ownership Skills. The difference score in case of two dimensions namely, Job Related Knowledge as Postal Assistant and Marketing Skills exceeded the average difference score of (-) 0.95 and the dimension Innovative Skills equalled the average score.

**Results of Objective No 2**

**Predictors of Overall Training Quality in terms of Measure of Training Adequacy (MTA), Measure of Training Superiority (MTS) and Perception**

The regression analysis was conducted using Training Quality dimensions as independent variables against a separate measure of overall happiness level of job-fit. The items were summed up to reproduce the original five dimensions which were analysed separately against the overall happiness level. All dimensions requested for analysis have been approved paving way for regression analysis.

The model summary reports the strength of the relationship between the model and the dependent variable namely overall happiness level of job-fit. R, the multiple correlation coefficient, is the linear correlation between the observed and model- predicted values of the dependent variable. Its value indicates the extent of relationship. R Square, the coefficient of determination, is the squared value of the multiple correlation coefficient. The values presented poor relationship between the model and the overall happiness level in terms of job-fit.

The ANOVA Tables V, VI and VII test the acceptability of the model from a statistical point of view. The regression row displays information about the variation accounted for by the model.

The residual row displays information about the variation that is not accounted for by the model. The significance value of the F statistic is less than .05 in case of MTA and .008 in case of Perception, which means that the variation explained by the model is not due to chance. However in case of MTS, the F statistic is .303 suggesting the acceptance of null-hypothesis. While the ANOVA table is useful to test the model's ability to explain any variation in the dependent variable, it does not directly address the strength of that relationship.

**Table V: Measure of Training Adequacy**

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	37.991	5	7.598	3.585	.003 <sup>a</sup>
	Residual	866.814	409	2.119		
	Total	904.805	414			

**Table VI: Measure of Training Superiority**

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	13.210	5	2.642	1.212	.303 <sup>a</sup>
	Residual	891.595	409	2.180		
	Total	904.805	414			

**Table VII: Perception**

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	34.080	5	6.816	3.202	.008 <sup>a</sup>
	Residual	870.725	409	2.129		
	Total	904.805	414			

In order to verify that multicollinearity was not a problem, the five dimensions were regressed against one another, and variance inflation factor analysis and tolerance level analysis were performed. In all cases, that is, in case of MTA, MTS and perception analysis no significant multicollinearity exists between the dimensions. The correlation matrix is presented at Tables VIII, IX and X. The scores of VIF and tolerance represent acceptable limits (Tolerance should be more than .1 and VIF should be less than 10: Hair et al.).

**Table VIII: Measure of Training Adequacy**

Model	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	Beta			Tolerance	VIF
(Constant)		96.058	.000		
1 Job Related Knowledge	-.203	-2.466	.014	.344	2.906
Marketing Skills	.002	.021	.983	.243	4.120
Customer Handling	.204	1.918	.056	.206	4.843
Ownership	-.089	-.972	.331	.277	3.606
Innovative	-.078	-.892	.373	.304	3.287

**Table IX: Measure of Training Superiority**

Model	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	Beta			Tolerance	VIF
(Constant)		84.754	.000		
1 Job Related Knowledge	-.073	-1.062	.289	.510	1.962
Marketing Skills	-.038	-.424	.672	.300	3.331
Customer Handling	.206	2.273	.024	.293	3.408
Ownership	-.061	-.656	.512	.278	3.592
Innovative	-.029	-.313	.754	.282	3.546

**Table X: Perception**

Model	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	Beta			Tolerance	VIF
(Constant)		22.896	.000		
1 Job Related Knowledge	-.056	-.596	.552	.262	3.823
Marketing Skills	-.088	-.872	.383	.230	4.347
Customer Handling	.306	2.553	.011	.164	6.110
Ownership	-.059	-.605	.546	.247	4.047
Innovative	.061	.641	.522	.260	3.845

The relative importance of the significant predictors is determined by looking at the standardised coefficients (Beta). Based on the beta values, the relative importance of dimensions category-wise are as follows:

**MTA:** Customer Handling, Marketing Skills, Innovative Skills, Ownership Skills and Job-related Skills.

**MTS:** Customer Handling, Innovative Skills, Marketing Skills, Ownership Skills and Job-related Skills.

**Perception:** Customer Handling, Innovative Skills, Job-related Skills, Ownership Skills, Marketing Skills.

It is worth noting that Customer Handling dimension emerged as the most important predictor in all these categories with high beta value and low significance. It is worth comparing the relative importance of Dimensions as found in Zone of Construction graphs as stated above which are as below:

**ZoT (MTA):** Customer Handling Skills, Marketing Skills, Job-related skills of Postal Assistant, Innovative Skills and Ownership Skills.

**ZoT (MTS):** Job-related skills of Postal Assistant, Marketing Skills, Innovative Skills, Customer Handling Skills and Ownership Skills.

**ZoT (Perception):** Customer Handling Skills, Ownership Skills, Marketing Skills, Innovative Skills and Job -related skills of Postal Assistant.

As seen from the above results, it is seen that the two methods, namely Regression and ZoT could not give completely identical results in terms of importance of the dimensions. The statistical technique ZoT is not tested for its psychometric soundness. However the technique of ZoT is simple to use and interpret the results. The findings of ZoT are direct in nature and on the other hand complex relationships exist in the regression analysis. Both techniques are empirically valid one and not necessary that both should yield identical results. However the dimension Customer handling skills has emerged as the most important dimension in five categories. In case of other dimensions, the priority was altered. Notwithstanding this, it can be stated that all these dimensions are important from the point of view of the Trainer and the Trainee though these dimensions have subtle differences among themselves.

**One Way ANOVA with Happiness Level as Postal Assistant vis-à-vis Age Groups, Service Experience, Education Qualification**

As seen from the Tables XI, XII and XIII, there is significant difference in the factors namely Age Groups, Service Experience and Education vis-à-vis “Happiness level as Postal Assistant” rejecting null-hypothesis that there is no significant difference. The alpha values for the analysis of Age Groups, Experience and

Education were .001, .023 and .048 which are below .05, the set significance level.

Also, the scores of Perception of all sample was analysed at Table XIV with reference to the Overall Happiness level as Postal Assistant by conducting Pearson Correlation to know the extent of correlation and the significance. The test established correlation between the Perception of Training received and the Overall Happiness level as Postal Assistant.

**Table XI: Happiness Level –Age Group**

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	37.652	3	12.551	5.949	.001
Within Groups	867.153	411	2.110		
Total	904.805	414			

**Table XII: Happiness Level- Experience**

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	109.344	33	3.313	1.587	.023
Within Groups	795.461	381	2.088		
Total	904.805	414			

**Table XIII: Happiness Level- Education**

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	36.943	9	4.105	1.916	.048
Within Groups	867.862	405	2.143		
Total	904.805	414			

**Table XIV: Happiness Level verses Perception Correlation**

Correlations			
		Happiness Level	Perception
Happiness Level	Pearson Correlation	1	.162**
	Sig. (2-tailed)		.001
	N	415	415
Perception	Pearson Correlation	.162**	1
	Sig. (2-tailed)	.001	
	N	415	415

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

**Question-Wise One Way ANOVA**

Question-wise one way ANOVA was conducted against entire sample with Overall Happiness Level as the dependent variable for three categories, namely, for MTA, MTS and

Perception. These results established of what parameters are significant determinants of the dependent variable, the happiness level. The empirical analysis offers scope for the service provider to look for the strategic areas to work upon to improve the happiness at work so that organisational performance enhances. The results are as follows:

#### **MTA**

Out of 20 items of the questionnaire, ten questions have emerged as the significant differentiators of happiness level. These are: Q1 (sig.0.001), Q2 (sig.0.012), Q3 (sig...035), Q4 (sig.0.03), Q8 (sig.0.033), Q15(sig.0.05), Q16(sig.0.042), Q18(sig.0.01), Q19(sig.0.013) and Q20(sig.0.003). Rest items have not emerged as significant as the p value is more than 0.05.

#### **MTS**

Out of 20 MTS items of the questionnaire, two questions have emerged as the significant differentiators of happiness level. These are: Q1 (sig.0.023), Q8 (sig.0.042). Rest items have not emerged as significant as the p value is more than 0.05.

#### **Perception**

Out of 20 items of the questionnaire, sixteen questions have emerged as the significant differentiators of happiness level. These are: Q1 (sig.0.023), Q2 (sig.0.009), Q4 (sig...007), Q7(sig.0.05), Q8(sig.0.04), Q9(sig.0.02), Q10(sig.0.007), Q11(sig.0.031), Q12(sig.0.04), Q13 (sig.0.011), Q14(sig.0.006), Q5(sig.0.014), Q16 (sig.0.021), Q18(sig.0.01), Q19(sig.0.035) and Q20(sig.0.007). Rest items have not emerged as significant as the p value is more than 0.05.

As seen from the above, Perception analysis yielded better solution giving as many as sixteen items which have explained the variation and emerged as the significant differentiators.

#### **Objective No 3**

##### **Validation and Reliability Analysis**

Any research instrument must be both reliable and valid (Churchill, 1979). Validity is concerned with whether the findings are really about what

they appear to be about (Saunders *et al.*, 2003). Validity is defined as the extent to which data collection method or methods accurately measure what they were intended to measure (Saunders *et al.*, 2003). Cooper and Shindler (2003) believe that validity refers to the extent to which a test measures what we actually wish to measure.

Face or content validity is checked as the scale items are vetted by the experts. According to Kothari (2000), more items in a Questionnaire will give greater reliability. Therefore 20 items considered in the present study are adequate to yield greater reliability. Reliability is measured using the correlation statistic Cronbach (Alpha) on a scale of 0 to 1 where 'one' denotes perfect correlation between item scores and 'zero' no correlation between item scores. Values greater than .7 are regarded as acceptable evidence of dimension reliability (Nunnally, 1978, George and Mallery, 1995). In this case, on conducting reliability analysis the Alpha values were calculated as .968, .939 and .972 respectively for MTA, MTS and perception which suggest unidimensionality of the scale.

It is seen that from the Reliability analysis, all items seem to be contributing reasonably well to the scale's reliability and a deletion of any item does not reflect much on the Cronbach alpha value (reliability).

Another method to decide the reliability of the scale is to analyse the inter-item correlations. Hair *et al.*, (1998) suggests that the Inter-item correlation should exceed .30 for the data to be reliable. Summary Item Statistics presents, current study statistics where the inter-item correlation is .637, .562 and .686 respectively for MTA, MTS and perception which are well above the prescribed value.

Items when grouped into the item-dimension correlations for each of the five original dimensions, these Alpha values for the overall instrument is high, as the reliability coefficients for the five original dimensions exceed the .70 cut-off recommended by Nunnally (1978) and Hair *et al.*, (1988).

### Objective Number 3-Factor Analysis Objectives and Scope of Factor Analysis

An Exploratory Factor Analysis (EFA) of the factor structure of the scale developed was undertaken with SPSS version 16.0 to examine the factor structure of variables. This yields such factors which are few in number after reduction, that explain the underlying characteristic of the dependent variable, the training quality. In other words, the multiplicity of parameters is reduced to minimum so that the solution is reduced to few factors and when viewed together explains the dependent variable well. Thus factor analysis is the proven statistical method to test the psychometric soundness of the construct and to yield factor solution for the problem defined. The EFA procedure employed is ‘principle components method’ for extraction with ‘varimax rotation’ and factors with eigen values greater than one were alone retained (Hair, Anderson, Tatham and Black, 1998). Factor Analysis is the permutation of multi-variate statistical methods primarily used to identify the underlying structure in data (i.e., to determine the correlations among a large number of variables). Factor analysis refers to the cluster of inter-dependence techniques whereas it summarises the information from a large number of variables into factors, depending on their relationships (Hair *et al.*, 1988).

#### Perquisites for Validating Factor Analysis

Field (2005), reviewed many suggestions about the sample size necessary for factor analysis and concluded that it depends on many things. According to him, over 300 cases are probably adequate but communalities after extraction while undertaking factor analysis should be above .5. Ideally, there should be a ratio of more than 20:1 cases per item which was satisfied in the present study. Given the sample size of 415, Hair *et al.*, (1995) suggested that conservative factor loadings of greater than .50 were to be considered significant at .05 level of significance. In order to study the suitability of construct for taking up factor analysis, Bartlett’s Test of sphericity (which tests the hypothesis that the matrix is an identity matrix) should be

significant. It is a statistical test for estimating the overall significance of all correlations within a correlation matrix. The test result as shown in Tables XV, XVI and XVII show that it is highly significant (Sig. = 0.000), which indicates that the factor analysis processes is correct and suitable for testing multi-dimensionality. The KMO(Kaiser-Meyer-Olkin) which is a measure of sampling adequacy is found to be .967, .961 and .968 in case of MTA, MTS and Perception indicating that the factor analysis test has proceeded correctly and the sample used is adequate as the minimum acceptable value of KMO is .6(Kim and Mueller,1978) (Tables XV, XVI and XVII). Therefore, it can be concluded that the Matrix did not suffer from multicollinearity (i.e., variables that are very highly correlated) or singularity (i.e., variables that are perfectly correlated). Small values for the KMO indicate that a factor analysis of the variables may not be appropriate, since the correlations between variables cannot be explained by the other variables (Norusis, 1993). The KMO measure is an index for comparing the magnitudes of the observed correlation coefficients to the magnitudes of the partial correlation coefficients.

**Table XV: KMO and Bartlett’s Test- Measure of Training Adequacy**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.967
Bartlett’s Test of Sphericity	Approx. Chi-Square	9.032E3
	df	190
	Sig.	.000

**Table XVI: KMO and Bartlett’s Test- Measure of Training Superiority**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.961
Bartlett’s Test of Sphericity	Approx. Chi-Square	7.821E3
	df	190
	Sig.	.000

**Table XVII: KMO and Bartlett’s Test-Perception**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.968
Bartlett’s Test of Sphericity	Approx. Chi-Square	1.070E4
	df	190
	Sig.	.000

Another condition for validation is that ideally Communality should be above .5 which is satisfied in the present study.

**Exploratory Factor Analysis (EFA): MTA (Table XVIII)**

On conducting EFA by way of Principal Component Analysis method, three eigen values are extracted whose extraction sums of squared loadings total, exceeded one with percentage variance explained 76.797 in case of Measure of Training Adequacy.

**Table XVIII: Total Variance Explained-Factor Analysis - MTA**

MTA: Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.24	66.21	66.21	13.24	66.21	66.21	6.38	31.92	31.92
2	1.11	5.56	71.77	1.11	5.56	71.77	4.69	23.49	55.42
3	1.00	5.02	76.79	1.00	5.02	76.79	4.27	21.3	76.79

**Extraction Method: Principal Component Analysis**

**Exploratory Factor Analysis (EFA): MTS (Table XIX)**

On the other hand, two eigen values are extracted whose extraction sums of squared loadings total exceeded one with percentage variance explained 66.427 for Measure of Training Superiority.

**Table XIX: Total Variance Explained-Factor Analysis - MTS**

MTA: Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.118	60.592	60.592	12.118	60.592	60.592	7.020	35.098	35.098
2	1.167	5.835	66.427	1.167	5.835	66.427	6.266	31.330	66.427

**Extraction Method: Principal Component Analysis**

**EFA-PCA: Perception (Table XX)**

In case of Perception, two eigen values are extracted whose extraction sums of squared loadings total exceeded one with percentage variance explained 76.56.

**Table XX: Total Variance Explained-Perception**

MTA: Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.286	71.432	71.432	14.286	71.432	71.432	8.834	44.168	44.168
2	1.026	5.128	76.560	1.026	5.128	76.560	6.478	32.392	76.560

**Extraction Method: Principal Component Analysis**

**Factor Analysis of Measure of Training Adequacy** was conducted and the component matrix was rotated to improve the solution. The result is at Table XXI. The interpretability of the factors can be improved through Rotation. Rotation maximises the loading of each variable on one of the extracted factors whilst minimising the loading on all other factors. Rotations work through changing the absolute values of the variables whilst keeping their differential values constant. Orthogonal (varimax) method assuming factors are independent, i.e., no correlation between factors is employed with Kaiser Normalization. A total of three components are extracted against the five dimensions in the original construct. However all factors are extracted as their loading value exceeded the required minimum of .5.

**Table XXI: Measure of Training Adequacy**

Question No	Component		
	1	2	3
Q10	.821		
Q9	.806		
Q7	.775		
Q8	.768		
Q11	.764		
Q12	.726		
Q5	.695		
Q6	.642		
Q19		.718	
Q16		.716	
Q15		.693	
Q18		.681	
Q20		.652	.502
Q17		.641	
Q14	.572	.640	
Q13	.577	.599	
Q2			.793
Q4			.743
Q3			.698
Q1			.689

**Table XXII: Measure of Training Superiority**

Question No	Component	
	1	2
Component MTS		
Q 19	.828	
Q 15	.798	
Q 18	.796	
Q 16	.794	
Q 14	.783	
Q 20	.779	
Q 13	.716	
Q 17	.668	
Q 7		.754
Q 5		.746
Q 6		.725
Q 8	.528	.721
Q 4		.684
Q 11	.525	.672
Q 9	.529	.652
Q 3		.646
Q 12	.556	.627
Q 1		.546

**Results of Factor Analysis for MTS:** Similarly factor analysis was conducted for **Measure of Training Superiority** by using the same method PCA and the rotation method being Varimax with Kaiser Normalisation. Values of factor loadings less than .5 are not selected to be in the final output (Hair et al., 1995). On rotation the component matrix yielded two component solutions as shown in the Table XXII. However, two parameters are eliminated altogether upon rotation. Here also the parameters 18, 19 and 20 of Innovative Skills got fused with Ownership Skills which retained its original parameter items. On the other hand, items one, three, four of Job-related Knowledge dimension and parameters five, six of Marketing Skills got loaded on to Customer Handling Skills which lost parameter no 10 (Ability to instil confidence in the mind of a Customer) as the item loading could not cross the stipulated .5. However item no two (Command over Rules and Procedures related to Job) of Job-related Knowledge also could not load clearly on to any factor as the value is less than .5. Items 8, 9, 11 and 12 have cross-loadings more than .4. These two factors can be named as Job Ownership Skills (Q. Numbers 1,3,4,5,6,7,8,9,11 and 12) and Customer Winning Skills (13, 14, 15, 16, 17, 18, 19 and 20).

**Factor Analysis of Perception (Table XXIII)**

Also factor analysis was conducted for Perception by using the same method PCA and the rotation method being Varimax with Kaiser Normalisation. The SPSS output is presented at Table XXIII. Values of factor loadings less than .5 are not selected to be in the final output (Hair et al., 1995).

**Table XXIII: Perception**

Question No	Component	
	1	2
Q7	<b>.855</b>	
Q5	<b>.827</b>	
Q10	<b>.823</b>	
Q8	<b>.822</b>	
Q6	<b>.820</b>	
Q9	<b>.802</b>	
Q11	<b>.767</b>	
Q4	<b>.762</b>	
Q12	<b>.732</b>	
Q2	<b>.658</b>	
Q1	<b>.615</b>	.526
Q3	<b>.603</b>	
Q19		<b>.820</b>
Q20		<b>.779</b>
Q18		<b>.778</b>
Q14	.534	<b>.734</b>
Q15	.527	<b>.727</b>
Q16	.577	<b>.706</b>
Q13	.593	<b>.672</b>
Q17		<b>.611</b>

**Results of Factor Analysis for Perception:** On rotation the component matrix yielded two component solutions. All items are accepted and above the minimum prescribed .5. Here also, the parameters 18, 19 and 20 of Innovative Skills got fused with Ownership Skills which retained its original parameter items. Items 1, 13, 14, 15 and 16 have cross-loadings more than .4. On the other hand items one, two, three, four of Job-related Knowledge dimension and parameters five, six of Marketing Skills got loaded on to Customer Handling Skills. These two factors can be named as Job Ownership Skills (Q. Numbers 1,2,3,4,5,6,7,8,9,10,11 and 12) and Customer Winning Skills (13, 14, 15, 16, 17, 18, 19 and 20).

**Interpretation of Factor Analysis:** Overall, it can be concluded that the factor analysis of

MTA, MTS and Perception yielded three factors, two factors and two factors solution respectively to explain the training quality. It is up to the user to choose the specific solution depending on the need. In other words, when the purpose of training is to ensure adequate quality expectations i.e., at the minimum level, the training design needs to be based on three factors namely, Core Skills (Q. Numbers 1,2,3 and 4), Job Ownership Skills (Q. Numbers 5,6,7,8,9,10,11 and 12) and Customer Winning Skills (Q. Numbers 13,14,15,16,17,18,19 and 20). On the other hand, if the aim is to take care of desired expectations at maximum level of trainee expectations of course content in relation to his/her job and happiness, it ought to have two components namely, Job Ownership Skills (Q. Numbers 1,3,4,5,6,7,8,9,11 and 12) and Customer Winning Skills (13, 14, 15, 16, 17, 18, 19 and 20). In case of perceptions of training received, the factor solution is again of two components as that of Measure of Training superiority in terms of Job Ownership Skills (Q. Numbers 1,2,3,4,5,6,7,8,9,10,11 and 12) and Customer Winning Skills (13, 14, 15, 16, 17, 18, 19 and 20). In other words, these dimensions shape the perception of training quality hence; the service provider needs to factor in these two dimensions in the training curriculum.

### Implications and Limitations

Generally the Post Office worldwide is an entity of the State and the subjects are functioning in a tradition and rule-driven Government Departments. No evidence could be obtained from literature regarding similar research taken up in the Postal Services elsewhere, both, in India and abroad. This particular research study has highlighted the gaps in the Training Design to prepare the frontline staff with required skill set to handle the transformative change that is happening across India Post, clearly suggesting the need to relook at the content and the delivery of the training course. Though, the service quality model (SERVQUAL) advocated by the triad Parasuraman, Zeithaml and Berry, is primarily intended to study the service delivered from the service user point of view, by this research, the notion of their model in terms of the comparative

diagnostic value of ideal and perceived ratings, applied in this research study exclusively for the frontline staff.

The Postal Assistant is the face of the Indian Postal Department and hence a model is required to understand what dimensions of training quality are required to focus on taking in to account the different age groups, the educational qualifications, the service experience and of course the employee overall happiness level as 'internal customer' of the organisation. The skill requirements of India Post are diverse considering the vivid cultural milieu representing the country and the scale of operations India Post is in to over 158 years. In this backdrop, the scale constructed is hoped to bridge the gap to reorient the training design focussing on the Core Knowledge, Winning Customers and cultivating the Ownership Skills at induction stage itself. The purpose of this study is also to enable the Managers to understand the expectations of the Trainee and to meet their expectations of training required in terms of various items that formed the scale. Also, the study results of the effect of age, qualification and the experience vis-à-vis the Happiness level of Job-fit of an employee are hoped to help the Managers to factor-in these results while devising and conducting the training programmes whether it is in-service or induction.

As the study was confined to one particular geographical region, further research is required to confirm the scale of its psychometric soundness in a diverse environment consisting of multi-sectors given the importance of equipping the frontline staff with right competencies. Also, future researchers can build on this to evolve a generic model of skill set measurement and their need analysis to be fulfilled through proper training design.

### References

1. A. Parasuraman, Dhruv Grewal & R. Krishnan. (2004). *Marketing Research – First Indian Adaptation*. New Delhi: Pashupati Printers Pvt. Ltd.

2. Berry, L L, Parasuraman, A. (1991). *Marketing services: Competing through Quality*, London: Free Press Macmillan.
3. Department of Posts, Government of India. (2010). Proceedings from INDIA-POST 2010: *Conference on harnessing the outreach Infrastructure of India's Postal Network*.
4. **Contributors:** India Post, the World Bank, Invest India-Economic Foundation.
5. L.R. Gay & Peter Airasian. (2000). *Educational Research – Competencies for Analysis and Application (Sixth Edition)*. Prentice Hall: New Jersey.
6. Parasuraman, A. Zeithaml, V.A. & Berry L.L. (1985). A Conceptual model of service quality and its implication for future research. *Journal of Marketing*, 49, Autumn, 41-50.
7. Parasuraman, A., Zeithaml, Valarie. A, & Berry, L.L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64(1), Spring, 12-40.
8. Parasuraman, A, Berry, L.L & Zeithaml, V.A. (1991). Refinement and Reassessment of the SERVQUAL scale. *Journal of Retailing*, 67(4), 420-450.
9. Parasuraman, A., Zeithaml, Valarie. A, & Berry, L.L. (1994). Alternate scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing*, 70(3), 201-230.
10. Parasuraman, A. Zeithaml, Valarie A, & Berry, L.L. (1994). Moving forward in service quality Research: Measuring Different Customer – expectation level, comparing alternative scales, and examining the performance – behaviour intentions. Retrieved from <http://www.msi.org/publications>. Accessed on March 8, 2008.
11. Rama Prasad.M.V. & Upender.V. (2011). Constructing Zone of Tolerance of Postal Life Insurance Service Level – A Case Study of North Andhra Pradesh. *Gavesana Journal of Management*, 3(2), 44-53.
12. Rama Prasad.M.V. & Upender.V. (2012). Factor Analysis of Life Insurance Service Quality of Post Office – An Application of SERVQUAL tool. *GITAM Journal of Management*, 10(2), 18-36.
13. Rama Prasad.M.V. & Upender.V. (2012). Customers Expectation in Logistics and Communication Industry – A Research Study in Andhra Pradesh, Karnataka and West Bengal, *PES Business Review Journal*, 7(2), 15-26.
14. Rama Prasad.M.V. & Upender.V. (2013). Comparative Study of Zones of Tolerance of Service Quality of Indian Departmental Major Post Offices – An Application of SERVQUAL Tool. *Proceedings from National Conference on Strategic Quality Management proceedings 5-6<sup>th</sup> April, 2013 at GITAM, Visakhapatnam*, 88-102.
15. Valarie A Zeithaml, Mary Jo Bitner, Dwayne D Gremler & Ajay Pandit. (2008). *Services Marketing Integrating Customer Focus Across the Firm*. New Delhi: Tata McGraw-Hill Publishing Company Limited.
16. Zeithaml, Valarie A., Leonard L. Berry, and Parasuraman A. (1988). Communication and Control Processes in the Delivery of Service Quality. *Journal Marketing*, 52.
17. Zeithaml, VA, Parasuraman, A., & Berry, L.L. (1990). *Delivering quality Service: Balancing customer Perception and expectations*. New York, NY: The Free Press,
18. Zeithaml, V., Berry, L.L., & Parasuraman, A. (1993). The Nature and Determinants of Customer Expectation of Service Quality. *Journal of the Academy of Marketing Science*. 21(1), 1-12.

19. Zeithaml, V.A. Bitner, M.J. (1996). *Services Marketing*, Mc Graw–Hill: New York.

20. Zeithaml, V., Berry, L.L., & Parasuraman, A. (1996). The Behavioural Consequences of Service Quality. *Journal of Marketing*, 60 (4), 31-46

**Appendix**

Sl.No	Item	The minimum Skill level I expect, out of 9 points is									The Skill Level I actually desire or hope (maximum)for, out of 9 points, is									But my Perception of the actual Skill I acquired from the training, is								
		Low			to			High			Low			to			High			Low			to			High		
I	Job-related knowledge of postal assistant	←—————→									←—————→																	
1	Knowledge on the Postal Products and Services	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
2	Command over Rules and Procedures related to Job	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
3	Ability to use Meghdoot and Sanchay software	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
4	Clarity My Job	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
II	<b>MARKETING SKILLS</b>	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
5	Ability to understand the needs of customers across the counter	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
6	Ability to cross sell the postal products and services across the counter	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
III	<b>CUSTOMER HANDLING SKILLS</b>	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
7	Ability to listen carefully to the needs of the Customers	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
8	Ability to serve customers speedily and correctly	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
9	Ability to solve the grievances of the Customers	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
10	Ability to instil confidence in the mind of a Customer	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
11	Understanding verbal and non verbal communication of the Customers	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
12	Relations with Colleagues in the counter and Supervisors	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
IV	<b>JOB OWNERSHIP SKILLS</b>	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
13	Sense of Ownership of the work place	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
14	Sense of Ownership of tasks given	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
15	Identifying Postal Assistant's Role with Organization Core Values like service before self	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
16	Planning Tasks well in advance(Scheduling)	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
17	Delivering more than the optimum level (Productivity)	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
V	<b>INNOVATIVE SKILLS</b>	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
18	Ability to do multi-tasks like able to work in other branches; trouble shooting etc	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
19	Ability to systematize the tasks so as to complete early and efficiently	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
20	Creative Experimentation of Post Office tasks so as to make tasks easier, speedy and cut delays	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9

# Factors Affecting Citizen Intention to Adopt E-Government Services in India

Jaya Iyer\* & R.K.Srivastava\*\*

## Abstract

The intention to adopt e-government services involves major factors and the purpose of this study is to identify them. The aim of e-government is to deliver services to the public, especially through the e-government portal. From various adoption studies, this paper strongly proposes a model to consider various factors when adopting e-government services. The factors recognized in this study are computer anxiety, computer self-efficacy, responsiveness, familiarity, website design and security/privacy. The study utilizes quantitative method for questionnaire preparation and data collection. The factors have been tested by a survey of 148 users of e-government services in India, particularly in Maharashtra. The survey was carried out using the convenience sampling method. Multiple regression analysis showed that the four factors of computer anxiety, computer self-efficacy, familiarity, and website design provide a strong base for the positive association and to motivate a number of people to use E-government services. The other two factors, security/privacy and responsiveness, reflected fewer positive responses to accept the e-government services.

## Introduction

There is a ripe witness to establish the power of information and communication technologies (ICTs), has brought a tremendous change in the business world. Most of the countries use internet and worldwide web in their day - day business and other operations. In India ICTs and e-Government is a boom given by the technological innovation. This is the reason for more and more people continue to take participate in the adoption of ICTs like mobile usage. Globally, our world wide web improved appreciably with a lot of advantages introduced in ICTs to offer valuable services to citizens. It plays a key role in transforming their performance in the field of government, business, politics, economics, and social. It helps the society to communicate effectively, interact actively, utilizing the resources efficiently and also provide more value added services. The main purpose of ICTs is to act as a key to change the society, it enhance the quality services to the public. Various governmental organizations in both developed and developing

countries implement e-government system through ICTs. The major benefit of using ICTs are it increases more effective and efficient services to the public, reduce cost, time, and fatigue to allow more participants to involve themselves in the e-government system. It supports the governmental activities through their transparent mode of presentation and framework structure of their rules and regulations.

The long researched innovative application of ICTs in private sector organization has placed an immense pressure on public sector to rethink their way of working. Instead of traditional manual system slowly public sector also moves to information technology (IT) world. For the economic development of the country the service industry plays a vital role in the competitive environmental sector. It has acknowledgeable pressure in public sector to deliver quality service and improved efficiency. The citizen needs and expectations are not static; it is flexible according to the competitive situation. But the service is very slow when

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compared to their expectation since the requirement for decision making is based on various hierarchies in the government department.

India with great population emerged to show its ability the steps taken by the government and its seriousness to provide valuable and factual information through ICTs. India's greatest strength is information Technology (IT). Though we have highly disciplined wizards in ICTs fields the desired policies, aim and objectives to provide simple, efficient, accurate services to public are held back, due to non-building of infrastructure, lack of literacy, poverty, political instability and high level of corruption etc. The objective of this paper is to identify major factors that contribute to the dependability of the intention to adopt e-government system in India.

#### **Literature Review on E-Government**

Literature means the science of letters in any language on a given subject. In the same way literature review on the e-government and its different perspectives and all the things related to e-government becomes a true one with a current scenario. E-government means an exchange of ideas or information between the government and public through the common media i.e. compute. It enables to increase the increases efficiency, responses readily and cuts cost (Donna and Yen, 2006). As defined by Kumar et al., (2007), E-Government stands as powerful mechanism to deliver improved services to citizens, businesses, and other members of the society with modified necessary changes to guide and helps the government to manage information system.

E-Government is defined also as "a generic term for web-based services from agencies of local, state and federal governments. In E-Government, the government uses information technology and particularly the Internet to support government operations, engage citizens, and provide government services. The interaction may be in the form of obtaining information, filings, or making payments and a host of other activities via the World Wide Web" (Sharma & Gupta, 2003, Sharma, 2004, Sharma

2006, Palvia & Sharma, (2007).). The author's opinion on e-Government created a stable awareness in the minds of the people to completely engage with full confidences for obtaining information and completing mandatory operations of the government. Generic term includes a meaning to give necessary information required to citizens' or society through e-government system.

In other words, as Badran (2004) indicated, e-Government is a default copy of classical and real government with a difference that e-Government lives in networks, information systems and technologies, and simulates the function of the classical government that exists in the physical manner in different governmental sectors. In addition to serve the most and basic important element in the society, i.e. the citizen, e-Government envisaged as helping national economy and improving the country image. E-Government strategy outlines the goals, processes and actions to achieve transparency, accountability and good governance, efficient and citizen-centered, and enabling citizens and businesses to access government services and information as efficiently and effectively as possible through the use of internet and other channels of service delivery and communication. Badran covers a number of activities of citizens respond and associate with requirements of the people as well as the government and comfortably sit under one umbrella.

#### **Adoption Studies Literature**

The existence of evolution of life continues to exist perpetually to the adoptability according to the nature i.e. it declares the process of mighty survival. The same concept demands in the e-Government to adopt the adoptability to use the fullest capacity of ICTs to offer a highest degree of its services to the citizens. The present world trend shows all the developed and developing countries shifted from traditional to e-Government system. If you keenly note the e-Government adopted by many countries defer from one another according to the nature of wants and demands of the people. There is bound to have some degree of disagreement in the implementation of e-Government depends

upon their capacity to adopt supported by various factors like infrastructure, literacy, culture, income status, internet penetration etc. There is lot of variation exist in the implementation of e-Government due to the complexities involved in adopting the new system.

Bwalya (2009) has proposed an e-Government adoption model for Zambia using case study approach in Health Management system and Immigration Management System. The model designed to explain various factors for e-government adoption are User characteristics (perceived risk, perceived control, and internet), Website design (perceived usefulness, perceived ease of use), service quality, client satisfaction, Government commitment, Cultural Awareness (local language content, culture incorporation, usability and trust), Adequate and inexpensive IT infrastructure. The author proposes that this model will suit only for all SADC (Southern African Development Community) countries because this model is built on the similar need base of South African countries.

Taking a note from 660 online sample survey conducted in Jordan, Mofleh and Wanous (2008) proposed a model for factors influencing citizens' adoption of e-Government services in Jordan. Their research model explained the various factors of Compatibility, Awareness, Previous Experiences, Trust in government and Trust in Internet are strongly influenced the use of e-government system. The conclusion of their survey study from the five factors only three factors, Compatibility with e-Government, Trust in Internet and Trust in Government show a significant welcome and willingness of the citizens' to use e-government system the other two factors awareness and previous experience has not shown any significant interest with intention to use e-government system.

Rokhman (2011) proposed a model for factors influencing E-Government Adoption in Indonesia By using online survey and collected 751 respondents out of which 705 respondents who have intention to adopt e-government and only

46 (6.1 percent) have no intention to adopt e-government. The variables identified in this study are relative advantage, compability, image and ease of use. The two variable relative advantage and compability is significant predictor for intention to use e-government, whereas the variable of image and ease to use has no significant with intention to use e-government. From the above study it is clear that Indonesia has vast number of computer culture citizens', which reflects and shows their acceptance with the factors relative advantage and compability to use e-government services. It also shows the disagreement with the variable image and ease of use in the use e-government services.

Taking the constructs from perceived characteristics of innovation by Moore and Benbasat's (1991), Carter and Belanger (2004) developed and tested a model with 140 respondents to identify the factors that influence citizen adoption of e-Government services in USA. The construct used during the study are meritorious relative advantage, image, compability and ease of use but the model concludes the ease of use has no appreciable significant influence in the citizen adoption for e-Government services.

Al-adawi et. al, (2005) have developed a conceptual model for citizen adoption which strengthens the factors which are derived from TAM, risk, and trust literature for the use of e-government and invokes the citizens' desire for interaction with the online services. The factors proposed in the model are perceived ease of use, perceived usefulness, trust, perceived risk. There is no denying that the factors proposed by the authors, also serves as a key note in differentiating between citizens' satisfied intention to use e-government and citizen's intention to conduct transactions on e-government website.

Warkentin et. al, (2002) proposed a suitably encouraging model with various advantages to draw attention of the citizens' go for the adoption of e-government for paying online tax in US. The model is tested by using online survey of 100 respondents. The factors tested in the

model are trust (Institutional structures, Disposition of trust, Characteristics based trust, Experience), perceived risk, perceived behavioral control, perceived ease use, perceived usefulness, culture. The paper strongly contributes the element of confident and complete trust is an important factor for intention to adopt e-Government services.

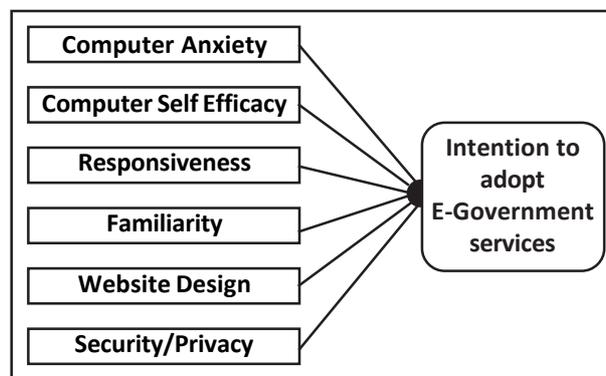
Colesca and Dobrica (2008) proposed a model, clarifying the factors affecting citizens' desires in the adoption of e-government services in Romania. Actually the authors modified the TAM (perceived ease of use, perceived usefulness) model by including four more factors to it (perceived trust, perceived quality, user satisfaction and demographic factors). The model is validated using data collected from 481 respondents. The modified version of this model stresses the main objective of the citizens' capability and compability goes for the e-government adoption behavior of citizens'. The proposed study suggest that the citizen's who have higher perception about usefulness, ease of use, quality and trust in e-government services will have high degree of satisfaction which accelerates the adoption rate of e-government services.

Kaur and Rashid (2008) have determined the factors for hindering e-government adoption in Malaysia. Based on literature review they identified four factors by using online survey of 171 respondents. The factors are complexity, security concern, privacy concern and IT illiteracy. According to the authors all the four factors are negatively affect the adoption rate.

Based on the various adoption studies this paper proposed six factors from many composite factors. These factors have been chosen with an idea to understand the relationship between one dependent variable (intention to adopt e-government services) and six independent variables (computer anxiety, computer self efficacy, familiarity, security/privacy, personalization, and responsiveness. The objective here is to identify which factor contributes more intensive for intention to adopt e-government services.

### Theoretical Model for Intention to Adopt E-Government Services

There are different theoretical models and frameworks used in the e-government literature to explain intention to use e-government services by citizens (Carter & Belanger, 2005, Carter & Weerakkody,2008; Ebbers & van Dijk 2007; Layne & Lee, 2001; Lau et al. 2007; Reddick, 2005, 2004; Van Dijk et al.2008). Warkentin et al. (2002) describe adoption as the intention of citizens to engage in e-Government to receive information and request services from the government. Carter and Belanger (2005) measure it as intent to use, while Gilbert and Balestrini (2004) measure it as willingness to use e-Government services. Both willingness and intention to use could be considered as one-dimension to measures adoption. This study is to test the relationships between intentions to use e-Government services along with six independent variables (computer anxiety, computer self-efficacy, familiarity, responsiveness, security/privacy, website design) which are depicted in figure-I.



#### Computer Anxiety

Computer anxiety is defined in many ways by different authors, but each one definition is close to each others. According to Herdman (1983) defined computer anxiety as emotional fear, apprehension, and phobia felt by individuals towards interactions with computers or when they think about using computers. This paper suggest that the anxiety of computer as a strange emotional sensitiveness and feelings of a person away from normal behavior when they interact with the computer. These conduct survey also find the influencing factor dismisses the negative feelings of the users, but when they

understand the usage of computer bring more suitable solution for their requirements.

### **Computer Self-Efficacy**

Computer self-efficacy is defined as, "a measure of an individual's judgment of his or her own abilities with computers, an assessment of self-confidence" (Durnedell et.al, 2000). According to this study computer self-efficacy is defined as a study of introversion of one's mind to hold great confidence and ability to perform task individually to meet any kind of situation to bring about one's own skill with perfect judgment. This study aimed in understanding the impact of self-efficacy on intention to adopt e-government services.

### **Responsiveness**

Responsiveness is a mandatory reaction for any government services to give an immediate reply to citizens' queries. (Yang & Jun, 002). Online user's expectation is to get answers for their inquiries instantly and without any delay, quick response will also assist the e-government users to take their decision faster in their operational activity. Delayed responsiveness diminishes the interest of the people to use the e-government services. For any government, quick responsiveness is a strong mechanism to bring about a great influence and enthusiasm and also bring a large number of citizens' in e-government usage.

### **Website Design**

The importance of well organized website design should envelopes its quality for online government users as it makes unfurled link between the citizens' and the government. Basically the value of website design compels to give maximum citizens' satisfaction. Website has the power to get closer with citizens' by the government. It also logically holds two main aspects which are technical functioning and website appearance (Suskasame, 2010). In the view of Lee and Lin (2005) their study suggested that website design as the important dimension for e-service quality. Website design should be simple one with proper layout, color, graphic, and proper guidelines to use their online system.

The necessary information for the users should be provided with available option for opting different languages. It should consist of proper hyperlinks as well as appropriate icons for each and every terminology. Santos (2003) opined that government should be more alert for maintenance of the website on a periodical basis to avoid any broken links while using online system.

### **Security/Privacy**

Security means a complete protection and guarding users from misuse and malpractice. There is a general tendency among the citizens that there is lack of security while doing online transaction on e-Government website (DeBenedictis et.al, 2002). In e-Government operations, the complete security and privacy of information is an unstated agreement between the citizens and the government. Though it is not a strictly fundamental right in India, it holds a primary importance in developed countries. Absolute security and privacy is only a myth it is highly impossible to protect them from intruders. The uncertainty of security and privacy reduces the interest and confidence in using online system.

### **Familiarity**

Familiarity is a process of human mind to bring back or to recollect the past experiences in our mind. Our mind registers and interacts with new things when we hear or see them for the first time, which it learns and records, and brings back when we happen to see something similar (Luhmann, 1979). In the same way citizens, who are not familiar with the use of online system, they become more familiar once they come in contact with the government agencies for their operational technique.

### **Research Methodology**

To test the research model for this study, a survey was conducted. A questionnaire was designed to gather the necessary information. Each item in the model had a corresponding question. Each item of the questionnaire was measured on a seven-point Likert scale with end points of 'strongly agree' (7) and 'strongly disagree' (1). A total of 162 responses were

collected, out of which 148 were usable with 91% of response rate.

**Demographic Profile of Respondents**

The demographic details of the respondents are given in Table-I, out of 148 respondents 99 respondents were male and 49 were female with the percentage of 66.0 and 32.7 respectively. Majority of the respondents are from the younger generation between the age group 20-29 years with 91.2%, there are only 6.8% of the respondents between age group of 30-39 and 1.7% were aged 40-49 and 0.7 % were aged 50 and above, because old group people prefer only traditional method for doing government task due to incompatibility with the computer usage. Higher education groups are more belongs to graduate and postgraduate with the 35.3% and 56.7%. Even though the majority of respondents are using internet in their day to day life, but awareness regarding the usage of e-government services is very less.

**Table-I Respondent Demographic Profile**

Measures	Item	Frequency	Percentage (%)
Sex	Male	99	66.0
	Female	49	32.7
Age Group	20-29	135	91.2
	30-39	10	6.8
	40-49	2	1.4
	50-59	1	.7
Education	10 <sup>th</sup>	1	.7
	12 <sup>th</sup>	1	.7
	Graduate	53	35.3
	Postgraduate	85	56.7
Employment Status	Yes	27	18.0
	No	117	78.0
Internet Usage	Yes	148	100.0
	No	0	0.0
Internet Access Frequency	Daily	141	94.0
	Weekly	9	6.0
	Monthly	0	0.0
	Less than once a month	0	0.0

Considering the Kaiser-Meyer-Olkin (KMO) and Bartlett’s test, the KMO metric for measuring sampling adequacy is 0.784 that means it appropriates to use factor analysis on data.

Factor analysis was conducted to evaluate the consistency, stability of the model. Principal component analysis with varimax rotation was used to evaluate and identify the component factors. The results of exploratory factor analysis are given in Table-II. Six factors that have an Eigen value of more than 1.0 were derived from the data (Aladwani & Palvia, 2002). Six constructs were loaded. All the items loaded above (0.54), which is the minimum recommended value in IS research (Straub et al., 2004; Dwivedi et al., 2008). All three items of the Computer Anxiety constructs loaded at factor (1) and represents the underlying constructs of Computer Anxiety. Coefficients for the first construct varied between 0.509 and 0.906. All three items of the Familiarity construct loaded at factor (2).The coefficient for this component varied between 0.728 and 0.875. All three items of the Security/ Privacy construct loaded at factor (3). The coefficient for this component varied between 0.772 and 0.804. All seven items of the Website Design construct loaded at factor (4). The coefficient for this component varied between 0.575 and 0.833. All two items of the Responsiveness construct loaded at factor (5). The coefficient for this component varied between 0.702 and 0.736. Finally, all four items of the Computer Self efficacy Emotional appeal construct loaded at factor (6). The coefficient for this component varied between 0.713 and 0.799.The analysis revealed that the items are loaded properly in the construct discriminate validity (loaded with at least 0.50) (Straub et al., 2004; Dwivedi et al., 2006; Carter et al., 2008), and the factor analysis results confirmed the findings. This means that the collected data and the findings that were obtained from this instrument are valid and reliable. The findings from the factor analysis confirm the internal consistency of measures and construct validity.

**Table-II: Results of Exploratory Factor Analysis in the Study**

Construct	No. of items	Factor Loading
Computer Anxiety	CA1	.509
	CA2	.869
	CA3	.898
	CA4	.906
Familiarity	FAM1	.840
	FAM2	.875
	FAM3	.728
Security/Privacy	SP1	.772
	SP2	.792
	SP3	.804
Website Design	WD1	.601
	WD2	.660
	WD3	.665
	WD4	.698
	WD5	.833
	WD6	.575
	WD7	.606
Responsiveness	RESP1	.736
	RESP2	.702
Computer Self Efficacy	CSE1	.743
	CSE2	.718
	CSE3	.799
	CSE4	.713

In order to identify the internal consistency of each construct given the model, the Cronbach alpha coefficients were computed. It is expressed as a number between 0 and 1. Table-III shows the calculated Cronbach alpha analysis, the results reveals the adequate reliability because all values were greater than 0.7 and more than half were greater than 0.8. As a rule of thumb for if the value lies between 0.7 d" á e" 0.8, the survey result is acceptable ((Nunnally, 1978).

**Table-III Cronbach's Alpha Analysis**

Variables	Cronbach's alpha
Computer Anxiety	.850
Familiarity	.859
Security/Privacy	.797
Website Design	.843
Responsiveness	.727
Computer Self Efficacy	.806

A multiple regression is used to analyze the relationship between a single dependent variable and several independent variables (Hair et.al, 2003). Computer Anxiety, Computer self efficacy, Website Design, Familiarity, Security / Privacy, Responsiveness are the independent factors were used in the multiple regression, the analysis result are presented in Table IV(a). Although the sum of squares (63.889) is larger than residual sum of squares (42.926), the value of F was found significant at 0.001 level (p<0.001). The analysis shows the independent variables that explain 59.8% (R Square = .598) of the variance in intention to use e-government services.

**Table-IV(a) Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.773 <sup>a</sup>	.598	.578	.60314

a Predictors: (Constant), Computer Anxiety, Computer self efficacy, Website Design, Familiarity, Security /Privacy, Responsiveness

**Table-IV(b) ANOVA (a)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63.889	6	10.648	29.271	.000 <sup>a</sup>
	Residual	42.926	118	.364		
	Total	106.815	124			

a Dependent Variable: Intention to use

**Table-V Multiple Regression Analysis for Most Important Factors Coefficients 'a'**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.443	.443		1.007	.316
	Computer Anxiety	.039	.039	.175	2.730	.007
	Computer self efficacy	.054	.054	.270	3.790	.000
	Website Design	.067	.067	.298	4.075	.000
	Familiarity	.053	.053	.311	4.414	.000
	Security/Privacy	.062	.062	.082	1.218	.226
	Responsiveness	.070	.070	.102	1.378	.171

a Dependent Variable: Intention to use

The results of multiple regression analysis is indicated in table-V which shows that familiarity was found to be the most significantly related factor affecting the intention to use e-government services. Website Design is second important factor followed by Computer self efficacy is the third significant and finally computer anxiety is the fourth significant factor for intention to use e-government services. Security / Privacy and responsiveness are not significant factor for intention to use e-government services.

**4.2 Hypotheses Tested**

Based on the research model six hypotheses were listed for this study. The following Table-VI summaries the numbers of the hypotheses suggested and offered in the paper. The hypotheses were tested using multiple regression analysis. Based on the analysis it is found that four hypotheses are supported and two hypotheses are not supported. Table IV (b) demonstrates research hypotheses that were tested to examine whether the independent variables significantly explained the dependent variables. The research hypotheses were supported by the data and it means that all the independent variables significantly clarified and explained the intention to use e-government system.

**Table-VI Summary of Hypotheses**

S.No	Hypotheses	Test	Result
H1	Computer Anxiety of e-Government services has negative influence on intention to use e-Government system.	Regression Beta = .175 p-value = .007	Supported
H2	Computer Self Efficacy of e-Government services has negative influence on intention to use e-Government system.	Regression Beta = .270 p-value = .000	Supported
H3	Familiarity of e-Government services has positive influence on intention to use e-Government system.	Regression Beta = .311 p-value = .000	Supported
H4	Responsiveness of e-Government services has positive influence on intention to use e-Government system.	Regression Beta = .102 p-value = .171	Not Supported
H5	Security of e-Government services has positive influence on intention to use e-Government system.	Regression Beta = .082 p-value = .226	Not Supported
H6	Website design of e-Government services has positive influence on intention to use e-Government system.	Regression Beta = .298 p-value = .000	Supported

**Conclusion**

This research paper attempts to get a bright glimpse about the factors that facilitate the intention to adopt e-government services. The factors are derived from various literatures and tested with different country perspectives. Those factors are proved relevance to e-government services by using quantitative surveys. The analysis revealed that the four factors computer anxiety, website design, familiarity and computer self efficacy are contributing more for intention to adopt e-government services. For successful implementation and survival of e-government system it should have better adoptability, security, interactivity, compability, flexibility, simplicity, utility and feasibility and also with a well organized infrastructure to influence the people to come forward more and more to involve themselves in the use of e-government services. In the absence of any one

of the elements said above the implementation of e-government will not attain its goal. It is important to consider the study's limitations; the sampling method used in the study is convenience sampling. Given that a convenience sampling method is not considered as an effective method of representation of the population because sample is limited to a particular state. The perception of intention to use e-Government system may vary from different dimensions because the number of respondents though drawn is varied in terms of age, income level, gender, education etc. The method used for data collection was survey method using questionnaire. Researchers have limitations with this type of data collection, due to low response rate, complex and confusing questions and surveys that might be too long (Cooper and Schindler, 2003). Hence it is hard to decide whether the theoretical model proposed is applicable in other regions and different states of India.

#### References

1. Al-Adawi, Z., Yousafzai, S., & Pallister, J. (2005). Conceptual model of citizen adoption of e-government. In *The Second International Conference on Innovations in Information Technology (IIT'05)*.
2. Aladwani A M and Palvia P C (2002), "Developing and Validating Instrument for Measuring User-Perceived Web Quality", *Information & Management*, Vol. 39, No. 6, pp. 467-476.
3. Badran, Abbas.(2004) E-government strategy to the application, Beirut, Arab Institution for Studies and Publication
4. Bwalya, K. J. (2009). Factors affecting adoption of e-government in Zambia. *The Electronic Journal of Information Systems in Developing Countries*, 38.
5. Carter L, Schaupp L and Evans A (2008), "Antecedents to e-File Adoption: The US Perspective", Proceedings of the 41st Hawaii International Conference on System Sciences, pp. 216.
6. Carter, L. & Bélanger, F. (2005) The utilization of e-government services: citizen trust, innovation and acceptance factors. *Information Systems Journal*, 15, 5-26.
7. Carter, L. and Weerakkody, V. (2008) 'E-government adoption: A cultural comparison', *Information Systems Frontiers*, 10(4), pp 473-482.
8. Carter, L., & Belanger, F. (2004). The influence of perceived characteristics of innovating on e-government adoption. *Electronic Journal of E-government*, 2(1), 11-20.
9. Colesca, S. E., & Dobrica, L. (2008). Adoption and use of e-government services: the case of Romania. *Journal of Applied Research and Technology*, 6 (03).
10. Cooper, D. R. Schindler. PS (2003). Business Research Methods. *McGraw-Hill Companies*.
11. DeBenedictis, A. Howell, W. & Figueroa, R. (2002), E-Government defined: an overview of the next big information technology challenge, *Issues in Information Systems*, Vol 3 pp. 130-136.
12. Donna, E. and Yen, D.C. (2006) 'E-government: evolving relationship of citizens and government, domestic, and international development', *Government Information Quarterly*, Vol. 23, No. 2, pp.207-235.
13. Durndell, A., Haag, Z., & Laithwaite, H. (2000). Computer self efficacy and gender: A cross cultural study of Scotland and Romania. *Personality and Individual Differences*, 28(2000), 1037-1044.
14. Dwivedi, Y. and Williams, M. D. (2008) Demographic influence on UK citizens' e-Government adoption, *Electronic Government, an International Journal (EG)*, Vol. 5, No. 3, Pp. 261-274.

15. Dwivedi, Y., Papazafeiropoulou, A., and Gharavi, H. (2006). "Socio-Economic Determinants of Adoption of the Government Gateway Initiative in the UK", *Electronic Government*, (3:4), pp. 404-419.
16. Ebbers, W. E., & van Dijk, J.A.G. M., (2007), "Resistance and support to electronic government, building a model of innovation", *Government Information Quarterly*, Vol. 24, pp. 554-575.
17. Gilbert, D., and Balestrini, P. (2004) "Barriers and benefits in the adoption of e-Government", *The International Journal of Public Sector Management*, 17(4), 286-301.
18. Hair, J. F., Tatham, R. L., Ande, R. E., & Black, W. C. (2003). *Multivariate Data Analysis*. Pearson Education.
19. Herdman, P. C. (1983). High tech anxiety. *Management Focus*, 30(3), 29-31.
20. Kaur, Jasber., & Rashid, N. D. N. (2008). Malaysian electronic government adoption barriers. *Public Sector ICT Management Review*, 2(1), 38-43.
21. Kumar, V., Mukerji, B., Irfan, B. and Ajax, P. (2007) Factors for Successful e-Government Adoption: A Conceptual Framework, *The Electronic Journal of e-Government*, 5, 1, 63-77
22. Lau, T. Y., Aboulhosen, M., Lin, C., Atkin, D. J (2007). Adoption of e-government in three Latin American Countries: Argentina, Brazil and Mexico", *Telecommunication Policy*, Vol.32, No.2, PP 88-100.
23. Layne, K. & Lee, J., (2001), "Developing fully functional E-government: a four stage model. *Government Information Quarterly*, Vol. 18, No.2, 2001, pp 122-136.
24. Lee G-G and Lin H-F (2005), "Customer Perceptions of e-Service Quality in Online Shopping", *International Journal of Retail & Distribution Management*, Vol. 33, No. 2, pp. 161-176.
25. Luhmann N (1979), *Trust and Power*, John Wiley & Sons Ltd., Great Britain.
26. Mofleh, S. I., & Wanous, M. (2008). Understanding factors influencing citizens adoption of e-government services in the developing world: Jordan as a case study. *INFOCOMP–Journal of Computer Science*, 7(2), 1-11.
27. Moore, G. C. and I. Benbasat 'Development of an instrument to measure the perceptions of adopting an information technology innovation' *Information Systems Research* Vol 2 No 3 (1991) pp 173-191.
28. Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
29. Palvia, S. C. J., & Sharma, S. S. (2007). E-government and e-governance: definitions/ domain framework and status around the world. *Foundation of e-government*, 1-12.
30. Reddick, C. G., (2004) "A two –stage model of e-government growth: theories and empirical evidence for U.S cities", *Government Information Quarterly*, Vol. 21, pp.51-64.
31. Reddick, C. G., (2005) "Citizen Interaction with .e-government: From the streets to servers?" *Government Information Quality*, Vol.22, pp.38-57.
32. Rokhman, A. (2011). E-Government Adoption in Developing Countries; the Case of Indonesia. *Journal of Emerging Trends in Computing and Information Sciences*, 2(5), 228-236.
33. Santos J (2003), "E-Service Quality: A Model of Virtual Service Quality Dimensions", *Managing Service Quality*, Vol. 13, No. 3, pp. 233-246.
34. Sharma, S.K. (2004) Assessing E-government Implementations, *Electronic Government Journal*, 1(2), 2004, pp. 198-212.
35. Sharma, S. K. (2006) An E-Government Services Framework, *Encyclopedia of Commerce, E-Government and Mobile Commerce*, Mehdi Khosrow-Pour, Information Resources Management

- Association, Idea Group Reference, USA, pp. 373-378. 2006.
36. Sharma, S. K., & Gupta, J. N. (2003). Building blocks of an e-government: A framework. *Journal of Electronic Commerce in Organizations (JECO)*, 1(4), 34-48.
  37. Straub, D., Boudreau, M-C. and Gefen, D. (2004). Validation guidelines for IS positivist research. *Communications of the Association for Information Systems*, 13, 380-427.
  38. Sukasame N (2010), "The Development of e-Service in Thai Government", *BU Academic Review*.
  39. Van Dijk, J. A. G. M., Peters, O., Ebbers, W., "Explaining the acceptance and use of government internet services: A multivariate analysis of 2006 survey data in the Netherlands", *Government Information Quarterly*, Vol.25, No.3, 2008, pp.379-399.
  40. Warkentin, M., Gefen, D., Pavlou, P. A., and Rose, Gregory M. (2002) "Encouraging Citizen Adoption of e-Government by Building Trust", *Electronic Markets*, 12(3), 157-162.
  41. Z. Yang, and M. Jun, (2002)"Consumer perception of e-service quality: From Internet purchaser and non purchaser perspectives", *Journal of Business Strategies*, (2002), Vol. 19, No. 1, pp. 19-41.

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# Employee Perception on Employee Relations Practices: A Study on Hinduja Global Solutions (HGS), Durgapur

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## Abstract

*The performance, success and failure of any organization depend on the efforts and the contribution made by its human resources in terms of achieving the organizational goals and objectives. For this, it is highly essential that the people working in an organization maintain a good interpersonal relationship, trust, sense of belongingness, affection, team work and participation. The management of the company on the other hand, should provide conducive work environment and culture so as to constantly nurture and maintain healthy employer-employee relationships thereby leading to satisfactory productivity, high employee motivation, and morale. For organizations belonging to the IT and ITES sector, managing fruitful employee relations have become a strategic need as these organizations constantly need to ensure effective customer relations. In this context an attempt has been made in this study to analyze the employees' perception of the employee relation practices of an IT/ITES sector organization (namely Hinduja Global Solutions) located in Durgapur, a developing town in Eastern India. The findings of this study could help further studies to understand whether there are any strategic differences in employee relation practices in such organizations when operating in developing towns like Durgapur as compared to operating in the leading metropolitan cities of the country.*

## Introduction

An organization can't perform only with the help of chairs, tables, fans or other non living entities. It needs human beings who work together and perform to achieve the goals and objectives of the organization. The human beings working together towards a common goal at a common place (organization) are called employees. Infact the employees are the major assets of an organization.

The success and failure of any organization is directly proportional to the labour put by each and every employee. The employees must share a good rapport with each other and strive hard to realize the goal of the organization. They should complement each other and work together as a single unit. For the employees, the organization must come first and all their personal interests should take a back seat.

Employee Relations involves the body of work concerned with maintaining employer-employee relationships that contribute to satisfactory productivity, motivation, and morale.

## Employee Relations at HGS Durgapur

Employee relations at HGS Durgapur is challenging in the context that the company employs a diverse workforce and its operations are 24X7. ER activities at HGS include the following hallmarks, namely:

- Floor Co-ordination for more "Employee Connectivity" and thus early warning on attrition.
- HR Touch point (Attendance, letter, salary issues, Grievances, performance appraisals, IJP, Transfers)
- High levels of Integrity.

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- Facilitate the acquisition of knowledge & skills of related areas of the process
- Grievances handling through skip level meetings/Floor walks/one-on-ones
- Ensure customer account information is not compromised zero fatal error (FE)
- Conducting employee fun activities/sports & games activities; preparation/sending, Birthday Mailers.
- Exit process co-ordination (activity handover), exit interview, clearance formalities).
- ER process manual adherence (transfers, skip level meetings, performance appraisals; Grievances handling, Exits etc).
- Make effective call backs for no show employees.

### **Need for the Study**

In spite of the visible and well known welfare practices provided by these organizations, there is very little research evidence regarding the present state and satisfaction towards the employee welfare programs provided by the IT & ITES organizations located in and around the city of Durgapur. As discussed earlier, with the plethora of changes occurring in the Indian economy, an employee of an IT/ITES company like Hinduja Global Solutions in Durgapur is bound to be affected psychologically and socio-economically. Hence the perception of such workers on the welfare strategies of these organizations might change with time. Hence there could be a possible gap between employee expectation (satisfaction) on welfare and those which were actually provided by their organizations. The present study has been designed in order to identify and analyze such opinions leading to employee satisfaction towards welfare practices of IT/ITES organizations in the Durgapur region. The study has been conducted only in the Hinduja Global Solutions (HGS) office at Durgapur.

### **Literature Review**

Markos., S., and Sridevi, M.S., (2010) in their research paper have indicated that manager-employee relationship is crucial for employee

engagement and retention. DeSilva, S.R. (2007) had indicated that employee relations in an organization could be often affected by management policies and practices. Authors like Bajaj, P., and Sinha, S., (2013) in their latest publication have emphasized upon the need to identify HR determinants or factors which can enhance employee relations in an organization and that also resulting in the improvement of Employee Relationship in the organization. This study had also made an attempt to quantify HR determinants equate these into perceptions regarding employee satisfaction. Previously Psychogios, A.G., et al (2010) in their paper had discussed various strategies and factors regarding the implementation of employment relations in South Eastern European countries. An Indian perspective on this issue had been presented and discussed by Aravamudhan A. (2011). Researchers like Bellou Victoria (2009) had given importance matching individuals and organizational expectations were important for fruitful employee relations. Robert Vance (2006) is of the opinion that, employee suggestions and feedback followed by constructive actions based on such feedback surveys ensures that the organization values employee opinion and feedback and this contributes to effective employee relations.

Srivastava, S.K., (2004) have investigated the impact of ER initiatives on the job satisfaction and attitude of workers belonging to private and public sectors. This study had indicated that, with various welfare initiatives, the workers perceived satisfaction towards their job and got higher motivation towards their work. Further the study had also indicated that, organizational welfare initiatives influenced employee attitudes towards the management and job satisfaction in both public and private sectors. A study conducted by Zachariaiah (1954) revealed that better working conditions and adequate provision of welfare services contributed to harmonious industrial relations in various manufacturing undertakings located in Bombay. Study conducted on employee satisfaction on labour welfare measures in KCP limited (Cement Division) showed that, the

employees were highly dissatisfied with the Productivity linked annual bonus and Consumer Cooperative stores provided by the organization (Satyanarayana, M.R., Reddy, J.P., 2012).

Another recent study conducted by Bhatnagar, J., (2007) on employee engagement in Indian ITES employees indicated low engagement scores at the beginning of the career and at completion of 16 months of their stay with the organization. The study also found that the importance of three factors namely organizational culture, career planning along with incentives and organizational support to be important for employee engagement in organizations belonging to the ITES sector.

### Statement of the Problem

Unlike other organizations belonging to the IT/ITES sector, the employees of the HGS Durgapur are often exposed to challenging situations in their work life as they need to handle a wide spectrum of operational problems and projects many of which they may not have prior experiences. In this challenging work perspective, satisfying or fulfilling the various needs of the employees would give them a better motivation and more time to concentrate on job performance. A voluntary approach on the part of the management to offer employee relations perspectives which are over and above what is laid down by the law would boost the morale of the employees and motivate them to perform better. Keeping this perspective in mind an attempt has been made in this study to analyze employee perception towards the employee relations practices with particular importance on evaluating their satisfaction towards such initiatives/programs implemented by the organization.

### Scope of the Study

- To have an insight on the employee relations perspectives implemented by HGS Durgapur.
- To understand the satisfaction of the employees on the ER practices initiated by HGS.

- To identify areas of improvement in terms of the employee relations strategies deployed by HGS.

**Objectives of Study :** The objectives of the study were as follows:

- To analyze the perception of the employees of HGS Durgapur regarding the Employee Relations practices of the organization.
- To assess whether the employees were satisfied by the ER initiatives of the organization.
- To analyze the factors influencing employee satisfaction towards various ER initiatives taken by the organization.

### Research Methodology

The present study adopted the descriptive research design. The population of the study involved 140 employees working in the HGS Durgapur unit. Out of this 32 respondents from various departments were considered as the sample for the study. Data regarding employee perceptions on ER practices were collected by using "Convenience Sampling" method. Primary data were collected by administration of questionnaires among the respondents. Secondary data were collected from company resources, web resources, books and journals etc.

Data collected from the study were presented and analyzed using SPSS and MS-Excel applications.

### Questionnaire Design and Analysis Plan

A questionnaire was designed in order to collect respondent opinion on their perceptions regarding ER practices in the organization. The questionnaire mainly consisted of closed-end questions. Respondent opinion was collected on the basis of a five point "Likert Scale".

The questionnaire used for the study had 27 questions. Respondent opinion were computed on a basis of a five point Likert scale where (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree). Respondent opinions on three question sets were

categorized (average score computed) under broad nine sub-categories / factors influencing employee relations such as:

- Personal Needs
- Team Needs
- Interpersonal Relations
- Conflict Management
- Work-life balance
- Superior-subordinate relations
- Work culture and environment
- Reward structure
- Legal / statutory compliance

### Limitations of the Study

The study could be limited by the followings issues, namely:

- Due to time constraint and administrative issues of the organisation, the samples size had to be restricted to 32.
- The respondents have replied to the queries recalling their memory. Therefore bias in their responses could be possible.
- Data was collected using a schedule as per the convenience of the organization.
- The respondents might not have disclosed their actual opinions on certain issues related to the organization which could be confidential in nature.

### Scope of Further Research

The study could be an eye opener to scale research covering all the IT/ITEs companies located in the Eastern India Industrial region particularly with reference to the ER programs implemented by these organizations. The study could take up and put light on additional issues like the additional issues like the impact of ER programs on employee retention and engagement.

### Data Analysis

### Respondent Profile

As indicated in Table 1, 40% of the respondents belonged to the age group of 21-25 years, followed by 34% belonging to the 26-30 years age group. Only 3% belonged to the age group of >40 years.

**Table 1: Age Profile of the Respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 21-25Yrs	13	40.6	40.6	40.6
26-30Yrs	11	34.4	34.4	75.0
31-35Yrs	4	12.5	12.5	87.5
36-40Yrs	3	9.4	96.9	96.9
>40yrs	1	3.1	100.0	100.0
Total	32	100.0	100.0	

50% of the respondents (Table 2) were having 1-5years of experience, followed by 28% having 0-1 years of experience. Only 3% were having experience of more than 10 years.

**Table 2: Experience Level of the respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0-1Yrs	9	28.1	28.1	28.1
1-5Yrs	16	50.0	50.0	78.1
5-10Yrs	6	18.8	18.8	96.9
>10Yrs	1	3.1	3.1	100.0
Total	32	100.0	100.0	

According to Table 3, 53.8% of the respondents belonging to the 21-25 years were having 0-1years of experience. This shows that the respondents from organization were young with relatively lesser experience levels.

**Table 3: Age vs Experience Level Cross-tabulation**

		Exp_Level				Total
		0-1 Yrs	1-5 Yrs	5-10 Yrs	> 10Yrs	
Age						
21-25Yrs	Count	7	6	0	0	13
	% within Age	53.8%	46.2%	.0%	.0%	100.0%
	% within Exp_Level	77.8%	37.5%	.0%	.0%	40.6%
26-30Yrs	Count	2	7	2	0	11
	% within Age	18.2%	63.6%	18.2%	.0%	100.0%
	% within Exp_Level	22.2%	43.8%	33.3%	.0%	34.4%
31-35Yrs	Count	0	3	1	0	4
	% within Age	.0%	75.0%	25.0%	.0%	100.0%
	% within Exp_Level	.0%	18.8%	16.7%	.0%	12.5%
36-40Yrs	Count	0	0	2	1	3
	% within Age	.0%	.0%	66.7%	33.3%	100.0%
	% within Exp_Level	.0%	.0%	33.3%	100.0%	9.4%
> 40Yrs	Count	0	0	1	0	1
	% within Age	.0%	.0%	100.0%	.0%	100.0%
	% within Exp_Level	.0%	.0%	16.7%	.0%	3.1%
Total Count		9	16	6	1	32
	% within Age	28.1%	50.0%	18.8%	3.1%	100.0%
	% within Exp_Level	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4 indicates that as the mean score on the comment whether employee had “Good ER” in the organization was 4.09, hence it can be inferred that the respondents were in agreement with this statement.

**Table 4: Descriptive Statistics regarding respondent opinion regarding “Good ER”**

	N	Std.	Mean Deviation
Good_Emp_rel	32	4.09	.689
Valid N (listwise)	32		

Table 5 indicates that, the respondents were in agreement with the feel-good factor w.r.t. ER practices in their organization.

**Table 5: Descriptive Statistics on respondent opinion regarding the Feel-Good Factor w.r.t. ER Practices**

	N	Mean	Std. Deviation
Feelgood_ER	32	4.13	.492
Valid N (listwise)	32		

**Respondent opinion on various factors influencing Employee Relations**

The following analysis (Table 6A & 6B) illustrates respondent opinion regarding the various nine factors influencing ER practices in the organization.

**Table 6A: Descriptive Statistics on respondent opinion on various factors influencing ER**

	N	Mean	Std. Deviation
Personal Needs	32	3.927	.6581
TEAM_NEEDS	32	4.125	.4786
INTERPERSONAL_RELATIONS	32	4.032	.6717
CONFLICT MGT	32	4.278	1.5052
WORK-LIFE BALANCE	32	3.816	.7287
Valid N (listwise)	32		

**Table 6B: Descriptive Statistics on respondent opinion on various factors influencing ER**

	N	Mean	Std. Deviation
SUPERIOR-SUBORDINATE RELATIONSHIP	32	4.134	.5380
WORK-CULTURE & ENV	32	4.044	.8534
REWARD	32	4.094	.4944
STATUTORY COMPLAINT	32	4.166	.4367
Valid N (listwise)	32		

It is clear from Table 6A & 6B that, Conflict Management (Mean score: 4.278), Statutory Compliance (Mean Score: 4.166), Superior-Subordinate Relationship (Mean score: 4.134), Team Needs (Mean Score: 4.125) had higher mean scores depicting higher levels of respondent agreement on these factors.

In order to analyze the impact of these nine factors on the employee relations aspect in the organization, the **factor analysis** was done as depicted below.

Table 7 presents the impact of the nine factors on employee perception towards employee relations in the organization.

**Table 7: Correlation Matrix (Good ER vs Nine Factors influencing ER)**

		Good_Emp_rel	Personal Needs	Team_needs	Inter personal_relations	Conflict mgt	Work-life balance	Superior-subordinate relationship	Work-culture & env	Reward	Statutory compl aince
<b>Correlation</b>	Good_Emp_rel	1.000	.559	.472	.367	-.116	.337	.139	.273	.409	.225
	Personal needs	.559	1.000	.688	.647	.026	.664	.516	.405	.754	.627
	Team_needs	.472	.688	1.000	.672	.187	.550	.404	.455	.501	.435
	Interpersonal_relations	.367	.647	.672	1.000	.398	.498	.694	.303	.534	.537
	Conflict mgt	-.116	.026	.187	.398	1.000	.094	.487	.037	.218	.194
	Work-life balance	.337	.664	.550	.498	.094	1.000	.509	.513	.584	.596
	Superior-subordinate relationship	.139	.516	.404	.694	.487	.509	1.000	.371	.544	.618
	Work-culture & env	.273	.405	.455	.303	.037	.513	.371	1.000	.141	.330
	Reward	.409	.754	.501	.534	.218	.584	.544	.141	1.000	.752
	Statutory compl aince	.225	.627	.435	.537	.194	.596	.618	.330	.752	1.000
<b>Sig. (1-tailed)</b>	Good_Emp_rel		.000	.003	.019	.263	.029	.224	.066	.010	.107
	Personal needs	.000		.000	.000	.443	.000	.001	.011	.000	.000
	Team_needs	.003	.000		.000	.153	.001	.011	.004	.002	.006
	Interpersonal_relations	.019	.000	.000		.012	.002	.000	.046	.001	.001
	Conflict mgt	.263	.443	.153	.012		.305	.002	.420	.116	.144
	Work-life balance	.029	.000	.001	.002	.305		.001	.001	.000	.000
	Superior-subordinate relationship	.224	.001	.011	.000	.002	.001		.018	.001	.000
	Work-culture & env	.066	.011	.004	.046	.420	.001	.018		.221	.032
	Reward	.010	.000	.002	.001	.116	.000	.001	.221		.000
	Statutory compl aince	.107	.000	.006	.001	.144	.000	.000	.032	.000	

It is clear from Table 7 that,

- Perception on “Good ER” had significant correlations with factors like “Personal Needs”, “Team Needs” and “Interpersonal Relations”.
- Personal Needs had significant correlations with factors such as “Team Needs”, “Interpersonal Relations”, “Work life Balance”, “Reward Structure” and “Statutory Compliance”.
- Team Needs had significant correlations with “Interpersonal Relations”

- Interpersonal Needs had significant correlations with “Personal Needs”, “Team Needs” and “Superior-Subordinate Relations”
- Work-life Balance had significant correlations with “Personal Needs”, “Reward” and “Statutory Compliance”
- Superior-Subordinate relations had significant correlations with “Interpersonal relations” and “Statutory Compliances”

Table 8 illustrates the KMO and Barlett’s Test to evaluate the measure of sampling adequacy.

**Table 8: KMO and Bartlett’s Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.797	
Bartlett’s Test of Sphericity	Approx. Chi-Square	173.562
	df	45
	Sig.	.000

It is evident that the data used for factor analysis had high levels of significance w.r.t. “measure of sampling adequacy”.

Table 9 & Table 10 depict the component matrix and communality matrix of the factor analysis

**Table 9: Component Matrix<sup>a</sup>**

	Component	
	1	2
Good_Emp_rel	.522	-.568
Personal needs	.874	-.265
Team_needs	.774	-.171
Interpersonal_relations	.811	.220
Conflict mgt	.297	.811
Work-life balance	.783	-.142
Superior-subordinate relationship	.748	.466
Work-culture & env	.527	-.224
Reward	.803	.027
Statutory complaince	.783	.129

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

**Table 10: Communalities**

	Extraction
Good_Emp_rel	.595
Personal needs	.834
Team_needs	.628
Interpersonal_relations	.705
Conflict mgt	.745
Work-life balance	.633
Superior-subordinate relationship	.776
Work-culture & env	.328
Reward	.646
Statutory complaince	.630

Extraction Method: Principal Component Analysis.

It is evident from Table 10 that, among the nine factors, “Personal Needs” (Computed Extraction: 0.834), “Superior-Subordinate Relationship” (Computed Extraction: 0.776), “Conflict Management” (Computed Extraction: 0.745), “Interpersonal Relations” (Computed Extraction: 0.705) are the most important factors influencing employee relations in the organization. Work Culture and Environment (Computed Extraction: 0.328) according to Table 10 seems to be contributing the least for good employee relations.

**Discussions :** Based on the above findings the following comments could be presented.

**Work Culture and Environment:** The management of the company needs to ensure to build an organization culture and environment to as to nurture, develop and appreciate talents which could further enhance the effectiveness of employee relations in the organization. In a recent white paper Denise McLean (2003) had suggested that in order to bring about change for an effective workplace an organization requires to instrument successful approaches that are applicable to particular occupations and workplace characteristics. The organization may also emphasize upon developing intercultural skills in the workplace and encourage more employees with strong intercultural skills with business benefits, such as increased productivity and sales. The team-leaders could be instrumental for fostering team work, participation and involvement by encouraging suggestions and implementing the same during day to day operations. Flexibility at work could be encouraged so as to motivate employees and create an engaging work environment. Further importance could also be given on ensuring that the goals and values of managers are aligned across all departments and that with individual employees.

**Workplaces Amenities:** Workplaces amenities (Like drinking water facilities, canteen, beverage breaks, Common-room facilities) could be improved as well as new facilities could be added to make the workplace more comfortable and engaging.

**Team Assignments:** The HR department needs to emphasize more upon team assignments and ensure employee development and learning through team. The needs of the team as a whole are to met more rigorously than emphasizing upon individual needs. This would enhance and improve interpersonal relations and foster a participative work environment.

**Individual Focus:** The HR department should ensure that it creates a workplace where individual and personal family or social commitments could be matched with professional commitments at the workplace.

**Employee Counselling and Employee Support Services:** Employee counselling and Employee Support Services could be used to promote effective work-life balance.

**Motivating the Performers & Achievers:** The management should emphasize upon acknowledging employee contributions and achievements through rewards and recognitions. The HR policy of the company should encourage and empower managers and supervisors to reward employee performance/contributions. Schemes like “Best Employee/Talent”, “Most Innovative Employee”, “Best Manager”, “Best Team” etc could be used to encourage employees. Financial rewards through incentives, bonuses and job enrichment schemes could be used for enhancing employee job satisfaction and engagement.

**Emphasis on Feedback System:** It is essential for an organization like HGS to emphasize upon a performance based feedback system so as to narrow down the list of factors strategically important for employee performance and identify skill gaps and areas of improvement. Job engagement surveys could be instrumented as essential feedbacks regarding employee perceptions on their employment in the organization.

**Emphasis on Employee Development:** Employee development should be facilitated by training need assessment. Employees identified with skill or competency gaps should be recommended for appropriate training. Senior managers, team leaders should be

recommended for management development programs. The in-house trainers and team leaders could also be encouraged to attend and participate in “Train-the-Trainers” programs for upgrading their capabilities and knowledge.

### **Conclusion**

The study had revealed interesting findings with respect to employee relations in the organization. Although “Personal Needs”, “Superior-Subordinate Relationship”, “Conflict Management”, “Interpersonal Relations” have been identified as the factors mainly contributing to effective employee relations, emphasis has to be given upon improving the work environment, amenities and the culture of the organization as a whole. Jobs should be made more engaging and rewarding. The management could bring about the best practices used in other organizations within the same industry to further improve employee relations.

### **References**

1. Alexandros G. Psychogios, Leslie T. Szamosi, and Geoffrey Wood (2010), “Introducing employment relations in South Eastern Europe”, Employee Relations, Emerald Group Publishing Ltd., Vol. 32 Issue 3 pp 205 – 211.
2. Aravamudhan A. (2011), “Transformation in Employee Relations- A Continuous Process”, NHRD Network, Journal, Vol.4 Issue 1.
3. Bajaj,P., and Sinha, S., (2013), “Successful human resource management determinants to build good employee relations: A quantitative approach”, International Journal of Human Resource Management and Research (IJHRMR), Vol. 3, Issue 2, Jun 2013, pp: 31-36.
4. Bellou Victoria (2009), “Matching individuals and organizations: Evidence from Greek Public Sector”, Employee Relations, Emerald Group Publishing Ltd., Vol. 31 No.5 pp: 455-470.
5. Bhatnagar, J., (2007), “Talent management strategy of employee engagement in Indian ITES employees: key

- to retention”, *Employee Relations*, Vol. 29, Iss: 6, pp: 640 – 663.
6. Denise McLean, (2003), “Workplaces that Work: Creating a Workplace Culture that Attracts, Retains and Promotes Women”, *Federal/Provincial/Territorial Ministers Responsible for the Status of Women*, Queen’s Printer for Ontario, p: 4.
  7. DeSilva, S.R. (2007), “Elements of a sound Industrial Relations system”, *International Labour Organisation ACT/EMP Publications*, p: 2. [www.ilo.org/public/english/dialogue/actemp/downloads/.../srseleme.pdf](http://www.ilo.org/public/english/dialogue/actemp/downloads/.../srseleme.pdf)
  8. Markos., S., and Sridevi, M.S., (2010), “Employee Engagement: The Key to Improving Performance”, *International Journal of Business and Management*, Vol. 5, No. 12; December 2010, pp: 89-96.
  9. Robert J. Vance, (2006), “Employee Engagement and Commitment: A guide to understanding, measuring and increasing engagement in your organization”, *SHRM Foundation*, 1<sup>st</sup> Edn., p: 20.
  10. Satyanarayana, M.R., Reddy, J.P., (2012), “Labour welfare measures in Cement industries in India: A case of KCP Ltd Cement division, Macherla, Andhra Pradesh”, *International Journal of Physical and Social Sciences*, Vol. 2, No. 7, pp: 257-264.
  11. Srivastava, S.K., (2004), “Impact of Labour Welfare on Employee Attitudes and Job Satisfaction”, *Management and Labour Studies*, February 2004, Vol. 29, No. 1, pp: 31-41.
  12. Zachariaiah, K.A., (1954), “Industrial Relations and Personnel Problems – A study with particular reference to Bombay”, *Asia Publishing House Bombay*, 1954, p: 28

# Indian Capital Market: Issues and Challenges Ahead

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## Abstract

*The paper provides a conceptual framework for addressing the issues and challenges faced by the Indian Capital Market. It uncovers the as yet un-researched or under-researched areas such as: capital market penetration, security lending and borrowing, IPO underperformance, pledging of shares, relevance of free cash flow, intra day trading, quantitative and qualitative analysis, value investing, growth investing and momentum investing. A bird's eye view of the pending policy areas for SEBI and potential new areas for research are also discussed in this paper.*

## Introduction

Indian economy has been able to exhibit robust economic growth and steady fiscal consolidation after liberalisation, privatisation and globalisation in 1991. The high rate of inflation in 2011-12 has however limited the benefits of this economic growth from reaching to the *aam aadmi*. In 2010-11, the savings rate was 32.3 per cent and it is crucial to mobilise this high savings rate for broadening and deepening of Indian financial markets.

Steady reforms, prudent regulations and a strong regulator have been instrumental in not only immunising the Indian stock markets from financial shock but also provide it which much needed dynamism. In 2011-12, (up to 31<sup>st</sup> December 2011), 30 new initial public offers (IPOs) were listed. Indian capital markets through initial public offers (IPOs), follow on public offers (FPOs) and right issues, was able to mobilise around Rs. 9,683 crore in 2011-12. This was much lower than Rs. 48,654 raised through equity public issues in 2010-11. Mutual Funds were able to mobilise Rs. 1,00,338 crore during 2011-12 (up to 30<sup>th</sup> November 2011).

The major reasons for movement of indices at the Indian capital markets have been the global recovery, portfolio rebalancing by Foreign Institutional Investors (FIIs) and financial performance of Indian Companies. Recovery from crises and consolation of gains can be

observed from the performance of Indian Indices. While stocks have showed significant highs and lows with sometimes reaching the circuit filter levels, the volatility of indices has been largely range bound. Low returns offered by portfolios of companies listed in developed countries and weak future economic prospects has also contributed to the growth story of Indian capital markets.

The return on investment in real estate, gold and stock markets has been substantially higher than returns on banking deposits. Indices like Bombay Stock Exchange (BSE) Sensex and BSE 500 have earned high returns during the period of 2007-08 to 2011-12. BSE Sensex has given returns ranging from 9.9% (2010-11) to 80.5% (2009-2010). Negative returns of -37.9% (2008-09) and -20.4% (2011-12), were primarily because of the financial crises in United States and European Sovereign debt crises. BSE 500 has given returns within the range of 6.5% (2010-11) to 96.4% (2009-10).

Market capitalisation and Price to earnings (P/E) ratio, have steadily increased or remained stable from 2007-08 to 2010-11. The steady increase is a positive signal, as it shows the growing confidence of investors in equities market. The volatility figure has also not shown much variation contributing to an overall positive sentiment of stability in Indian equities market. Indian Capital Markets is experiencing a range of reconstruction measures involving innovation

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and up gradation of current system. Changes like Smart Order Routing, Algorithmic Trading, rising dominance of options over the cash and futures market, world class trading and settlement mechanism, mobile based trading and possibility of listing of exchanges are some of the emerging issues in current day capital markets. This raises the issue of a need for a self regulatory body for primary and secondary capital markets along the lines of Association of Mutual Funds in India (AMFI) for ensuring better governance in capital markets.

Securities and Exchange Board of India (SEBI) notified guidelines for trading on small and medium enterprises (SMEs) platform in May 2010, but not many SMEs have come forward for listing on the SME platform till date. There is a need to provide the right stimulus to promote and activate this SME Exchange before it fails like the Over the counter exchange market of India (OCTEI). Careful examination of the growth model of NASDAQ (USA) and Alternate Investment Market (UK) is also recommended to prevent any possibility of failure of this SME Exchange.

The cost of execution of trade still remains very high. Our transaction costs are extremely high as compared to other countries like Japan, United States (US), Germany, Australia, Singapore, Russia, Brazil and United Kingdom (UK) who have lowered their transaction cost. Rationalization of stamp duty and securities transaction costs is recommended.

A need to fill the existing regulatory gaps is also felt by many analysts. For example, on the issue of listing of exchanges, the Bimal Jalan committee's recommendations opposed listing of stock exchanges. On the contrary, exchanges like BSE and Multi Commodity Exchange of India (MCX) have been supporting listing of exchanges as they will get the desired funding for technological improvement and will be able to compete with exchanges like National Stock Exchange (NSE). SEBI has cleared commodity exchange MCX's IPO plan in September 2011. The possibility of similar actions by BSE, NSE and regional bourses and its possible impact on

the equities market largely remains un-researched and uncertain.

In a seminar organized by Assocham on Capital Markets<sup>1</sup>, thought provoking developments in the Indian capital market were outlined by Thunuguntla. Four issues raised by him in research report were higher volumes of options market as compared to combined volumes of cash market and futures market, increasing ratio of market capitalization to GDP and trading volumes to GDP and Lastly, a high percentage (30% approximately) of all the total listed shares not being traded even for a single day in a year. Analysis was undertaken with the help of turnover data in Rs. Crores from both BSE and NSE from 2000 to 2011 for cash market, futures market and options market.

In Financial Year (FY) 2000, the percentage share of the total turnover was 100% in the cash market which slowly and slowly decreased to 27.8 %, with the increase in the percentage share of futures market peaking to a high of 62.9% in 2008 and with options market having a share of 9.3%. From 2009 onwards an "Era of options" was seen emerging with a decrease in the percentage share of both cash market and the futures market and a substantial rise in the percentage share of options market. For FY 2011, it was shown that only 13.8% for cash market, 29% for futures market and 57.2% for option market was the percentage share in the trading volumes. The reason for the observed phenomenon is that the brokerage and security transaction tax (STT) is charged on the premium portion and not in the entire open interest in options market. From this analysis one may question, are the cash markets in danger? Also if the trading in the cash market reduces to new low then what will futures and options trade on with almost no significant trading in the underlying asset i.e. equities in cash market. This area needs to be focused by providing the right stimulus to the cash market by rationalization of the brokerage fees, securities transaction tax (STT) and stamp duty as applicable currently to the cash market.

The second observation made in the report relates to "Market cap to GDP ratio". "Market

cap to GDP ratio” represents the current market capitalization of the listed shares as the percentage of the Gross Domestic Product. The ratio shows the importance of capital market as the source of capital vis-à-vis the total value of goods and services produced in a country. The ratio has shown a steady rise from 23.28 in 2002-03 to 132.47<sup>2</sup> in 2010-11 representing the increasing attractiveness of listing on the BSE.

Thirdly, trading volumes in cash market to GDP ratio has increased from 39.33 in 2002-03 to 71.39 in 2010-11, whereas the trading volumes in the Futures & Options (F&O) market to GDP ratio has increased from a mere 17.95 (2002-03) to 445.91 in FY 2010-11. Aggregating the two, the trading volume in the cash and F & O market to GDP ratio has increased from 57.28 in 2002-03 to 517.30 in 2010-11. This phenomenal increase in trading volumes is a result of the high returns that are being offered by securities listed on BSE and NSE.

Another area of concern is that as high as 32% of the listed shares are not trading even for a single day in a year. Hence, this raises a very important issue of liquidity in our capital markets. Out of 4975 listed companies, 1603 did not trade even in a single day and 385 companies traded for less than 100 days in a year. How will the Government and Security and Exchange Board of India (SEBI) tackle these illiquid stocks and how will retail investors protect themselves from investing in such companies is an area which requires much greater attention.

Ministry of corporate affairs, SEBI, National Stock Exchange (NSE), Bombay Stock Exchange (BSE) and many professional bodies like Institute of Chartered Accountants of India (ICAI) have initiated steps for educating investors through investor awareness programs. Most of these programs guide small investors to be more realistic in terms of the returns they expect from the equity portfolio rather than being swayed away by promises of high returns with almost no risk. Equities offer returns over long periods which can neither be called risk free nor guaranteed by any financial advisor. One of the reasons for many investors not participating in the equity markets is that either their

expectations are too high or they wait for some financial advisor to guarantee their unrealistic expectations.

Investors often get convinced of the superior selection and timing skills of wealth managers with which they can deliver high returns on a regular basis. This was also observed in responses to question number three of the questionnaire for retail investor. This opinion gets cemented when it is supported with data of past years. Most investors consider that it is either a choice of earning a low return with absolute safety or high returns with high risks. The convexity of the risk-return trade off results in equities offering returns which may be moderate with risks ranging from moderate to high. The activity of investment in equities needs to be seen as a regular activity and as a way of earning normal returns rather than supernormal returns.

### **I. Capital Market Penetration**

Unfortunately, the successes of the capital markets are being shared amongst a select few. The investors penetration is extremely low with about only 1.8 Crore (approx.) having demat accounts in a country having a population of 120 Crore (approx.) people. Greater participation of all citizens is not only in their interest but good for the stock exchanges also. With greater participation, a reduction in the volatility of share prices may also be observed as a few dominant players will not be able to manipulate the price of a security.

Active participation by retail investors cannot be achieved till demat account opening form is simplified. Current procedure of account opening is not only cumbersome but also dangerous for less educated individuals as it requires more than fifty signatures on account opening booklet. Opening of demat account should be as simple as opening of a bank account; and sale and purchase of equities should be as simplified as opening or breaking of a fixed deposit. Trading being limited to shares in electronic form acts as a deterrent for many investors who are not computer savvy. Existing Know Your Customer (KYC) norms have

limited the participation in equities market, to only those who have Permanent Account Number (PAN) and a bank account with cheque facility. Attempts need to be undertaken for ensuring participation of unbanked and non taxpaying population in India.

## II. Security Lending and Borrowing

Security lending and borrowing (SLB) scheme introduced on the NSE in April 2008 needs to be revamped. It has received a very low response rate on account of complex regulations, high costs and limited to Futures and options only. Using SLB scheme, lenders of equity can earn returns on their lending with very less risk. While borrowers of equity may sell the borrowed equity in spot market when the stock prices are high (say Rs. 200) and take a buying position in futures market at a lower price (say Rs. 180). At the expiry of the futures contract, equity borrowers would purchase the equity in the futures market and return it to the lender. This way both lenders and borrowers can earn a positive spread by trading simultaneously in spot and futures market.

## III. Initial Public Offer (IPO) Underperformance

Underperformance of initial public offers (IPOs) for two to three years after listing is an important issue emerging from many research studies cited in the review of literature. Discussions with some of the brokers and capital market players on the issue revealed the role of merchant bankers in pricing of the issue. Most of the IPOs end up being overpriced because of existing competition between merchant bankers. Listing day high gains are present because of the enthusiasm of the market participants after which slowly the shares moves towards its intrinsic value and results in gains only in the long run.

Some brokers recommended that before going in for an IPO, an investor should analyse how have other IPOs performed, which were issued by the same merchant banker. However, IPOs do not much erode the wealth of individual investors, since the current rate of oversubscription of IPOs results in individual investors being allotted a much smaller

proportion of shares as compared to what they had actually applied for. This does raise another important issue on retail investors deserving a much larger pie of allotment or not? The answer to this question is highly subjective but it does need much more deliberations.

## IV. Pledging of Shares

Recently, a lot of discussions are taking place relating to pledging of shares by the promoters. Extensive pledging raises the issue of safety and stability in prices of shares held by shareholders. Pledging of shares involves mortgaging a part of their holding in the company by the promoters for meeting the working capital requirements of the company or other long term financing activities. Under the formal system of pledge, the pledger and the pledgee inform the depository participant to electronically lock the pledged shares. These shares can neither be sold nor purchased without the consent of the pledgee but the pledgee has the right to sell the shares without the permission of the pledger. When such formal route of creating a pledge is not followed then, it is referred to us an informal pledge.

During the bull-run pledging of shares does not create problems. However, in case of a market downfall, the bankers and financiers demand further security which may be paid in cash or more stockholding. This may expose a company to threat of takeover by the financiers. This also exposes the pledgers to short sellers as when the share price goes down and in case the pledger is unable to meet the margin call, the pledge's financial institution may sell the shares resulting in stock price fall. This provides arbitrage opportunities to many short sellers who track companies with high percentage of pledged shares and have fewer amounts of cash available with them.

Promoters do not like to share the information on the amount of pledged shares, as it conveys a negative signal in the market. Promoters follow innovative ways to circumvent the requirement of declaring the right amount of pledged shares. Some promoter's transfer their shares to a separate demat account and

undertake a 'negative lien' on it. The shares are then pledged to NBFCs (Non-Banking Finance Company) or other financiers. Alternatively, some promoters create a special purpose vehicle (SPV) and transfer some shares to this SPV. The SPV is directly or indirectly under the control of the promoters. Money is then raised by pledging shares of the so called SPV. There also exists several loop holes in the current system like holding of shares by promoters in benami accounts, use of margin accounts for trading in one's own share which is technically not treated as pledge and many other methods which make it very complicated to determine the exact amount of pledged shares. For example shares being traded by promoters under margin trading may get sold by the broker in case the share price crashes.

Before taking the sell decision, it is important to note that in case of a company managed by joint promoters, which one of them has pledged their shares. The purpose of pledging and the economic strength of the promoter by way of economic interests in other companies also need to be qualitatively analysed before making a final call. Also, the extent of short selling in F&O segment and the extent of promoter pledging should also analysed simultaneously and not in isolation.

#### **V. Relevance of Free Cash Flow**

Free cash flows (FCF) generated by the company is an additional variable that needs to be analyzed for picking stock for one's portfolio. This variable adds to existing list of variables like PE (price-to-earnings) multiple, return on equity, dividend yield, sales growth, profit growth etc. Free cash flow refers to that cash which is available to be paid as cash dividends to the shareholders. FCF is surplus cash available after meeting all the requirements related to working capital and capital budgeting decision of a firm. Free cash flow as a variable has the advantage of not being manipulated using unfair means.

Free cash flows (FCF) may ultimately be retained by the firm or distributed as dividend. After 2008 financial crisis, cash has become one of the important variables for determining stability of

a firm during recession. Companies maintaining high FCF also prevent themselves from any possibility of bankruptcy related cost in near future. Also, the times interest earned (TIE) ratio for such companies also tends to be high.

Various ratio analyses may also be carried out using FCF. For example, the ratio of FCF to sales shows the extent to which revenue is converted into cash. Hence, firms with high ratio are expected to perform better. Alternatively, the ratio of market capitalization to FCF may be used for determining over and under valuation. A low ratio will indicate that the equity is undervalued and a high ratio will show vice versa. However, it must be noted that low figure of FCF does not mean that a firm is not suitable for investments.

For firms with low FCF, further analysis needs to be carried out. This may involve understanding which stage of the growth curve does a firm lie on. Growth firms are those firms whose expected rate of return on the investment opportunity is higher than the cost of capital. Even a low FCF is justified for firms making large amount of capital investments.

A firm with very high value of FCF, on one hand represents good security and on the other hand represents a firm with very low investment opportunity. Hence, quantitative analysis of FCF needs to be combined with qualitative analysis of stage of life cycle of the company and industry. Use of FCF as a method of equity selection is justified as (1) FCF makes available cash to pursue research and development or avail of any other opportunity of merger, acquisition or joint venture which may arise; (2) it provides a hedge against recession; (3) it provides the ability to pay high dividends. The information effects of paying dividends has been widely discussed in existing literature by Walter and Gordon and (4) a steady rise in FCF shows enhanced managerial performance by increasing productivity and optimum use of resources.

#### **VI. Intra Day Trading**

For those individuals who are interested to undertake risky bets and get involved in intra-day trading must take care that the amount used for intra-day trading should not be so significant

that its loss results in bankruptcy of an individual. This can be ensured by investing in liquid shares which may be large cap or index based securities. Diversification as principle is suitable for a long term portfolio but not for portfolio in which securities are bought and sold on a daily basis. Hence, it may be advisable for those individuals who act as day traders to limit themselves to two to three securities at the point of time.

Securities may be carefully analysed using technical analysis and research report from various brokerage houses. Reference point must be pre-decided so as to clearly define entry and exit point.

Loss limit should be also pre-decided. This ensures weeding out emotion out of day trading. Mixing of trading goals should not be attempted i.e. securities kept for intraday trading should not be included in the long term portfolio as these stocks may become worthless in the long run and vice versa.

Hence, role should be clearly defined by an individual to be an investor or an intra-day trader. Individuals who act as day traders should strive to be satisfied with target returns and let not greed take over their investment strategy.,

## **VII. Quantitative and Qualitative Analysis**

Quantitative analysis as followed by Nathan (2011) shows the increasing relevance of multi-criteria portfolio creation. Nathan has developed ranking methodology<sup>1</sup> for finding ET (Economic Times) Wealth top 100 stocks. Filters are used for selecting equities out of 3000 listed equities. For this first filter is that only actively traded equities are considered. The second filter is based on market capitalization and on revenues. Only companies with market capitalization and revenues of 500 crores and above are selected. The third filter focuses on popularity of the equity among research analyst and for this each equity passing through the filter must have been tracked by at least five analysts. The fourth filter is focused on the expectation of growth, revenues and net profit in last four quarters along with positive net worth.

Further these stocks have been ranked on four variables. The first variable is growth percentage including three sub-variables namely revenues, net profit and earnings per share (the higher the better for each of the sub-variables). The second factor is based on valuation ratio including PE (price-to-earnings) ratio, PB (price-to-book) ratio, PEG (price/earnings to growth) and dividend yield (for PE ratio, PB ratio and PEG, the lower the better and for dividend yield, the higher the better). The third factor is risk focusing on downside risk and bear beta (the lower the better). The last factor is the rating factor which includes number of analysts tracking a particular security and consensus rating (the higher the better for each parameter). Finally, an overall rank is given on the basis of filters and four principals created.

The discussion on the methodology followed for finding ET (Economic Times) Wealth top 100 stocks, clearly shows that nowadays analysts are focussing on a number of desirable characteristic of a particular equity before including it to be a part of the portfolio.

Investors should not only go for the quantitative analysis but also take care of qualitative issues related to how the capital has been utilized and how others in the same industry are utilizing their capital. Also, attempt should be made to analyse the working capital management by the company. Qualitative factors like professional expertise of board of directors must also be checked.

## **VIII. Value Investing, Growth Investing and Momentum Investing**

When an investor selects an investment advisor, he looks for advice which will help him to make good the previous losses and undertake gainful future investments. Alternatively, some investors may be invested to save now for a better future tomorrow and for some it involves undertaking financial planning for post retirement life. Invariably, all investors look at not only protecting the capital but also making suitable returns. Most of the analysts recommend investors to check the fundamentals of the security before investing, but what are

these fundamentals? For this three commonly identified investing styles include value investing, growth investing and momentum investing. Investment advisors should discuss their investing style with their clients before recommending portfolios.

Value investing involves investing in equities whose current market price is lower than their fundamental value. The concept was developed by Benjamin Graham and David Dodd. Warren Buffet also follows the concept of value investing. However, value investing involves picking up securities which are neither popular among the analyst nor with the investors. These securities may also suffer on account of low liquidity. Hence, these securities are essentially meant for long term. Value investing involves looking at equities with either low price to earnings or price to book ratio and high dividend yields. Low PE ratio or PB ratio is often achieved by company with good track record. Hence, value investing is often also regarded as conservative investment.

Growth investing on the other hand involves identifying equities which are expected to grow at meteoric rates. This may involve investing in new age equities belonging to information technology, real estate etc. Investors preferring growth investing do not mind investing in equities with high PE (price-to-earnings) ratio and PB (price-to-book) ratio. However, these are the securities which trickle down the maximum in case of a crisis or other systematic risk. This investment strategy tends to focus on securities which are popular among investors and analysts.

Momentum investing involves focusing on technical analysis for devising right strategy and deciding the right time of investment. Momentum investing can be regarded as trading strategy rather than investing strategy. Choice of investment strategy depends upon risk tolerance of investors as both value and growth investing have resulted in both gains and losses.

## **IX. Summary and Conclusions**

The article raises issues related to capital market penetration, initial public offer (IPO) underperformance, pledging of shares,

relevance of free cash flow, intra-day trading, quantitative and qualitative analysis, value investing, growth investing and momentum investing. For improving governance of Indian capital markets, a need for a self regulatory body in equities market has been expressed. A need for providing stimulus to the Small and Medium Enterprises (SME) Exchange and Security lending and borrowing (SLB) scheme is recommended. Rationalisation of transaction costs and taxes in equities market will prevent the shift of volume from cash market to options market. Existing regulatory gaps related to listing of exchanges also needs to be fixed. Investor awareness programs should not only educate investor as regards stock market fundamentals but also help individuals build rationale expectations of returns from equities.

Capital market penetration is extremely low and hence steps need to be taken for inclusion of a large segment of unbanked and non taxpaying population. For greater investor participation, we have recommended easing of Know Your Customer (KYC) norms and simplification of the demat account opening form. The issue of increasing illiquidity of stocks listed on Indian bourses is also a matter of great concern requiring regulatory intervention. Initial Public Offers (IPOs) underperformance in the short run also raises the issue of revamping the procedure of issuing IPOs. Special focus has to be laid on the role and responsibilities of merchant bankers in IPO pricing. Innovations in pledging of shares have added considerable unsystematic risks to certain equities. Ways and means to counter this risk also needs to be devised to prevent loss of investor's wealth. Quantitative and qualitative analysis along with disclosure on investment style is recommended for ensuring greater transparency in the field of wealth management.

ASSOCHAM's 6th Annual Summit on "Capital Markets – Key to Double Digit Growth" on Thursday, 26th May, 2011, Hotel Le-Meridian, New Delhi.

The ratio was calculated using BSE market capitalization only. A detailed explanation of the methodology is available on [www.wealth.economicstimes.com](http://www.wealth.economicstimes.com).

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## References

1. Agarwal, Aman, Yamini Agarwal and Saurabh Agarwal, "The Changing Structure of World Investment, Trade, Capital Flows and its Impact on Global Integration and Regional Cooperation", *Finance India*, Vol. 20, No. 2, 2006, pp. 471-490.
2. Agarwal, J.D., "Security Analysis & Portfolio Management: A Review", *Finance India*, Vol. 3, No. 1, 1989, pp. 49-53.
3. Agarwal, Saurabh, "Dynamics of Investor's Behaviour: A Survey-Based Study on Indian Securities Market", *International Journal of Monetary Economics and Finance*, Switzerland, Vol. 4, No. 4, 2011, pp. 410-431.
4. Markowitz, H., "Portfolio Selection", *The Journal of Finance*, Vol. 7, No. 1, 1952, pp. 77-91.
5. ASSOCHAM Report, "New Trends in Indian Capital Markets", SMC and Assocham, 2011, pp. 1-17.
6. Dhanorkar, Sanket, "Free Cash Flows: Don't overlook the Cash Flow", *The Economic Times Wealth*, Delhi Edition, 11<sup>th</sup> April 2011, pp. 14-15.
7. Ghosh, Sugata and Apurv Gupta, "Promoters Devise Ways to Mask Share Pledge", *The Economic Times*, New Delhi, 24 June 2011, pp. 1, 11 and 29.
8. Menon, Sailesh, "Brokers Upgrade to Algo Trade for FI Clients", *The Economic Times*, New Delhi, 17<sup>th</sup> May 2011, pp. 12.
9. Nathan, Narendra, "How Safe are Shares that are Pledged?", *The Economic Times Wealth*, June 27<sup>th</sup> - July 3<sup>rd</sup>, 2011, pp. 12.
10. Shashikant, Uma, "Be Realistic about Returns", *The Times of India*, 13<sup>th</sup> June 2011, pp. 16.
11. Times Business, "NSE arm offers Algo Trade Tool", *The Times of India*, 14<sup>th</sup> May 2010, pp. 28.
12. Zachariah, Reena, "SEBI Wants a Self-regulatory Body to Supervise Fin Advisors", *The Economic Times*, New Delhi, 19<sup>th</sup> September 2011, pp. 11.
13. Zaidi, Babar, "Is Day Trading for you", *The Economic Times Wealth*, June 13<sup>th</sup> - June 19<sup>th</sup>, 2011, pp. 2-7.

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# Just-in-time: Theory and Practice

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## Abstract

Many widespread managerial concepts are expressed as acronyms or abbreviations of two, three or more letters. In addition, they have often been introduced and treated as new-to-the-world by both scholars and practitioners. For example, just-in-time (JIT) is a managerial concept that has been heavily promoted in the world-wide automotive industry. Its underlying principles have been implemented by most car manufacturers or car assemblers for many decades. JIT, as a phenomenon, has been named differently at different times during the last century. Therefore, the newness of JIT and its underlying principles are questioned in this paper. The paper describes parts of the historic evolution of JIT during the twentieth century in literature. It is concluded that JIT is just a reincarnation of past theory and practice.

## Introduction

There have emerged various managerial concepts at different times in the past and new ones are certain to emerge in the future. Most of them are expressed as an abbreviation of two or three letters, for example just-in-time (JIT). JIT signifies a continuous search for waste reduction and to make only what is needed “just in time” (Toyoda, 1987). It is a concept that has been frequently promoted and has attracted firms and their executives in many different industries. Its underlying principles have been widely implemented in the world-wide automotive industry. By many practitioners, and some scholars, JIT has been regarded as an innovative and new-to-the-world concept. Because of the keen competition in the automotive industry, car manufacturers have been searching for different means of reducing costs, increasing productivity, maintaining profitability, and so on. For example, car manufacturers have been striving to reduce, and in some cases eliminate, inventories (e.g. sequence deliveries which almost lack inventory buffers between the supplier and the car manufacturer’s assembly plant), reducing the number of subcontractors used (e.g. from multiple sourcing to single sourcing per component or material), and the sharing or diffusion, partly or totally, of manufacturing, assembling, research and development of new

materials and components (e.g. outsourcing). These trends have to a certain extent contributed to an increasing interdependence between firms in the marketing channels of the automotive industry. The trends have also implicated a movement of responsibility upstream, where the different functions performed on the car manufacturers’ assembly line in the past have now been transmitted to sub-contractors. Rainnie (1991, p. 3) states: “JIT is highly vulnerable to breakdown and relies to a large extent on pushing responsibility for quality control down the line to sub-contractors”. Consequently, it may be stated once again that JIT does not necessarily mean to speed-up the production rhythm, but that the production contains fewer disruptions, fewer disturbances, improved quality, and so on (e.g. Porteus, 1986; Hay, 1987; The Industrial Robot, 1984). JIT is a matter of achieving an improved flow-through in the processes of production (Hall, 1983).

## Objective

The objective of this paper is to describe the historical evolution of JIT from the beginning of the twentieth century.

## Methodology

The paper is conceptual in nature and is based on the review of the existing literature on just in time philosophy.

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## Review of Literature

In order to catch a more profound and comprehensive picture of JIT, some definitions are presented. In literature, there are many interpretations of JIT, and in order to clarify its meaning different definitions of JIT are reviewed. For example, Christopher (1992) comments on JIT that it is both a technique and a philosophy. He also writes: It is based upon the simple idea that wherever possible no activity should take place in a system until there is a demand for it. Thus no products should be made, no components ordered, until there is a downstream requirement (Christopher, 1992, p. 153). Hence, JIT applies to a so-called pull strategy. Another definition is collected from Ballou (1992, p. 153), who defines JIT as: A philosophy of scheduling wherein the entire supply channel is synchronized to respond to the requirements of operations or customer.

He sees JIT as a synchronized consumer-driven system. Aggarwal (1985) regards JIT as an approach for providing smoother production flows and making continual improvements in processes and products. Hall (1983) writes that JIT is a philosophy where all goods are to arrive exactly when they are needed, that is, neither too soon nor too late. Monden (1981a, b) defines JIT as the idea of producing the necessary units in the necessary quantities at the necessary time. Rao and Scheraga (1988) comment that JIT is an approach to production management that can yield enormous productivity increases, inventory reductions, and quality improvements. Schonberger (1982) states that JIT is manufacturing without inventories, and the elimination of waste. Shingo (1984) looks at it slightly differently. JIT is a system to eliminate everything that is not necessary, and JIT signifies that each process should be provided with the right components, the right quality and at the right time. Vollmann et al. (1988) focus on JIT as a philosophy of pursuing zero inventories, zero transactions, and zero disruptions. Finally, De Treville (1987) identifies four categories of JIT, namely:

- JIT flow control only;
- Flexible resource allocation;
- Disruption and learning; and
- All JIT elements.

In literature, the richness of different definitions is overwhelming. Thus, published definitions of JIT often give different meanings. However, two main components of the definitions seem to appear repeatedly, namely, a continuous search for waste reduction and to make only what is needed just in time. This is well in accordance with the concept's original definition (Toyoda, 1987).

### JIT Concept: Historical Background

It should be noted that JIT is not an academic concept or a concept created by consultants, but was a concept created at Toyota Motor Company (e.g. Toyoda, 1987; Sohal et al., 1988; Singh and Brar, 1992; Ohno, 1988) in order to manage its internal activities and the relationships to sub-contractors as efficiently as possible (Heiko, 1989). In the beginning of the depression in the 1920s a phenomenon called "hand-to-mouth-buying" appeared (McGill, 1927), which basically is similar to JIT, in the sense of inventory reduction and an improved rate of turnover in the inventory management. The same concept was used in the mid-1970s (Baily and Farmer, 1977), and referred to what the Japanese companies, at the time, called JIT (Ansari and Modarress, 1988). Originally, the concept of JIT was founded in 1937 by Toyoda (1987, p. 58), who's basic thought was:

### **"Just Make What is Needed in Time, But not Make Too Much"**

Since the mid-1970s, when the first contributions were published about JIT (Sugimore et al., 1977), many books and articles have been written on the subject (e.g. Monden, 1983; Schonberger, 1982). At that time, the concept of JIT was not used in the western world, but it was called the "Toyota manufacturing system" (Sohal et al., 1988). In the western world even the name "Kanban System" was used, which was misleading, because Kanban is just a part of a JIT system.

The fundamental and underlying ideas of JIT have their origins at least at the beginning of the twentieth century. Within agriculture and road construction, the principles of JIT have been implemented for generations (Arnold and Bernard, 1989). In literature, the impression is transmitted that JIT is a new and modern phenomenon, whose true origin is seldom revealed, but, as stated above, that is not the case (e.g. Cheng, 1990; Hartley, 1981). Wilson (1995, p. 75) states:

The parallels between the JIT approach and Ford's Model T production system are striking. Henry Ford was one of the foremost proponents of JIT systems ....

Toyota's production system is usually referred to as the origin of JIT.

Initially, in order to clarify its meaning to some extent, one might state that JIT embodies a philosophy of excellence to establish demand-pulled inventory practices that produce products to design specifications at a rapid, smooth, delivery rate with no idle inventories, no unnecessary lead-times, and increased employee involvement in the marketing channel (Fogarty et al., 1989). Thus, JIT is a commonly used concept, whose significance is normally referred to as the removal of waste and to make just what is needed, in order to add value through the supply chain. This may lead to reduced costs, to improved quality and to flexible companies, which in turn may create competitive advantages in the marketplace (Waters-Fuller, 1995).

The concept of "just-in-time" may also be interpreted as "at the last minute", which is well in accordance with the ideas of the originator Kiichiro Toyoda (Toyoda, 1987). Another similar concept is "just-in-case", which should not be interpreted as JIT, but as a precursor. It was the western world's traditional approach to manage the supply chains or the marketing channels (e.g. Nelleman and Smith, 1982; Rajan and de Treville, 1987). Thus, JIT is basically a kind of stockless production technique or on-the-road inventory philosophy.

## **Theoretical Framework**

JIT is strongly associated to marketing channel theory. A marketing channel and a supply chain have a vertical emphasis, so that horizontal matters are not usually included. Therefore, the theoretical perspective in this article of JIT in marketing channels is supported by and limited to channel theory (e.g. Weld, 1916; Bucklin, 1966). At the beginning of the twentieth century, scholars utilized economic foundations to analyse how a distribution channel could be structured more efficiently for the eventual benefit of the ultimate consumer (Sheth et al., 1988). Different principles may dominate activities performed in the marketing channel. For example, the principle of postponement (e.g. Alderson, 1950), which might be described as a pull approach, and the principle of speculation (e.g. Bucklin, 1965), which might be seen as a push approach. However, the holistic approach of the marketing channel and supply chain is of major interest (e.g. Culliton et al., 1956; Brewer and Rosenzweig, 1961) in today's competitive marketplace in many industries.

Different circumstances in the environment may create dependences in a marketing channel or a supply chain. In literature, various theoretically paired concepts are of interest, for example power/dependence (e.g. Cartwright, 1959; Emerson, 1962), risk/uncertainty (e.g. Knight, 1921; Ganesan, 1994), and reliability/availability (e.g. Sandler, 1963; Frankel, 1988). There are some other concepts too that could be of interest, for example, conflict (e.g. Lusch, 1978; Rosenberg and Stern, 1971), control (e.g. Pfeffer and Salancik, 1978), and exchange (e.g. Blau, 1964). However, the essence of this article is on the dependence between firms in a marketing channel, that is, in a JIT context.

Traditionally, channel literature has concentrated on vertical dependencies between firms in the marketing channel. A marketing channel consists of a number of actors or intermediaries that take part in the exchange process, since they may improve the efficiency of the channel (Alderson, 1954). The point of departure may also be what creates independence for firms (Blau, 1964). In a

marketing channel, activities are specialised and there is a functional distribution between firms (e.g. Bucklin, 1966; Alderson, 1954). The dependence between firms may be explained by the fact of the division of labour (e.g. Stigler, 1951; Stern and El-Ansary, 1992). Nowadays, firms in a marketing channel strive to satisfy the ultimate consumer or as Steudel and Desruelle (1992, p. 2) express it:

In essence, being world-class means being capable of bringing products to the marketplace that offer better value than the competition ...

Generally, there is a mutual dependence between firms in a marketing channel (e.g. Alderson, 1957, 1965; McCammon and Little, 1965; Stern, 1969). Existing interdependencies create a necessity for co-operation between firms, in order to achieve individual and sometimes mutual goals.

The supply chain which is a part of the marketing channel should be regarded as a single entity (Alderson, 1965), a super-organisation (Stern et al., 1996) or a social system (Balderston, 1964) consisting of a number of interdependent firms that are involved in the task of the distribution of products to the ultimate consumer. However, the problem is not to design a marketing channel or a supply chain theoretically, but to make it work practically (Stern et al., 1996, p. 281).

### **The Essence of JIT**

Based upon the theoretical framework described in the previous section, JIT applies to a certain extent to the principle of postponement (e.g. Alderson, 1950; Bucklin, 1965). For example, activities are postponed to latest possible point in time to reduce costs (e.g. Alderson, 1950). Alderson (1957, p. 424) states: One general method which can be applied in promoting the efficiency of a marketing system is the postponement of differentiation ... the principle of postponement requires that changes in form and identity to the latest possible point in the marketing flow; postpone changes in inventory location to the latest possible point in time.

This principle is based on the fact that a firm outsources activities to others in the marketing channel (Stigler, 1951), without affecting the

total outcome of the channel negatively. These functional interdependencies might be seen as the foundations of the holistic approach (Culliton et al., 1956; Brewer and Rosenzweig, 1961). From time to time interdependencies are emphasised in terms of JIT. Culliton et al. (1956, pp. 64-5) use "the total cost concept" and Brewer and Rosenzweig (1961, p. 70) use the concept of "rhomematics", which means:

... The science of product or materials flows. The term is connoted to mean scientific or systematic approaches to the management of materials flows (Brewer and Rosenzweig, 1961, p. 70).

A JIT system should be regarded as a holistic vertical approach or system.

### **Objectives of JIT**

In the same way that the meaning of JIT is unclear and ambiguous in literature, the objectives of JIT are nevertheless very much dependent upon the author. For example, Aggarwal (1985) sees JIT's core objectives as obtaining low-cost, high-quality, and on-time production. Hall (1983) writes that the objectives of JIT are a stockless production and an elimination of waste. Monden (1981a, b) defines the goals as the reduction of costs surrounding production processes, and the system also helps to increase the turnover ratio of capital. Rao and Scheraga (1988) comment that the purpose is to eliminate all waste. Waste refers to any incurred cost, such as inventory, set-up, scrap, and rework that does not add to the value of the product. Schonberger (1982) states that the objectives are to produce and deliver all kinds of goods only at the time needed. Shingo (1984) looks at its goals as achieving stockless manufacturing, that is, each process should be provided with the right components, the right quality and at the right time. Vollmann et al. (1988) state that it is about the reduction of the slack to zero in a firm's activities. Finally, De Treville (1987) argues that the aim of JIT is quite simply success.

The objectives of JIT are hard to interpret due to the lack of homogeneity in literature. However, two objectives seem to be common

denominators: a continuous search for waste reduction and to make only what is needed in time. This is also well in accordance with the concept original objectives (Toyoda, 1987).

### **JIT – Trends in Industries**

Three widespread and well-known trends that have been implemented in many industries, and that have been intensified in the last decade are inventory optimization (i.e. inventory reduction), sub-contractor optimisation (i.e. from multiple to single sourcing), and outsourcing optimisation (i.e. buying instead of making).

One of three significant trends in the context of JIT is that firms strive to minimise their inventories between actors and processes in the marketing channel or the supply chain. In the seventeenth and eighteenth century, the well-being, strength and richness of factories and trading houses were judged in terms of their inventory sizes. The higher inventory levels the richer, stronger, more influential and attractive were the factories and trading houses.

Not until the beginning of the twentieth century did executives become aware of the inventories and the supply chain as influential factors for the availability of cash and the flexibility of a company (McGill, 1927). Arnold and Faurote (1919, p. 33) studied the supply chain at Ford and concluded:

The Ford shops are minutely systemised, and all accounts are carefully and accurately kept; no purchase order is issued without what amounts to a complete inventory of the component under replenishment ...

Many recent authors (e.g. Hall, 1983) state that JIT is a philosophy where all goods are to arrive exactly when they are needed, that is, neither early nor late. The importance of inventory size has been acknowledged for a long time. For example, Bornholt (1913, p. 1672) states:

The first machine sets the pace and the operators of the other machines must keep their machines moving at a similar rate so that the stock will not run short or accumulate.

In the 1920s, traditional supply chains were discovered as causing problems for prosperous

companies. At the time, many supply chains contained great amounts of buffers that caused the emergence of a phenomenon called “hand-to-mouth-buying” in the US economy.

The roots of one of the recent trends (i.e. inventory reduction) within JIT had definitely emerged. During the depression that followed in the US society, firms began to put emphasis on the inventory levels and their supply chains, that is, as the name indicates, “hand-to-mouth-buying”. Thus, the awareness of the importance of supply chains was discovered and commenced to influence firms’ business activities.

Nowadays, firms that keep high levels of inventories are regarded as less prosperous and more vulnerable. However, inventory may restrict capital flexibility, which in turn may limit the firm’s liberty to use its resources in the most suitable way. There are companies that have involved the importance of lean supply chains in their business mission. For example, Metsä Serla Tissue is a manufacturer and market leader in the Scandinavian consumer goods market, that produces toilet paper and kitchen rolls. The company has the following phrase in their business mission:

Strive to achieve a smooth flow of goods and information in the whole supply chain.

This is due to the fact that the information technology has made it possible to implement it practically (Silver et al., 1998). Some reasons that might explain the past behavior are that product life cycles were longer (Kotler, 1997), innovations were diffused slowly on narrow and limited markets (Rogers, 1962, 1982), competition was less keen (Porter, 1985), and the complexity of technology, production, and product was less developed.

Another of the three significant trends in the context of JIT is that firms in many industries (e.g. the automotive industry) strive to move from multiple sourcing towards dual or single sourcing per component or group of components. This is done due to the keen competitive environment in the marketplace (Ramsay and Wilson, 1990). In other

circumstances where companies have only one available source, so-called sole sourcing becomes necessary, due to geographic location, exclusive rights, customer preferences, lack of alternatives or monopoly (e.g. Bartholomew, 1984; Hall, 1983; Trevelen, 1987). A reduced supplier base fits well in terms of a JIT system. However, at the beginning of the twentieth century, the necessity for fewer sub-contracting intermediaries was alerted.

Reduced sub-contractor sourcing implies that fewer suppliers are in charge of the responsibility to perform a set of functions that were previously performed by others. It might be seen as a kind of vertical integration. Weld (1916, p. 20) states:

When one dealer undertakes to combine and to perform functions formerly performed by two or more successive middlemen, we have what might be called integration...

The diminishment of the sub-contractor base is encouraged by those benefits that may be achieved, but at the same time implicates costs (Porter, 1980). The risk that a company may be exposed to when using single sourcing is often argued as less recommendable. However, already at the beginning of the twentieth century, marketing channels were dedicated to their core competence and core activities. Ford's factories bought ready-made from others, rather than manufacturing parts themselves.

Accordingly, outsourcing has been with us for a long time.

### Conclusions

The main message in this paper is that JIT is not new-to-the-world, but a suitable and attractive etiquette or name that has gained world-wide acceptance in the last decades. However, its underlying thoughts and principles are long since documented in literature. For example, optimisation of inventory management, supplier sourcing, and outsourcing have been well known for many years.

The principal question of whether JIT had any novelty value at the time it was introduced,

namely that it was new-to-the-world, has been answered. Therefore, it is highly overestimated. The theoretical evidence that is brought forward in the paper supports the questioning of the novelty value of JIT. It is argued that JIT is nothing more than a similarity to the reincarnation of past theory and practice!

### References

1. Aggarwal, R.L (1985), "MRP, JIT, OPT, FMS?", Harvard Business Review, Vol. 85 No.5, pp.8-16.
2. Alderson, W (1950)), "Marketing efficiency and the principle of postponement", Cost and Profit Outlook, Vol. 3.
3. Alderson, W (1954), "Factors governing the development of marketing channels", in Clewett, R.M (Eds), Marketing Channels for Manufactured Products, Richard D. Irwin, Homewood, IL, pp.5-34.
4. Alderson, W (1957), Marketing Behavior and Executive Action: A Functionalist Approach to Marketing Theory, Richard D. Irwin, and Homewood, IL.
5. Alderson, W (1965), Dynamic Marketing Behavior: A Functionalist Theory of Marketing, Richard D. Irwin, Homewood, IL.
6. Ansari, A. (1986), "Identifying factors critical to success in implementing just-in-time technique", Industrial Engineering, Vol. 18 No.10, pp.44-52.
7. Ansari, A, and Modarress, B. (1988), "JIT purchasing as a quality and productivity centre", International Journal of Production Research, Vol. 26 No.1, pp.19-26.
8. Arnold, U, and Bernard, K.N. (1989), "Just-in-time: some marketing issues raised by a popular concept in production and distribution", Technovation, Vol. 9 pp.401-28.
9. Arnold, H.L, and Faurote, F.L (1919), Ford Methods and the Ford Shops, the Engineering Magazine Company, New York, NY.

10. Bailey, P, and Farmer, D (1977), *Purchasing Principles and Techniques*, Pitman, London.
11. Balderston, F.E (1964), "Design of marketing channels", in Cox, R, Alderson, W (Eds), *Theory in Marketing*, Richard D. Irwin, Homewood, IL, pp.176-89.
12. Ballou, R.H (1992), *Business Logistics Management*, Prentice Hall, Englewood Cliffs, NJ.
13. Bartholomew, D (1984), "The vendor-customer relationship today", *Production and Inventory Management*, Vol. 25 No.2, pp.106-21.
14. Blau, P.M (1964), *Exchange and Power in Social Life*, John Wiley & Sons, New York, NY.
15. Bornholt, O.C (1913), "Continuous manufacturing by placing machines in accordance with sequence of operations", *Journal of the American Society of Mechanical Engineers*, Vol. 35, pp.1671-8.
16. Brewer, S.H, and Rosenzweig, J (1961), "Rhochematics", *California Management Review*, Vol. 3 pp.52-71.
17. Bucklin, L.P (1965), "Postponement, speculation and the structure of distribution channels", *Journal of Marketing Research*, Vol. 2 pp.26-31.
18. Bucklin, L.P (1966), *A Theory of Distribution Channel Structure*, University of California, Berkeley, CA.
19. Cheng, T.C.E. (1990), "A state-of-the-art review of just-in-time production", *Advanced Manufacturing Engineering*, Vol. 2 No.2, pp.90-102.
20. Christopher, M (1992), *Logistics and Supply Chain Management*, Pitman Publishing, London.
21. Culliton, J.W, Lewis, H.T, and Steele, J.D (1956), *The Role of Air Freight in Physical Distribution*, Harvard University, Boston, MA.
22. De Treville, S (1987), *Disruption, Learning and System Improvement in Just-in-time Manufacturing*, Acta Academiae Oeconomicae Helsingiensis, Helsinki School of Economics and Business Administration, Helsinki .
23. Emerson, R.M (1962), "Power-dependence relations", *American Sociological Review*, Vol. 27 No.1, pp.31-41.
24. Fogarty, D.W, Hoffmann, T.R, and Stonebraker, P.W (1989), *Production and Operations Management*, South-Western, Cincinnati, OH.
25. Frankel, E.G (1988), *Systems Reliability and Risk Analysis*, Kluwer Academic Publishers, Dordrecht.
26. Ganesan, S (1994), "Determinants of long-term orientation in buyer-seller relationships", *Journal of Marketing*, Vol. 58 No.2, pp.1-19.
27. Hall, R.W (1983), *Zero Inventories*, Dow Jones-Irwin,, Homewood, IL.
28. Hartley, J.R. (1981), "The world's greatest production line: the Japanese view", *Automotive Industries*, Vol. 161 pp.53-4.
29. Hay, E.J (1987), "Any machine setup time can be reduced by 75 percent", *Industrial Engineering*, pp.62-7.
30. Hay, E.J (1988), *The Just-in-Time Breakthrough*, John Wiley & Sons, New York, NY .
31. Heiko, L (1989), "A simple framework for understanding JIT", *Production and Inventory Management Journal*, Vol. 30 No. 4, pp.61-3.
32. Knight, F.H (1921), *Risk, Uncertainty and Profit*, Houghton Mifflin Company, Boston, MA.
33. Kotler, P. (1997), *Marketing Management: Analysis, Planning, Implementation and Control*, Prentice-Hall, Englewood Cliffs, NJ.

34. Lusch, R.F. (1978), "Intra channel conflict and use of power: a reply", *Journal of Marketing Research*, Vol. 15 pp.275-6.
35. McCammon, B.C, and Little, R.W (1965), "Marketing channels: analytical systems and approaches", *Science in Marketing*, John Wiley & Sons, New York, NY.
36. McGill, H.N (1927), "Hand to mouth buying and its effect on business", *Industrial Management*, Vol. 73 No. 6, pp.344-7.
37. Monden, Y (1981), "Adaptable Kanban system helps Toyota adapt to demand changes and reduce inventory", *Industrial Engineering*, Vol. 13 No.8, pp.42-51.
38. Monden, Y (1981), "What makes the Toyota production system really tick? ", *Industrial Engineering*, Vol. 5 No.1, pp.20-30.
39. Monden, Y (1983), *Toyota Production System*, Industrial Engineering and Management Press, Norcross, GA.
40. Nelleman, D.O., Smith, L.F (1982), "Just-in-time vs. just-in-case production/inventory systems: concepts borrowed back from Japan", *Production and Inventory Management*, Vol. 23 No.2, pp.12-20.
41. Ohno, T (1988), *Toyota Production System: Beyond Large Scale Production*, Productivity Press, Cambridge, MA.
42. Pfeffer, J., Salancik, G. (1978), *the External Control of Organizations: A Resource Dependence Perspective*, Harper and Row, New York, NY.
43. Porter, M.E (1980), *Competitive Strategy – Techniques for Analyzing Industries and Competitors*, The Free Press, New York, NY.
44. Porter, M.E (1985), *Competitive Advantage: Creating and Sustaining Superior Performance*, The Free Press, New York, NY.
45. Porteus, E.L. (1986), "Optimal lot listing, process quality improvement and setup cost reduction", *Operations Research*, Vol. 34 No.1, pp.137-44.
46. Rainnie, A (1991), "Just in time, sub contracting and the small firm", *Work, Employment and Society*, Vol. 5 No.3, pp.353-75.
47. Rajan, S., and de Treville, S. (1987), "Getting from 'just-in-case' to 'just-in-time': insight from a simple model", *Journal of Operations Management*, Vol. 6 No.3, pp.295-304.
48. Ramsay, J (1990), "The myth of the cooperative single source", *Journal of Purchasing and Materials Management*, Vol. 10 No.8, pp.19-28.
49. Ramsay, J., and Wilson, I. (1990), "Sourcing/contracting strategy selection", *International Journal of Operations and Production Management*, Vol. 10 No.8, pp.19-28.
50. Rao, A, and Scheraga, D (1988), "Moving from manufacturing resource planning to just-in- time manufacturing", *Production and Inventory Management Journal*, Vol. 29 No.1, pp.44-9.
51. Rogers, E.M (1982), *Diffusions of Innovations*, 3rd ed, The Free Press, New York, NY.
52. Rogers, E.M (1962), *Diffusions of Innovations*, the Free Press, New York, NY.
53. Rosenberg, L.J, and Stern, L.W (1971), "Conflict management in the distribution channel", *Journal of Marketing Research*, Vol. 8 pp.437-42.
54. Sandler, G.H. (1963), *System Reliability Engineering*, Prentice-Hall, Englewood Cliffs, NJ.
55. Sheth, J.N, Gardner, D.M., and Garrett, D.E. (1988), *Marketing Theory: Evolution and Evaluation*, Wiley, New York, NY.
56. Schonberger, R.J. (1982), *Japanese Manufacturing Techniques: Nine Hidden Lessons in Simplicity*, the Free Press, New York, NY.

57. Silver, E.A, Pyke, D.F, and Peterson, R (1998), *Inventory Management and Production Planning and Scheduling*, John Wiley & Sons, New York, NY.
58. Sohal, A.S, Keller, A.Z, and Fouad, R.H (1988)), "A review of literature relating to JIT", *International Journal of Operations and Production Management*, Vol. 9 No.3, pp.15-25.
59. Stern, L.W (1969), "Distribution channels: a social system approach to the study of marketing", in Stevens, W.D (Eds), *Social Responsibility of Marketing*, American Marketing Association, Chicago, IL.
60. Stern, L.W, and El-Ansary, A.I. (1992), *Marketing Channels*, Prentice-Hall, Englewood Cliffs, NJ.
61. Stern, L.W, El-Ansary, A.I., and Coughlan, A.T (1996), *Marketing Channels*, Prentice-Hall International, Upper Saddle River, NJ.
62. Sugimore, Y., Kusunoki, K., Cho, F, Uchikawa, S (1977), "Toyota production system and Kanban system: materialization of just-in-time and respect-for-human system", *International Journal of Production Research*, Vol. 15 No.6, pp.553-64.
63. Trevelen, M (1987), "Single sourcing: a management tool for the quality supplier", *Journal of Purchasing and Materials Management*, Vol. 23 No.1, pp.19-24.
64. Vollmann, T.E, Berry, W.L., and Whybark, D.C. (1988), *Manufacturing Planning and Control Systems*, Richard D. Irwin, Homewood, IL, .
65. Waters-Fuller, N (1995), "Just-in-time purchasing and supply: a review of the literature", *International Journal of Operations and Production Management*, Vol. 15 No.9, pp.220-36.
66. Weld, L.D.H (1916), *The Marketing of Farm Products*, The Macmillan Company, New York, NY.
67. Wilson, J.M (1995), "Henry Ford's just-in-time system", *International Journal of Operations and Production Management*, Vol. 15 No.12, pp.59-75.

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# Like a Virgin: Secrets They Won't Teach You at Business School

A book by Richard Branson, Published by Ebury Publishing, A Random House Group Company,  
Publishing Year: 2012, Pages: 343, Price: Rs. 599.00, ISBN-9780753519912

Reviewed by **Mrunal Joshi\***

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## Introduction

"Like a Virgin: Secrets They Won't Teach You at Business School"-is a book by Richard Branson wherein he shares the wisdom and experience that made him one of the world's most recognized and respected entrepreneurs. The book is a business school that gives tips for succeeding in business.

Through this book Richard Branson guides the entrepreneurs, managers. The format of the book is quite strange with short 2-4 page long articles and stories with Richard's wise words to guide further. Through a series of questions-answers in between the prose, he briefly covers the general curiosity people have about him, his business, life and experiences he had. Through few chapters he also talks about the sustainable energy, corporate social responsibility and his ideas behind exploring the space, researching about submarines, and alternative fuel options. He is futuristic, fearless and risk-taker and advises the young entrepreneurs to possess these abilities in them to succeed in their endeavor. He further adds that with the relentless work leading passion one perceives, results into positive outcome and one should live by that dream.

Richard Branson, claims that despite owning 400 companies worth billions, he still doesn't understand the basics of a profit and loss account. He has made himself famous by doing a whole series of publicity stunts and still cultivates the image today of being a 1960s drop out by running his business empire from the British Virgin Islands. He quit school at the age of sixteen, but went on to a great success. But

he is humble enough to say that for everyone education is on the top of the list which we think we can't get enough of. He also admits that his strategy will not work for everyone. Particularly in today's tough job market, a degree or diploma can be critical as it shows that one has gained the skills and other building blocks required to start a career. He advises the entrepreneurs to see their ideas through customer's eyes.

In 76-short articles, the wisdom what Richard is trying to give can be broadly divided into:

## Business Requirements and Getting the Investors

Richard Branson believes that one needs to enjoy the business (job) he owns or does. One needs to be innovative and should have pride of associating with the venture or job he does; which results into wonders. He advises to have a plan and keep the deal simple, concrete, explain what is in the deal for the investors, demonstrate the bench strength and prove that growth is sustainable. He says that there is nothing wrong with making mistakes as long as one doesn't make the same ones over and over again. Moreover he adds if things don't work out don't hesitate: take that escape hatch. Branson says while fighting with the big boys in the business, one needs to figure out what the giant's weaknesses are and how best to leverage them. A partner who just brings in capital is very useful, but a strategic partner who can also provide creative space, time and freedom needed to build his business is a true friend-and is much more likely to stand the test of time.

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## About the Author

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## **Customers**

Richard Branson says happy customers are very important for a business. An entrepreneur should ensure that the product or service he provides should be a solution to customer's problems. Greater customer service should be a service

culture and it starts at the top, so management must constantly on guard and ready to respond quickly on the first hint of a problem.

Richard Branson also adds that customer's opinion is important but there are always going to be a few chronically unhappy customers who cost more to maintain than to lose.

## **Managing People**

For better customer service an organization should invest in their employees, maintain open communication with people, and make sure employees have the tools they need to succeed. Branson says that people-power is the real engine of any business. Branson says 'Good people are not just crucial to a business, they are the business'. They are the key assets. They need to be looked after and celebrated again and again.

A company's employees are its greatest asset, particularly into service-based operations where people providing the services are the product. When a company fails to grasp this simple business tenet, the result is invariably an oppositional 'us and them' divide between management and front-line staff.

Empowering employees so that they can make good decisions is one of an entrepreneur's most important tasks. It takes an engaged, motivated and committed workforce to deliver a first-class product or service and build a successful, sustainable enterprise. He says while every company needs an entrepreneur to get it under way, healthy, innovative growth requires a smattering of intrapreneurs who drive new projects and explore new and unexpected directions for business development.

## **Leading the Business and Tackling Challenges**

In Latin, education actually means 'to lead forth'. So like a good educator, a good boss or corporate leader should draw opinions and ideas out of

their students or associates. Bosses should be seen and not heard. To succeed in a business, a leader must learn to be a good listener. You can learn from other people and end result will be a lot better if you keep an open mind and sought out what is right.

As the business matures and expands, senior management gets busy in meetings and other strategic work. Richard Branson advises them to manage the time effectively by delegating and sharing the work. While using gadgets, one should remember that the gadgets should not manage them. He says leaders should practice more walking and talking and less typing and griping. This improves business communication.

While agreeing to the fact that restructuring is a difficult process, Richard Branson says that companies aren't future proof and no company lasts forever. So though it is hard, an entrepreneur needs to undertake restructuring. While doing so, he needs to take a cold, hard look at the business and assure how he is going to empower his staff to do the job that needs to be done. Management overseeing the restructuring or merger should find ways to inspire all employees to think like entrepreneurs.

When anybody first starts up a business; one of his priorities has got to be emergency planning. Because if disaster strikes, rest assured that a lot of people are going to be looking to him for answers. An entrepreneur should always stay on target, be realistic about costs, hire the people needed for the business, not the people he likes and an entrepreneur should know when to step down as CEO.

## **Recovering Mistakes**

Recognizing failure and recovering from mistakes are essential skills for an entrepreneur. Richard Branson says there is nothing wrong with doing business with friends but it is important to create an atmosphere where friends can work together and friendship can flourish. Recognizing failure and recovering from mistakes are essential skills for an entrepreneur. Richard Branson says it can be a difficult thing for an executive or manager to acknowledge to employees but errors of judgment aka mistakes

do happen and anyone who accepts a leadership position should be prepared to own them.

### **Work/Life Balance**

Richard Branson says that one must find time for oneself and one's body. Also the entrepreneur or manager needs to understand that most of the employees wish that their company would be more flexible about the structure of the work day. So he expresses the companies need to tackle this issue because keeping the staff motivated and happy is the key to the company's success. This also helps them to take care of their responsibilities well.

### **Strategic Thinking**

In business, change sometimes happens more quickly than anybody wants it to. Transformative technologies arrive suddenly in the market, tastes adjust, or economies shift. One needs to understand that change is usually a threat that

has potential to bring the business to a halt. So he advises to keep an eye on the environment and transform the business model when required. He further adds to stay on top of market developments; recurrent training and refresher courses should be an ongoing part of company life-and budgets.

Richard says it is crucial to set objectives for each period according to your business's strategic direction and then make sure that all employees know about them. It is important to define a core set of values for your business, to which you and your employees can refer when making decisions. He shares a good manager should provide clear roles for the members of their team and avoid micromanagement.

This book can be a good read for management students, entrepreneurs and every individual who enjoys and believes management is all about the common sense.

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# Ready for Takeoff

## A Leadership Story

A book by Sachit Jain, Rupa Publications India Pvt. Ltd., New Delhi, 2011, Page 252,

Price Rs. 195, ISBN: 9788129116598

Reviewed by **Swati Agrawal\***

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### Introduction

“Ready for takeoff” is a book on leadership and management with a difference, written in an innovative format. Mr. Sachit Jain, author of the book, through his unique story about an investment banker turned CEO of a nonprofit making organization, shares with readers’ leadership lessons that are otherwise very difficult to define in words. In this book, some important lessons of management & leadership come in conversation between Anurag and his wife Alpana. The journey of Mr. Anurag in his experience of a turnaround gives the tone to the book. The beauty of the book is that it’s a three in one accomplishment: It reads like a work of fiction, it is a book on leadership & it is a motivator.

The author says that the book inspired by his actual experiences in corporate life. Ready for Takeoff is a story of a turnaround based on real life experiences and gives leadership lessons for executives working at different levels in organizations, hoping to inspire them to lead a challenging life. The author is an MBA from IIM, Ahmedabad. He has worked with Hindustan Levers and is presently part of the senior management at Vardhman. He therefore through his book was able to successfully relate with the management and engineering graduates in corporate world who have professional personal & complex social life experiences.

Through its 40 well-connected chapters, each of which is a small story in itself, the book elaborates the journey of the successful investment banker turned CEO with the objective of turning around a loss-making organization ‘Ajanta Special Steels’. The book talks about how the new CEO gets acceptance from employees, brings changes in the organization and converts it to a profit making unit along with succession planning for long-term success of the organisation. Alongside he brings new management interventions like 5S, TPM with the initiative of employees (engineers & managers), who have been working there for long, but were earlier not motivated to give opinions and take initiatives.

The book elaborates on team building, trust, boss-subordinate relationship, balancing of professional & personal life which leads to happy employees and profit-making organization. Along with the chapters dealing with managerial & leadership issues, some of the chapters in the book talk about relationship of author Anurag with his wife Alpana and two teenager daughters. At the end of the book, the author develops a definition of leadership in conversation with his wife Alpana, capturing its essence by using each letter of the word ‘LEADERSHIP’.

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### About the Author

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## Impact of Frightening Health Warnings on Sales

Extract from the article “Scary Health Warnings Can Boost Sales” written by Ziv Carmon, Yael Steinhart & Yaacov Trope Published by HBR, Oct 2013, Pg. 24

Extract Prepared by **Chandan Chavadi\***

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**Research Question:** Can a *warning label* increase a product’s appeal?

It is not surprising to observe that the moment the risk of the product is highlighted – customers think twice before using the product. Ex: Medicines and cigarettes. But certain experiments have proved the *opposite*.

### Cigarette Warning

In one of the experiments conducted by researchers, a cigarette ad was shown to 71 smokers and asked if they would like to place an order. The smokers were divided into 2 groups. The first group saw a warning message about health hazards while the other group did not. Half of the people in each group were informed that the cigarette would arrive in a day – “a near future condition” - and the other half were told that the cigarette would come three months later – “a distant future condition”.

Findings: Under the near future condition the warning message was *effective* while in the distant future condition the warning message *backfired*.

Participants who were exposed to the warning message ordered 75% *lesser* packs of cigarettes on an average than those who were not exposed to the warning message. In the distant future condition, the participants who were exposed to warning message ordered 493% packs *more* than those who weren’t.

### Artificial Sweeteners

A sample of 74 women was considered to test the impact of time lag. Two versions of an ad was developed for an artificial sweetener. One version of the ad showed a warning about immune system damage and other side effects

while the other version didn’t. In this research, immediate choice and delayed choice conditions were set for each group. Immediate choice meant they could order a sweetener right away and delayed choice gave them an option to order the sweetener two weeks later.

Findings: In this experiment also, the time lag caused the warning to boomerang.

In the immediate choice condition, 94% fewer packages of sweetener were ordered by those who had seen the warning than those who hadn’t. In the delayed choice condition, the participants who had seen the warning ordered 265% more than those who hadn’t.

### Hair Loss and Erectile Dysfunction

Successive experiments involving hair loss and erectile dysfunction medication showed that delays have similar boomerang. Here, the participants were shown an ad. After 2 weeks, the participants were asked to rate their desirability of the product after being told that the product would be available after a year.

Findings: Delay made the participants override the warning and increased their desirability to buy more.

### Implications

The above research studies are very useful for regulators and managers in the field of healthcare products and consumer care products.

It is clear from such studies that if we are able to build a delay of some sort, then it is possible to minimize the deterrent effects of warnings. It is not advisable to bury the warnings in fine print as it may cause suspicion in the minds of the customers and may forego the authenticity

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### About the Author

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and credibility of the product, hence adversely affecting the sales. Inclusion of warnings builds trust in the eyes of the customers and as time passes the substance of the warning fades.

Companies wanting to warn customers genuinely should ensure that the message is delivered shortly before the relevant event, i.e., usage of the product or medical procedure or high-stake investments.

**Conclusion**

*Scary health warnings can boost sales to the companies.*

Examples of Warnings

**WARNING !**  
A frequent product side-effect is considerable weight gain.

**WARNING !**  
The product may cause significant hair-loss, headaches and damage to the immune system.

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