



सिद्धिमूलं प्रबन्धनम्  
भा. प्र. सं. इन्दौर  
IIM INDORE

# Indore Management Journal

Volume 4 Issue 4

January-March 2013

# **Indore Management Journal**

The Indore Management Journal is published by the Indian Institute of Management Indore, in the belief that management scholars and social scientists should integrate disciplines in an attempt to understand the complexities of contemporary management challenges. We believe that both researchers and practitioners can contribute by translating understanding into action, by linking theory and practice. These would enhance the relevance and thought in various related fields taking us a little outside traditional fields of management, such as sustainable development. We would like to draw special attention to our openness to such thinking as well as approaches.

This could entail working within one's area or crossing disciplinary boundaries. As an academic journal, we also invite manuscripts from a range of authors. We welcome proposals for special issues from potential guest editors. These could include how the topic or theme fits in with the Indore Management Journal's objectives. The descriptions of manuscripts (or the manuscripts themselves), along with author details should be submitted with the proposal.

Please visit: [http://www.iimidr.ac.in/iimi/images/Publications/journal/Guidelines\\_for\\_Author.pdf](http://www.iimidr.ac.in/iimi/images/Publications/journal/Guidelines_for_Author.pdf)

## **Founder Editor**

**N. Ravichandran**

*IIM Indore*

## **Editor**

**Sushanta K. Mishra**

*IIM Indore*

## **Editorial Board**

**Devanath Tirupati**

*IIM Bangalore*

**Ranjeet Nambudiri**

*IIM Indore*

**K. R. Jayasimha**

*IIM Indore*

© 2013, Indian Institute of Management Indore

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical or photocopying or otherwise, without prior permission in writing from IIM Indore.

The editor, editorial team and the publisher do not hold any responsibility for the views expressed in the Indore Management Journal or for any error or omission arising from it.

# Editorial

We are pleased to release the last issue of Volume 4 of Indore Management Journal (IMJ). The present issue contains views on institution building specifically in the context of higher education. The issue also carries scholarly articles including a case study, perspectives and book reviews.

On the occasion of the foundation day celebration of IIM Indore, N. Ravichandran presents an introductory summary on institutions building in the conference titled "Creating and Sustaining Institutions: The Indian Experience". Based on his experience Deepak Satwalekar reflects on the concept of institution building. He believes that what is true for institution building is equally true for career building. VL Mote argues that what is true of the nation's educational programs is also true of the nation's development. According to him, the triads for any educational program is who to teach, what to teach and how to teach. For academic excellence, he emphasizes on understanding the economic as well as the social environment. SG Desmukh takes the case of ABV-IIITM. He discusses the differences between the views of technology school and the management school and explains how ABV-IIITM is balancing the views of both the schools to evolve as an institution of excellence.

The first article addresses the relation between interest and investment and argues that while making monetary policy the authorities need to factor in the distribution of liquidity in addition to the volume of aggregate liquidity. The second article is a case study that focuses on the content, process and challenges that are faced by a large, reputed bank in India during its transformation phase.

The perspective section carries five important articles. The first one discusses the divide between Science and Religion and argues that there is no Cartesian divide between the two. A balance between the two can bring a high level of synergy in one's life. The second article draws a philosophical perspective to comment on the article. Draws from the experience of Venkat Changavalli, the third perspective throws light on how to build successfull personal brand. The fourth perspective talks about the use of intelligent measures for employment testing. The fifth perspective is a reaction to Sandberg's exhortation to women to 'lean in' to their careers and set right the gender skewness in organizations.

As in the past, the present issue carries a rich selection of book reviews. Diverse themes, such as leading business through the great economic power shift, conquering the Chaos, lessons for breakthrough growth, the story of Param, and how Gujaratis do business are included.

We are sure that you will find this issue enjoyable to read.

**Editorial Team**  
Indore Management Journal (IMJ)

## CONTENTS

### **EDITORIAL**

### **VIEWPOINT**

- 1      Institutions Building
- 5      Reflections on Building Institutions  
Deepak Satwalekar
- 9      Thoughts on Academic Excellence  
V. L. Mote
- 13     ABV- IIIM: Experience of a T and B School  
S. G. Deshmukh

### **ARTICLE**

- 22     Balance Sheet Effect of Real Investment  
Subhasankar Chattopadhyay

### **MANAGEMENT CASE**

- 31     Organizational Transformation: The Case of Republic Bank of India (REBI)  
Ranjeet Nambudiri and Radha Ravichandran

### **PERSPECTIVE**

- 40     Swami Vivekananda: Bridging the Cartesian Divide of Science and Religion  
Swami Samarpanananda
- 47     Commentary  
Biswanath Swain
- 50     How to build Successful Personal Brand  
Nithiya Anil Changavalli
- 52     Intelligence Measurement:  
Recommendations for a Research based Strategy in Employment Testing  
Sangeetha Rajan
- 60     Perspectives on 'Lean In'  
Madhusri Shrivastava

### **BOOK REVIEW**

- 63     Global Tilt : Leading your Business through the Great Economic Power Shift  
Satheesh Kumar T. N.
- 65     Conquering the Chaos: Win in India, Win Everywhere  
Kajari Mukherjee
- 68     The Elephant Catchers: Key Lessons for Breakthrough Growth  
Wallace Jacob
- 70     Param  
Madhukar Dayal
- 73     Dhandha: How Gujaratis Do Business  
Jitender Kumar

# Institutions Building<sup>1</sup>

Indian Institute of Management Indore has been celebrating its Foundation Day by public events, seminars and conferences etc. In the year 2013, this was celebrated with a conference titled "*Creating and Sustaining Institutions: The Indian Experience*". The schedule of the conference is enclosed as *Annexure 1*. This was also used as an opportunity to document the aspirations of students as well as faculty members about the evolution and positioning of IIM Indore. The student aspirations presented in the conference is placed in *Annexure 2*. The Faculty aspirations presented in the conference is placed in *Annexure 3*. Three important presentations in this conference are included as a part of this article.

A brief summary of the introductory remarks made by the Director is reproduced below.

## What are Institutions?

Institutions are different from enterprises / organizations. More importantly, institutions can be seen as evolution of an organization. Enterprise is the first level of formal structure of a business / commercial / social entity.

## Characteristics of Institutions

Institutions are characterized by the performance for which they stand for. They are independent of time. It is often not clear as who has created them. There is no standard operating procedure to create institutions. They are sustained and nurtured by the stakeholders.

Some outstanding examples of institutions include Christian Medical College and Hospital, Vellore, 3M: Profile of an Innovating Company and Chaparral Steel: Rapid Product and Process Development as a manufacturing unit. These organizations eventually have a purpose. They performed well, constantly evolved a mechanism by which they can be reinvented themselves.

## DNA of Institutions

Institutions have a definite eco-system. They are dynamic and agile to the environment conditions. They are customer centric. They are adoptable to the technology, market and customer needs. They develop a unique policy to be resilient. They are people enabled and performance driven. Often they change the frame of reference in which they operate. Institutions are built on innovative ideas, creative solutions and an ability to balance risk. They are driven by leaders and owned by stakeholders.

## Annexure 1

### Conference on Creating and Sustaining Institutions: The Indian Experience

#### Programme Schedule

##### Day 1: Wednesday - October 2, 2013

1400 - 1430	<b>Topic: Tutorial on Institution Building</b> N. Ravichandran, Director, IIM Indore
1430 - 1600	<b>Topic: Evolution of Management Institutions</b> 1. Ajay Pandey, Professor, IIM Ahmedabad 2. Sudas Roy, Former Professor, IIM Calcutta 3. Devanath Tirupati, Officiating Director, IIM Bangalore
1630 - 1800	<b>Topic: Experience Sharing</b> 1. S.G. Deshmukh, Director, IIITM, Gwalior 2. Rajendra Nargundkar, Senior Dean - Academics, IMT, Ghaziabad 3. Aditya Shastri, Vice Chancellor, Banasthali Vidyapith
1800 - 1845	Aspiration of Students / participants on IIM Indore
1930 - 2045	Cultural Programme

<sup>1</sup> This article is part of the speech delivered by Dr. N. Ravichandran at IIM Indore on the occasion of its Foundation Day on October 2, 2013.

**Day 2: Thursday - October 3, 2013**

0945 - 1000	<b>Introductory Remarks by Dr. M.N. Buch, Member, BoG, IIM Indore</b>
1000 - 1115	<b>Topic : Reflections on Institution Building</b> <ol style="list-style-type: none"> <li>1. Deepak Pental, Former Vice Chancellor, Delhi University</li> <li>2. S. Sundarajan, Director, NIT, Trichy</li> </ol>
1130 - 1300	<b>Topic : Academic Leadership</b> <ol style="list-style-type: none"> <li>1. V.L. Mote, Former Professor, IIM Ahmedabad</li> <li>2. Gautam Barua, Mentor Director, IIIT, Guwahati</li> </ol>
1400 - 1530	<b>Topic : Reflections on Institution Building</b> <ol style="list-style-type: none"> <li>1. Deepak Satwalekar, Former MD, HDFC Standard Insurance</li> <li>2. P. Balaram, Director, Indian Institute of Science, Bangalore</li> </ol>
1545 - 1715	<b>Topic : Learning from the practicing world</b> <ol style="list-style-type: none"> <li>1. T.G. Sagar, Director and Dean of Cancer Institute (WIA), Chennai</li> <li>2. N.S. Kannan, Executive Director, ICICI Bank Ltd.</li> </ol>
1715 - 1745	<b>Valedictory Address</b> T.V. Rao, Adjunct Professor, IIM Ahmedabad
1800 - 1845	<b>Evolution of IIM Indore in the next 10 years</b> Director, Dean (Administration) and Activity Heads of IIM Indore
1900 - 2015	Cultural Programme
2030	Foundation Day Dinner**

**Annexure 2**  
**Aspirations of Our Students at IIM Indore**  
**Presented by Students**

The value of a business school is not just about the quality of the professors or the education or the campus facilities.

These factors are obviously important. But lots of schools have them. And they're hard to tell apart. At the highest levels, moreover, there's only one thing that really differentiates one business school from another: The amount the school will help your future career. Some of the key aspects are provided below.

**Admission Process****Focus on Diversity**

*Gender :* Minimum of 33% females in a batch

*Stream :* A minimum percentage (Say 5%) from under-represented but important streams (Commerce, Arts, Medicine, Law etc)

*Work-experience:* Focus on varied industries and profiles

*Entrepreneurs:* Some percentage admission reserved for entrepreneurs - No Placement assistance

*International admissions* - Will enhance global thinking and bring in a broader perspective

**Scholarships**

Merit based fee-waiver during admissions

Will attract better talent

**Pre-Term: Preparatory Course before Term Starts**

Review courses in financial accounting, microeconomics, statistics, and financial analysis for students without the relevant background

To include classes in English for those who need it languages, Short seminars in communication skills, computing technology, trading simulations, and career management

## **Student Life**

### **Academics**

- Learning teams consisting of six students from different sections
- Culture designed to reduce competition and foster collaboration

### **Clubs and Committees**

- Being a member is mandatory
- Year-round events

### **Cooperation**

- Between students of different programs
- Among students of same program

### **Games and Fitness**

- World-Class grounds/courts

## **Dual/ Joint Degree**

### **A University like System**

- Students should be able to draw on resources from all of the different programs running including law, engineering, medicine, humanities and sciences
- This will lead to a collaborative, cross-disciplinary learning culture where students are encouraged to pursue a joint or dual degree

## **Faculty**

### **Collaboration**

- In a university like system, faculty from one discipline (e.g. Law) may take basic law course for another disciplines (e.g. MBA)
- Would also help research in overlapping areas of study

### **Guest Lecture into Curriculum**

- Industry experts to give a few lectures in each course taught
- Instead of having guest lectures by industry experts, call industry experts to give lectures as part of the relevant running course

- Can provide contemporary best practices and insights

## **MBA Program**

### **Class Participation**

- CP component to be increased to at least 40%
- Essential for sharing of ideas and grooming of individuals

### **Personalized Mentoring**

- One teacher assigned to each individual
- Helps in guiding career path and choosing electives

## **Vision for the Future**

The education received at IIM Indore should empower students with the knowledge, skills, and long-term vision that lead to innovation and growth. Students will build a powerful network of accomplished, inspiring colleagues that will continue to sustain them, long after their final class.

Exponentially more than a resume enhancement or a means to an end, time spent at IIM Indore will shape a student's entire career - and transform their life. It will prepare them to navigate the unprecedented economic, social, and other complex changes the future will certainly bring.

## **Annexure 3 Faculty Aspirations**

**The Journey so Far:** Established in 1996 - 6<sup>th</sup> among the prestigious IIMs. First batch of PGP graduated in 2000 with 36 participants

Today, IIM Indore is the largest in terms of PGP intake across IIMs. It has a

- Robust Doctoral program - contributing faculty to IIMs
- Well-established EPGP - alliances with leading global institutions
- Presence in multiple locations - PGP and PGPMX
- Only IIM to offer an Integrated program

- MDPs - train around 1200 managers annually
- Focused Executive / Long term programs (E-Governance, Defense services etc.)

## Vision

- To emerge as one among the Top 5 management institutions (2009-2013)
- To evolve as a contextually relevant school with world class academic standards
- To propagate, assimilate and develop contemporary management practices and systems to contribute to social capitalism in India
- To illustrate and experience the uniqueness of embedding a business school in a social science setting
- To have a dominant presence in all segments of management education in Indian and abroad

## The Road Ahead - Academic and Executive programs

- Scaling up the FPM program - impacting the academic fraternity
- Specialized PGP / EPGP programs aligned around industry verticals- healthcare, analytics, logistics and supply chain etc. - impacting the industry
- Capacity enhancement of industry - relevant and cutting-edge executive education programs at multiple locations - NCR, Chennai etc.
- Collaborate with local and state governments to make top-class education accessible easily - impacting the society

## Enabling mechanisms

- Recognition as best-in-class institution - accreditation, enhance alliances with globally recognized institutions etc.

- Become an institution of choice for top notch academicians - attract the best talent from India and abroad
- Create a world-class executive education center offering solution-based training programs
- Leverage and adopt latest technology - be at the frontier of innovation in pedagogy
- Embed academic areas in social sciences and enhance participant exposure and learning through reflection
- Research centers that contribute to creation of applied knowledge such as Leadership, entrepreneurship, analytics, supply chain
- Build synergies between teaching and research
- Knowledge dissemination through a world-class journal that appeals to researchers from across the globe
- Create high quality infrastructure

## What We Want to be Known for

- Collegial culture - ecosystem characterized by cooperation and collaboration
- Institution driven by values - thus rendering the need for the formal system redundant
- Center of Excellence for research and case writing - action research contributing to application
- Creating thought leaders not only in the industry but also academia, the non-business context, government etc.
- Institution aware and sensitive to the needs to the society around - An institute that contributes to every segment - academia, industry, society.

# *Reflections on Building Institutions<sup>1</sup>*

**Deepak Satwalekar**

---

"It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair..."

– Charles Dickens (1859)

While this may describe our sentiments today, it is actually a quotation from the book "A Tale of Two Cities" written by Charles Dickens in 1859 describing events and times in England and France in 1775. So, we are not uniquely damned by the actions and inaction of the current rulers. All I want to say is not to let current externalities rule us and our actions, but to prepare ourselves to take charge of our lives and to lead our lives in the best possible manner. Best, not just for ourselves, but for the society at large, because our good can only come from the good of the society and its members. The aristocrats in France found that out the hard way - on the guillotine.

I am an extremely lucky person to have had the opportunity, three times, to create something from nothing. I failed badly the first time when I was twenty-two years old. That company does not exist today. The next one was a bit more successful, but it is only 36 years old. I am referring to HDFC, India's first private sector and currently the largest housing finance provider. The third is still work in progress, 13 years old, but is showing good signs of replicating its parent. I am talking about HDFC Standard Life Insurance Co. Ltd. HDFC created a new sector, while HDFC Life Insurance was the first private sector life insurance company to be registered 44 years after the creation of LIC through the nationalization of the then existing private life insurers.

I am an example of what an average person who is committed to his principles, and can get others to believe in them, can achieve in his life. This is not to brag about myself, but to emphasize that you can do it. Many

youngsters think that if you go down the path of values and principles, it is a lonely path and a dead end street. You are wrong. There are enough good people in this world in search of a leader who will show them the right way of doing things, not the expedient way of achieving short term results. There are institutions and companies in India which stand testimony to this belief.

So how do you go about building an institution? You don't. You cannot. That cannot be the objective. It can be the result of your actions. An institution is after all only a legal manifestation of the people in it.

Let me give you a little background in order to put things in perspective. What was being established thirty six years ago was a financial institution that was i ) intending to raise long-term resources, which was generally very difficult to do at that time, ii) finance households directly for housing, which no bank or institution in India had dared to do iii) service loans efficiently even though there existed no legal mechanism of foreclosing on mortgages and iv) still remain commercially viable and enhance shareholder value consistently.

To make commercial sense of this venture, we had to be different and the difference we decided on was "customer service". At that time, quality customer service, especially in the sphere of retail finance, was somewhat of an oxymoron.

Right from its inception, HDFC has maintained a strong service philosophy - service became the business and service became the product. For HDFC, service defined the organisation's products, delivery processes, internal systems and how people interact with each other. So right from the very first day we opened our door for business, we at HDFC installed our home-built model

---

<sup>1</sup> Lecture delivered at IIM Indore on October 3, 2013 on occasion of the Foundation Day celebration of IIM Indore.

for customer service. And the reason why we had to develop our own service delivery model was simple - - there was just no other domestic model to emulate.

Quality service became an inherent feature of our operations. Quality became the distinguishing attribute in our operations. Striving for excellence became a personal mission for each one of us.

The way HDFC looks at customer relationship management has not changed, what has changed are the ever rising customer expectations. Customers have increasingly become more demanding, less loyal, seek convenience, demand the best service in the shortest possible time and at the lowest cost. And if the customer doesn't find a satisfactory solution with your organisation, he simply takes his business elsewhere. The comfort that some financial organisations used to have -- the feeling of 'owning the customer' for life is today just not there. So getting a customer is only one part of the job, retaining the customer requires a different strategy altogether.

Customers will automatically gravitate towards organisations where they feel they will get superior service, where they feel they will be treated fairly, be adequately informed about the costs of the transactions and where they generally feel a sense of comfort. Most such impressions or perceptions are created by word of mouth through experiences of other customers.

As a practitioner, I believe that for a financial product, the only differentiator is service. The uniqueness of a financial product will last at the most a week or a month- anyone can copy it and the only patent protection one can have is quality of service.

Employee and customer satisfaction are inextricably linked. An organisational structure more often than not determines the efficacy of relationship management within an organisation. How the staff is treated will invariably reflect how a customer is treated. It is unlikely that a disgruntled employee will be able to provide customer satisfaction, but a committed and empowered employee is more likely to help acquire and retain a customer.

I'd like to quote the closing line of the stage musical,

*My Fair Lady* : "the difference between a flower girl and a lady is not what she is, but the way she is treated". What it means is managers who believe in their employees and have high expectations of them can get phenomenal results. Remember, you can never, ever, do enough for your people.

At HDFC, we had always believed that empowering frontline staff is a necessary condition for delivering exceptional service. It is the frontline staff that really understands the customer's psyche because any interface is with the frontline staff. It is therefore necessary to keep frontline staff motivated and enthusiastic. Empowerment is the process of creating an enabling environment in which individuals take responsibility for making significant shifts in the value creation process for customers and contribute to the organisational goals. It requires the creation of a culture where people across levels feel they can make a difference and this in turn assists them in acquiring the confidence and skills to do so.

Empowerment is often mistaken as increasing the power of the employees. On the contrary, it is more about releasing the knowledge and motivation which employees already have. People must directly experience being in charge of themselves and their destiny to develop an empowered state of mind and thereby exhibit empowered behaviour.

More important than the introduction of new organization structures is the need to have in place a value system, the organizational culture, which weaves through the entire fabric of the organization and becomes the cohesive force that holds and drives it forward. It will therefore be necessary for the senior management to crusade for and get the message of the organizational values down to the last employee, on a regular basis. A healthy culture is simply a function of several factors, namely, honesty, trust, dignity and respect. They all go together; they reinforce one another.

You may have noticed that in my talk I have made no reference to any financial ratios or parameters- not because they are not important to building institutions, but because people are more important. And this is true even for you, individually, at the personal level. **Howard**

**Stevenson, Professor at Harvard Business School**, based on extensive research, has articulated the findings very well "the four things that make us feel successful in life: achievement, significance, legacy and happiness". You will note that money, status in society don't figure in that list.

What is true for institution building is equally true for building your career. So let me just leave some thoughts behind for your consideration. These have been the driving force in my life, and I have benefited a lot from them.

- Take jobs and internships that pay less money or no money, but give you the opportunity to learn, experiment and grow. After completing my graduation in IIT, I took a job at an unknown small company at Rs 600 pm instead of a job at L&T paying 25 percent more. I have no regrets at all.
- Do what you love, and not what is "expected of you" or what is seen to be the right thing. If you enjoy what you are doing, you will bring passion, energy and an ability to work without stress. As Thomas Edison, who held 1093 patents, said, "I never did a day's work in my life: it was all fun".
- Be passionate about whatever you do. Give it your 100 percent. As Ralph Waldo Emerson said, "Nothing great was ever achieved without enthusiasm"
- It is important for us to have an aspirational statement for ourselves. To see ourselves in a grander manner than just as a cog in some wheel. We must have a goal, an end cause, a higher aspiration for our endeavours, and we must work with passion and be loyal to the end cause. We crave so much more in our work, and not just money. We want fulfillment, creative challenge, growth, joy and a sense that we are living for something more than ourselves. There was an anecdote that I used to repeat very often, because I thought it was very apt. So let me repeat it one more time.
- When St. Paul's Cathedral was being built in the late 17<sup>th</sup> century in London, Sir Christopher Wren, an eminent architect, asked a mason what he was doing and he said I am carrying a brick from here to there. He asked another mason what he was doing and he

said I work from 10 o'clock to 5 o'clock, I get ten shillings a day and this is my means of livelihood. He then asked a third mason what he was doing and he said: I am participating in the building of this magnificent cathedral.

- One of the biggest mistakes you can make in life is to accept the known and resist the unknown. You should, in fact, do exactly the opposite put a challenge the known and embrace the unknown. Six weeks after joining Citibank, fresh from my MBA, I quit, only to join a company that had started operations a month earlier - that was HDFC. No one had heard of it. I realized that for me working in a big company, with its rules and regulations and processes would have been stifling. I wanted to write the rules. Let me be honest. Did I know all this when I did what I did? Absolutely not. I just went with what my heart told me, and it has not let me down.
- Learning is a process not an event. I thought learning would be over when I got my degree. It's not true. I haven't stopped learning, and my teachers have been everyone from the junior most in the company to senior colleagues in industry. Indeed, it gets easier to learn once you're out of the educational system because it's easier to see the relevance of why you need to learn.
- Be true to yourself.
- Set the highest standards for yourself.
- Live up to your own expectations. Its tougher than meeting your bosses expectations.
- It is important to stick to commitments made by you, so don't promise anything that you cannot deliver.
- Keep things simple. Don't introduce complications if they are not necessary, even if they make you look intelligent.
- Don't seek greatness in other people's eyes.
- Cherish your convictions and stand by them. You can fake principles for an audience. You can't fake it in your own eyes. Your conscience is the strictest judge.
- Do what has to be done. Fame, admiration and rewards will follow. Don't work for the rewards. Don't make money your sole aim in life.

- Money is only a means to some end.
- Build intrinsic strength so that you truly become great and are not just thought of as being great.
- Customers are all you have. Care for them.
- Planning and strategy formulation is important, but execution is critical.
- To become truly great, you must add more value to the world. And the best way to begin doing that is to become a more valuable person. Acquire skills no one else has. Read books, no one else is reading. As someone said, and I don't recall who:

*What will matter is not what you bought, but what you built.*

*Not what you got, but what you gave.*

*What will matter is not your success, but your significance*

*What will matter is not what you learned, but what you taught.*

*What will matter is every act of integrity, compassion, courage or sacrifice that enriched, empowered or encouraged others to emulate your example.*

*What will matter is not your competence, but your character.*

*What will matter is not how many people you knew, but how many will feel a lasting loss when you're gone.*

*What will matter is how long you will be remembered, by whom and for what.*

*Living a life that matters doesn't happen by accident, but by choice.*

## Concluding Remarks

In a fast changing and increasingly more competitive world where the biggest trend in business is the rise of infotech, corporate leaders are searching for achieving sustainable competitive advantages. However increasingly they will find that this search will lead them not towards increasingly hi-tech solutions, but instead towards the soft side of business - values and culture.

In this world, corporations and institutions have an enormous responsibility to support the reinstatement of a business ethic that shuns short cuts and unethical practices; that builds a management style to reflect this

ethic; that is quick to promote an active public service strategy and is in tune with the environment in which it operates. In the long run, this approach makes business sense as customers are likely to be much more discriminating in a world of information and transparency and are likely to gravitate to those institutions that have impeccable standing, enlightened leadership and a strong element of social responsiveness.

---

**Deepak M Satwalekar** retired as the Managing Director and Chief Executive Officer (MD & CEO) of HDFC Standard Life Insurance Company Ltd. in November 2008. Before taking on the responsibility of setting up and running the new Insurance company in the year 2000, he was the Managing Director of HDFC, the country's largest mortgage lender. He received a B.Tech. in Mechanical Engineering from IIT, Bombay, and a M.B.A. from The American University, Washington D.C. He has consulted for the World Bank, the Asian Development Bank, and other bilateral and multilateral agencies in several countries. Besides being a recipient of the "Distinguished Alumnus Award" from IIT, Bombay, he is on the Advisory Council of the IIT, Bombay. He has been a member of/chaired several industry, Reserve Bank of India and government expert groups. Inter alia, he has been/is a member of the Technical Advisory Committee of the RBI, the Committee for Policyholder Protection/Intermediaries, etc of the Insurance Regulatory and Development Authority, Committee for Restructuring the NPS set up by the PFRDA. He also serves as an independent director on the boards of some large companies in India. He serves on the India Advisory Board of a large European Bank and is currently active on the Board of Trustees of IshaEducation ([ishavidhya.org](http://ishavidhya.org)), Gyan Prakash Foundation and Teach to Lead([teachforindia.org](http://teachforindia.org)), which are engaged in the field of primary education for the low income and socially disadvantaged members of society in rural and urban India respectively. In the field of higher education, he is on the board of the Indian Institute for Human Settlements ([iihs.co.in](http://iihs.co.in)). He is an adviser to Private Equity and Venture Capital firms as also on the Board of Society for Innovation and Entrepreneurship, an early funding vehicle set up at IIT, Bombay. He is also advising a company which is establishing a network of BPO centers in rural areas across the country. Board memberships include: Infosys, Asian paints Ltd., Piramal Enterprises Ltd., The National Stock Exchange of India Ltd., The Tata Power Co. Ltd., IL&FS Transportation Networks Ltd., India Mortgage Guarantee Corporation P Ltd., Franklin Templeton Asset Management India P Ltd.

# *Thoughts on Academic Excellence<sup>1</sup>*

## **V. L. Mote**

---

The topic on Academic Leadership for discussion is timely and opportune. It is timely, because none of Institutions for higher learning, including the IITs and IIMs find a place among the top ten institutions of higher learning around the globe. Why do not we in India have a M. I. T., the Sloan School of Management, Harvard Business School of Business Administration and the California Institute of Technology? This question is of concern not only to academicians like us but also to the Ministry of Education, Government of India. If we do not address this question in right earnest, we would be perpetuating mediocrity. It is opportune because India is now grudgingly getting global appreciation as a country that matters. However, we are lagging far behind China in economic development, in giving to Indian citizens, good education, nutrition and an excellent health system that is comparable to the best in the world. In addition, India is nowhere near China when we compare the Indian military might with the military might of China. The Indian army has undoubtedly come a long way since the day when it suffered a humiliating defeat at the hands of the PLA. However, we cannot correct all the problems that I have listed above, unless we provide an excellent academic leadership to our Institutes of higher learning. In a "Knowledge-Economy", can India survive without excellent education and particularly, higher education? Providing academic leadership in achieving excellence in teaching must be the top priority of the Institutes and their distinguished alumni.

I make no apologies for beginning my presentation with the questions that I have posed in the second paragraph of this article. Asking the right questions is as important as finding the answers to the questions. It is so for the simple reason that we cannot answer a question that has not been posed. According to the legend, wrote his three great works, and impelled by the first question of his wife, The three words happen to be the first three words of the three works respectively. Why does

the sky look blue? This question led to the answer "Blue colour of the sky is due to Raleigh scattering."

Now that we are discussing "Academic Leadership" in IIM Indore, it is obvious we must address "academic leadership" in management education. I strongly believe that the Institutes of Management and the alumni of the Institutes' top management programmes have a crucial role to play in addressing the major managerial problems that the Indian Industry and the Indian Government face. I hope that I do not appear to be chauvinistic when I make the above assertion. The late Dr Vikram Sarabhai told me when he recruited me a young assistant professor "Mote the purpose of the Institute of Management Ahmedabad is to help the Indian Government and the Indian Industry in resolving many problems which we can classify as managerial. You must do so through your empirical and theoretical research and teaching" These words of Dr Sarabhai are etched on my mind and these words ring in my ears even now after fifty-one years.

With this background let me now address the question, what should be the action plans of the Institutes of Management and the alumni of its top management programmes for providing academic leadership? The triads of any educational programme are who to teach? what to teach? And the third element of the triad is how to teach? In the present context the question, who to teach is redundant. Clearly, our target audience is the participants of the Institute's top management programme. I will therefore concentrate on the two elements what to teach and how to teach.

Clearly, an organisation exists in an environment, comprising the economic and the social environment. The recent debate between two well-known economists, Professor Sen and Professor Bhagawati, whether social development comes first or economic development comes first shows the importance of understanding the environment that we live in. When President Obama won a second term, he said, "The US is standing on a fiscal cliff." In India, we are in a much worse situation.

---

<sup>1</sup> Lecture delivered at IIM Indore on October 3, 2013 on the occasion of Foundation Day celebration of IIM Indore.

Our fiscal deficit among other factors, is leading to inflation, which in turn is leading to high current account deficit. As an economist observed "Inflation is the cruellest tax on the poor." Can you imagine the hardships that poorer sections of the society must be facing when onion, which is a poor man's food costs about eighty per kilogram? The rising prices of milk and vegetables are driving the inflation. Why cannot the persons who are in charge of managing the Indian economy tame inflation? Obviously, helping the understanding of the economic environment must be an important part of the Institutes' programme for providing academic leadership. I am sure that during this excellent "Conference on Creating and Sustaining Institutions" you must have discussed these important aspects of the Indian economic environment. My experience shows that the courses that teach Macro Economics rarely discuss these questions, which should be the central foci of such courses. Who but the Institutes and its alumni like you can provide this academic leadership?

Undoubtedly, we have followed a development pattern that has benefited only a few urban citizens who speak English<sup>2</sup>. Publishing data about the proportion of Muslim students in the Two-Year Post-Graduate Programmes that the Institutes offer would show how lopsided the distribution of educational opportunities for higher education are. Similarly, making public the data about the proportion of students whose parents are industrial workers, in the IIM's Two-Year Post-Graduate Programmes, would again highlight how lopsided the distribution of educational opportunities for higher education are.

What is true of the nation's educational programmes is also true of the nation's industrial development. The nation has developed large industries that are capital intensive resulting in large scale unemployment. What the nation needs is an array of labour intensive industries such as tourism and the garment industry, which are well paying. However, the impediment to the development of these industries is the attitude of the workforce. Remaining absent at the smallest pretext is

a common norm. In a garment industry, the production is organised in a line where each operative performs a limited operation and passes on the garment to the next operative. In such a production set up, absenteeism can be detrimental. Further, the poor quality of education affects the industry. In an interview for the selection of sewing machine operative, I asked the candidate whether an inch is longer or a centimetre is longer? I was surprised when the candidate who had passed the standard 10 in high school did not know the correct answer.

Similarly, for tourism we need guides who can speak many languages fluently. I speak subject to correction, but I am afraid that we do not have facilities to train tourist guides. Clearly, the only solution to all these problems is to ensure that all **young Indians** get good quality basic education. By basic education I mean that the education that will give them proficiency in reading, writing, and basic arithmetic. It is unfortunate that the poorest sections of the society do not get good quality education.

The Government of Gujarat has given this important task to Ahmedabad's municipal schools. Unfortunately, the less we speak about the quality of education in these schools the better off we would be. Now the Government has made it mandatory for corporations to set aside 2% of their profit for achieving the corporations' objective of Social Responsibility. I do hope that IIM Indore and its distinguished alumni will help the corporations to use these funds effectively and efficiently for imparting education to the poorest of the poor children in the city.

It is not possible to discuss thoroughly in the ambit of one short presentation all these issues. It would suffice it to say that the IIMs and the IITs should equip many NGOs<sup>3</sup> who can carry out these tasks.

I have not discussed two important issues regarding the IITs and IIMs' role in providing academic leadership. The first issue is, how to teach? And the second issue is the need to prepare teachers for meeting the burgeoning need for educating people at different levels.

---

<sup>2</sup> Once a research assistant told me, "Professor, do you realize the advantage that you have because your parents spoke English?" He stopped me dead in my tracks.

<sup>3</sup> SHARDA Trust, Arvind Mills' arm for helping the urban poor is carrying out many of these tasks effectively.

For want of space I will only answer the question, how to teach rather perfunctorily. I suggest that for answering the question how to teach, all teachers should follow Gandhiji's advice to teachers. He said, "**teach for life, through life, and throughout life.**" (Emphasis added).

Undoubtedly, the need to prepare **good teachers** is a pressing need. However, I am afraid that the IITs and IIMs can do very little about it except for training the teachers they need for their own requirements. For any person who wants to teach in primary school or high school must have a B. Ed. degree. Unfortunately, the IITs and the IIMs can play no role in improving the quality of education in the B. Ed. Programme. I recall that the IIM Ahmedabad had started a programme for university teachers but they had to wind up that programme soon.

Let me now turn to the question of social environment, which also has close connection with the economic environment. Parliament has passed the Food Security Bill. Undoubtedly, no Indian citizen would like to see a child going to sleep on an empty stomach. An old English adage says we must not only give fish to a hungry person but also teach him to fish. Do we have an effective educational programme to teach a vast majority of the unlettered persons among the poorest section of the society? I have already highlighted this issue and I need not repeat it here.

We get a glimpse of the Indian social environment when we read about the brutal rape and murder of Nirbhaya in Delhi. Similarly, the rape of a photographer journalist in Mumbai leads us to question how this could happen in India where we proudly say, "Angels dwell where women are respected?"

Do you remember the disaster in Uttarakhand where many pilgrims lost their lives? Let me recall the sequence of events leading to the disaster in Uttarakhand. On 12 June, the Metrological Department issued a warning of heavy rainfall near the Kedarnath temple and suggested that the *char dham yatra* should be postponed. The department sent copies to the CMO and to the District Collector's office. Unfortunately, none of the worthies took any notice of these warnings and the disaster followed. It was the Indian Air Force and the Indian

Army rescued the pilgrims. The Air Marshal said "our rotors will keep spinning until we have rescued the last pilgrim. In the massive rescue-operation that followed the Air Force lost one helicopter, the pilot, and the army personnel lost their lives. But the Air Force did not stop its rescue operations. After giving full military honours to the pilots and soldiers who lost their lives in the operation, the Air Force continued its rescue operations.

The Indian Armed forces could do such a rescue operation because it has a strong code of conduct. The code is:

1. The safety and the honour of your country come first.
2. The safety and the honour of the men you command comes second, and
3. Your own safety and honour come last.

That the Armed Forces live according to this code of conduct is apparent when we see the ratio of officers to men killed in all battles.

Contrast the behaviour of the Air Force Pilots and the soldiers of the Indian Army with the behaviour of the shopkeepers and the *dhaba* owners who fleeced the hungry and the thirsty pilgrims who could manage to come down safely.

Can the Institutes of Management and its distinguished alumni act as the conscience keepers of the society? I am sure that if the IITs and the IIMs followed this strategy, then over a couple of decades they would have transformed Indian society.

I could go on. We academicians do not keep time according to the watch. We keep time with the calendar. I would not tax your patience. Let me conclude my talk by sharing with you the important message that the last verse of the *Bhagvadgita* gives to important people like you shape the destiny of organisations. Perhaps a word on what the *Bhagvadgita* is may not be out of place. The *Bhagvadgita* is more a religious classic than a philosophical treatise. It is not an esoteric work designed for and understood by the specially initiated but a popular poem which helps even those "who wander in the region of many and variable." The last verse of the *Bhagvadgita* says "unite vision (yoga) and energy (dhanuh) and not allow the former to degenerate into

madness or the latter into savagery. High thought and just action must be, for ever, the aim of man."

**V. L. Mote** was a Professor at Indian Institute of Management Ahmedabad from 1962 to 1993.



## Indian Institute of Management Indore

Management Development Programmes

JANUARY - MARCH 2014

S.N.	Programme Title	Coordinator	Dates
1.	Negotiation Skills	Kamal Kishore Jain	Jan 06 - 08
2.	Retail Management	Hasmukh Gajjar	Jan 07 - 10
3.	Workshop on Business Modeling	U. K. Bhattacharya	Jan 13 - 15
4.	Senior Management Programme	Prashant Salwan	Jan 16 - 25
5.	How to Build Innovative Organizations	D. L. Sunder	Jan 22 - 24
6.	Leadership Communication	Madhusri Shrivastava	Jan 27 - 29
7.	Customer Behaviour and Marketing Strategy	Sabita Mahapatra	Feb 03 - 05
8.	Competency Mapping & Management	Sumit Kumar Ghosh	Feb 03 - 05
9.	Strategic Reward Management	Kajari Mukherjee	Feb 10 - 12
10	Workshop on Logic of Logistics	U. K. Bhattacharya	Feb 10 - 12
11.	Accelerating Leadership Impact through Communication Skills	Swatantra	Feb 17 - 19
12.	Corporate Performance Management	Keyur Thaker	Feb 18 - 20
13.	Cloud Computing and Other Modern Computing Architectures	Madhukar Dayal	Mar 03 - 05

For details please contact:

Management Development Programmes (MDP) Office

**Indian Institute of Management Indore**

Rau-Pithampur Road, INDORE 453556 (India)

Tel: +91-731-2439750, 2439752-54 • Fax: +91-731-2439800, 2439751 (D)

E-mail: mdp@iimidr.ac.in

# *ABV-IIITM: Experience of a T and B School<sup>1</sup>*

**S. G. Deshmukh**

This paper elaborates the case of an institute of higher learning specializing on both Technology (T) and Management (B). It is an interesting synergization of both a T-school and a B-school. Various challenges faced and interesting initiatives undertaken are discussed. The insights gained are also spelt out with a view of sharing the experience of sustaining these initiatives.

## **1. Introduction**

ABV-Indian Institute of Information Technology and Management (ABV-IIITM), Gwalior is a premier Institute set up by Ministry of HRD, Government of India in 1997-98 with the objective of imparting quality education and conducting high quality research in the cusp areas of Information Technology and Management. The institute is the first in the series of MHRD institutions in the IIIT family. It is a novel experiment of synergizing IT and Management. It is both a T-school and a B-school complimenting each other. The institute is fully residential, spread across 150 acres of lush-green area, and has state-of-the-art infrastructure. Currently, the institute is exclusively a Postgraduate (PG) institute. It offers postgraduate and doctoral level programmes. The institute got the status of a deemed university in 2001. The institute has academic collaboration with international institutes and universities from abroad (Deshmukh, 2012).

The institute is set up with the following objectives:

- To provide research, consultancy and advancement and dissemination of knowledge.
- To undertake extra mural studies, extension programmes and field outreach activities to contribute to the development of society.
- To promote the cause of information technology and management education and research in an integrated manner.

It may be noted that, for a country like India, there is a huge demand for high quality UG education, and from the supply side, there is no dearth of good quality candidates and institutes offering UG programmes. However, getting good quality candidates at PG level, particularly at the PhD level, is a big challenge. ABV-IIITM takes pride in having taken this challenge with a conscious focus on PG education with a deliberate tilt towards developing a qualified manpower in terms of PhDs. The institute has contributed to the technical manpower scenario by offering its doctoral output in IT and Management. The high quality products out of its Ph D programme are working in IITs (IIT Delhi, IIT Chennai, IIT Kharagpur), IIMs (IIM Lucknow, IIM Shillong etc.), NITs (Jaipur, Bhopal etc.), IIITs (Jabalpur) to name a few.

It may be worthwhile to dwell on the typical characteristics of a good institute (Deshmukh, 2012).

- A good institute must have good academic programmes which enable students to develop a good perspective and instill a sense and commitment towards lifelong learning.
- A good institute must have the faculty who are creating, not just conveying knowledge in their fields, and who are engaged in their disciplines beyond the institute itself.
- It should have ties to the fields with which it works - for example, the Business school should have connections to the business community; Technology school should have connections with industry and technologists.
- It should foster a passion for learning, not just train people for specific jobs, so there should generally be an eco-system enabling intellectual curiosity on campus.
- It must have a focus on continuous improvement whereby the pursuit of excellence is never ending.
- The institute cannot ignore the culture and context within which it operates and attempts to influence.

<sup>1</sup> This paper is based on a presentation made by the author at IIM Indore's Foundation Day Conference: "Creating and Sustaining Institutes of Higher Learning" on October 2, 2013.

This paper is an account to take stock of above characteristics with reference to ABV-IIITM Gwalior. The following premises are to be noted. These premises are the building blocks and help understand the fabric and texture of an institute such as IIITM.

- P1 : An institute is a socio-cultural- technical system
- P2 : An institute is an organic entity and has its life cycle
- P3 : An institute has its own dynamics and sensitivities
- Corollary : Residential campus has its social dynamics
- P4 : Both culture and context are inevitable parts of the institute
  - Culture
    - Culture gives identity to an institute
    - Culture is a composite entity - difficult to define but easy to feel
    - Culture is built over a period of time - it can not be copied, nor can it be transplanted!
  - Context
    - Context in which it was established, evolved and reached its maturity

## 2. Academic Programmes Offered

The Institute offers a five - year Integrated Post Graduate (IPG) programme leading to degree of Bachelor of Technology in Information Technology and Master of Technology/ Master of Business Administration. This is a flagship programme of the institute as reflected in terms of its acceptability by industry, parents and high ranked candidates from AIEEE examination. The curriculum consists of:

- Blend of information technology and management (typically in an IPG (M Tech programme, 30 to 35 percent course credits come from Management stream and in IPG (MBA) programme, about 40-45 percent course credits come from Technology stream.)
- Set of courses designed to introduce state-of-the art in the domain of the study. For example: there are courses such as Mobile Computing, Information Security, Set of courses designed to introduce societal orientation by linking the implications of subject under study to social and economic problems of the society. For example, there are courses such as, e-governance, Environmental Ecology etc.

**Table 1: Academic Offerings**

Sn	Programme	Characteristics	Credits	Expected Duration
1	Integrated Post Graduate Programme (IPG) (Admissions through AIEEE/JEE)	Leading to:B Tech (IT)+ M Tech, or,B Tech (IT) + MBA	220-230 Credits including thesis	5 Years
2	M.Tech (Admission through GATE)	Computer Sc and Engg. (Adv Networks, Infor. Security, VLSI, Digital Comm)	58-60 Credits including thesis	2 years
3	MBA (Admission Through CAT/MAT/CMAT/JMET)	Focus on integration of IT and Management with specializations in General, PSM (e-governance) and IT Enabled Services	60-70 Credits including thesis	2 years
4	PhD (Admissions through written test, presentation and	With focus areas in IT, CS, EC, Management /Humanities and Applied Sciences	12 Credits course work+ Thesis	Min. 3 years

**Table 2: Various Challenges Faced by the Institute**

<b>Sn</b>	<b>Challenge</b>	<b>How was it Addressed?</b>
C1	Documentation	Through ISO9001:2008 Certification: Hired a consultant to help in documentation Digitization of records: Academic and Admn Related through an agency
C2	Streamlining of Procedures	ISO9001: 2008 acted as a platform Involvement of internal people with experts from outside for adopting procedures
C3	Automation	Computerization of various activities Use of software such as Tally, SORS (an in-house ERP for academic system)
C4	Work Culture	Involvement of various stakeholders Making processes transparent, Getting feedback from various users Periodic visits by employees (Faculty, staff ) to other institutes Periodic visits by outside experts Regular hosting of events involving people from outside

The institute also offers regular M. Tech and MBA programme and a very vibrant Ph D programme. The total student population on the campus is about 950.

Table 1 presents the academic programmes offered by the institute.

### **3. Challenges Faced**

The institute faces both routined and some interesting challenges.

#### **3.1 Routined Challenges**

The institute faced many challenges, being infantile in development phase, and being in a location such as Gwalior. These challenges were on account of documentation, procedures, and work culture. Table 2 shows how these challenges were addressed.

Gwalior does not have good connectivity, though it is just over 300 kms away from Delhi. The air connectivity and road connectivity are not adequate. However, the issue of connectivity is addressed through virtual or digital connectivity. For example, through video conferencing/Skype, the issue of connectivity is partially addressed.

The institute is also visible in various social media such

as Facebook, LinkedIn and also hosts and supports events outside Gwalior to show its presence and visibility.

#### **3.2 Interesting Challenge**

As mentioned, the institute works in the cusp areas of IT and Management. Applied sciences and humanities form an integral part of the institute both in terms of faculty resources, and research areas being pursued. At a gross level, it appears that the institute has a dual view: the view of a typical T-school and a view of a B-school!. (Table 3)

It is an interesting challenge to have a balanced view amalgamating both the views. This is facilitated by

- a) Faculty jointly guiding students for IPG/M Tech/ MBA thesis work.
- b) Faculty collaborating on research projects of mutual interest coming from T or B school
- c) Students and faculty jointly participating in various events.

It must be noted that at times, the institute may give a look that it is predominantly a T-school, at times, it may give a look that it is predominantly a B-school. The challenge lies in giving it a perfect blend of both T and

**Table 3: Two Interesting Views**

T-School View (IT/Computer Sc/Applied Sciences)	B-School View (Management and Humanities)
Strong focus on quantitative and optimum solutions	Strong focus on qualitative and heuristics
Always searching for exact answers	Searching for thumb rule based solutions
Comfortable in dealing with certainty	Comfortable in dealing with uncertainty
Work with complete information	Work with vague information
Structured in approach	Unstructured in approach

B school. This challenge cannot be met unless faculty, staff, student and other stakeholders are aligned with the vision and mission of the institute with a shared perception.

#### **4. DNA of the Institute**

The institute has earned a place of recognition. Table 4 presents a quick score card of the institute.

Generally, the DNA of any institute is characterized by several elements (Anubhai, 2011). Several DNA elements have contributed to the above scorecard.

##### **4.1 Competent Faculty**

ABV-IIITM follows IIT norms in recruitment of faculty. Every regular faculty is a Ph.D. They are selected following a rigorous process, including seminar presentation and personal interview before the selection committee. The seminar is attended by all faculty

members of the institute. Our faculty is on the editorial boards of several journals. The faculty has won several professional awards and recognition such as Best Paper Award, Young Scientist Award, Career Award by AICTE etc. The institute is also able to attract adjunct faculty from industry.

##### **4.2 Competitive Students**

The institute is able to attract high quality students reflected in their AIEEE /JEE Ranks or GATE/CAT/ JMET/MAT scores. Students have won several competitions and awards. They have also won Open Source Software Competition held at several institutes including IIT Bombay, NIT Trichy etc. From ACM-ICPC to IBM The Great Mind Challenge, Lord of the Code (IIT-B and Red Hat) to Google Code Jam, the students of the Institute have been at the top position of various International and National competition.

**Table 4: Quick Score Card of the Institute**

S1	Publications by faculty in last five years in Refereed Journals/ Conference/Workshops (as per SCOPUS indexed database )	500+
S2	Ongoing Research Projects from external funding agencies	16
S3	Ongoing Research Projects under Faculty Initiation Grants	6
S4	Ph.D.s Awarded till date	44
S5	Books published by the Institute Faculty	22
S6	Patents filed	02
S7	Workshop/ Seminar/Conferences conducted in last 3 years	50+
S8	Number of Entrepreneurs Developed	25+
S9	Alumni base (till 2012-13)	1791

#### **4.3 Strong Focus on Research**

The institute has developed strong research themes in IT, Management, and Applied Sciences. The following is an indicative list of these areas.

T-Areas    Image Processing; Biomedical Image Analysis, Wireless Ad-hoc Networks, Grid computing, Quantum computing, Mobile Computing. Biometrics, Information Security; Soft computing, AI, Modeling and Simulation of Biological and Environmental Systems, Datamining, Evolutionary Algorithms, VLSI Design, Nanoelectronics, Robotics , Reliability, Modeling for Nano materials.

B-Areas    IT Enabled Marketing, Customer Relationship Management, Supply Chain Management, Project Management, Finance Management, Accounting, Technology Management, Human Resource Management, Econometrics, Social Impact of IT, Public Policy and Processes, e-governance.

Research crossing the discipline boundary is encouraged. The research is conducted by both students and faculty. The students have an opportunity of thesis work (be MBA or MTech students). This provides a good outlet for research. The outcome is through publications in national /international conferences or journals.

The faculty members have an opportunity to do sponsored research. The institute has conducted several sponsored research programmes funded by agencies such as DIT, DST, MHRD etc. Its strong focus on research has led to numerous publications during its short period of existence. Its faculty and students have contributed to over 500 publications in International Journals and Research Conferences.

#### **4.4 Spirit of Innovation**

Creating entrepreneurs thriving on innovation and creativity has been the forte of the institute. Right from its inception, the institute has been promoting entrepreneurial spirit of the students and has been

nurturing young talent through E-cell and Innovation and Incubation Centre, incubating new enterprises. The institute has a collaboration with CIIE (Centre for Innovation, Incubation and Entrepreneurship) at IIM Ahmedabad. The institute takes pride in having developed 25+ entrepreneurs till date. In a very short span of time since its inception, the Institute has witnessed over many ventures by its students. CEON Solutions, BCube IT Services, ADAVANTAL Technologies, are to name a few such vibrant units. The faculty and students are encouraged to set up new enterprises.

#### **4.5 Peer-to-peer Learning**

There is a student forum called, Abhigyan Abhikaushalam Student Forum (AASF). This is a completely student driven forum emphasizing on peer-to-peer learning. All activities are managed by students.

- It organizes 50+ events per year
- Brings out magazine showcasing student talent
- Sensitizes about various issues
- Organizes various programming contests, b-plan competitions, quizzes etc. thereby help students in digesting both T and B view in synchronization with each other
- Helps to develop organizational skills along with technical skills

#### **4.6 Enabling Ecosystem**

The institute provides an enabling ecosystem for research. This includes a well-stocked library, state-of-the-laboratories (23 labs) and good computational facilities. The students are encouraged to present papers at national and international conferences/workshops. In last 2 years more than 80 students were funded for such participation. Besides academics, a lively culture of peer-to-peer knowledge sharing, collaborative personality development and skill enhancement ensures multi-dimensional development of the students as a part of the ecosystem.

The institute has developed strong linkages for collaboration with the Industry. There is an IBM Centre of Excellence in Software. The institute has collaboration

with C-DAC. Periodic sessions by Industry professionals are conducted to sensitize about the emerging technology and business scenario. The institute has developed strong bond with the Madhya Pradesh government for conducting various e-governance and IT related programmes for employees.

## 5. Impact

As one of the premier IT and Management institutes, ABV-IIITM produces a large volume of human resource which in turn serve the nation. An alumnus of ABV-IIITM is not only a human resource for Gwalior or Madhya Pradesh, s/he earns the ability to create and sustain national and international impact. Our alumni are in top leadership roles in corporations (such as TCS, Wipro, Yahoo etc.), educational institutions (such as IITs and IIMs, ), research labs (such as DRDO, NTRO etc.), NGOs, governmental agencies, and as heads of their own entrepreneurial companies.

Educational institutions are open systems. Thus, institute's technological know-how and managerial wisdom have meaning only when they addresses human and societal problems. The mandate of any academic institution should be the development and skill upgradation of all the stakeholders by imparting needed knowledge. Therefore, one of the mandates of ABV-IIITM Gwalior is to create technological and managerial solutions to solve social and economic problems at the grass root level. In particular institute endeavors to:

- Understand the challenges faced by the populace at large.
- Understand the prevalent governance system (involving citizens, non governmental entities, business and government) and developing ways to make it more effective.
- Gear institute's research and development activities to meet these challenges.
- Develop low cost technology enabled managerial solutions which are modular in nature and have ability to interoperate with broader solutions developed at state/national level.

A number of initiatives are taken by the institute wherein technology transfer is effected.

The impact is also felt through following initiatives:

### 5.1 Training Programmes

a) Apart from curriculum, ABV-IIITM is committed to the society through its social obligations. The institute is always eager to take community led initiatives, extension and outreach programme. One of our flagship programmes is training for professionals. Training for professionals, a novel concept initiated by the institute based on the idea of Finishing School in association with Department of Information Technology, Government of India. It is dedicated to guiding the professionals all round the country for excellence in Technology and Management and to bridge the gap between their education at the undergraduate level and the requirement of Information Technology Enabled Services.

So far 15 batches of students have been trained with more than 700 unemployed graduates taking advantage of this programme. The programme started as a response to the NASSCOM survey that revealed less than 25 percent of the total professionals in IT are employable. The program is a special initiative of the Institute to strengthen the quality of IT education and to enhance interface with industry, for those sections of the society who otherwise do have the access to state-of-the-art facilities and good learning environment. The programme aims to create quality manpower by imparting high quality professional training in three domains namely technology, management and soft skills for personality development. Active involvement from industry have led to the creation of good content for the program.

The finishing school has also benefitted the institute in the following ways:

- Helped in developing unemployable graduates of other institutes/colleges
- Improved in developing infrastructure
- Industry based assignments helped in gaining industry acceptance
- Industry faculty participation helped in reorienting our faculty
- Improved our visibility

- b) In line with the mission of the institute of providing e-governance solutions, the institute has conducted training programme for NREGA (National Rural Employment Guarantee Act ) workers of MP for enhancing their IT skills. This is a first-of-its kind programme wherein large number of employees at the grass root level are being trained.
- c) The institute has conducted several FDPs (more than 7) in recent past. It has trained more than 225 faculty members from various T and B schools.

### **5.2 Environmental Consciousness**

ABV-IIITM is committed to a sustainable society for future generation. It promotes environmental awareness in both formal and informal ways. In formal mode, the institute has designed courses like environmental ecology, ecosystem and sustainable development for the students. In informal mode, students are sensitized towards the present environmental problem by study tours and other participatory activities regarding water conservation, recycling, nature conservation and tree

plantation. Students are encouraged to undertake environmental projects such as waste management, environmental hazards of computer and mobile phones, water conservation as a part of course curriculum. Tree plantation is a regular activity on the campus.

The institute is first of its kind to initiate a butterfly conservatory on the campus. Butterfly is an indication of environmental health of the campus. With this view and to sensitize student community, a butterfly conservatory was launched on 11 April 2010 on the campus with active support from MP Biodiversity Board and Department of Horticulture , NDMC, New Delhi. The institute has also produced a documentary called "Disha" to showcase the biodiversity of the campus.

### **5.3 Professional Impact and Recognition**

The institute has also created certain professional impact. The following is a direct acknowledgement as recognized by the professional world. Table 5 provides an indicative list of recent laurels earned by the institute.

**Table 5: Professional Recognition Earned by the Institute**

Sn	Award/Recognition	Year	Remark
1	CMAI MP Educational Excellence Award for Best IT Institute in Madhya Pradesh, by CMAI	2013	T-View
2	25 <sup>th</sup> Rank in India Today-Nielsen Survey of Best Engineering Colleges	2012	T-View
3	20 <sup>th</sup> Rank in Top 100 Engineering Colleges for CS and 22 <sup>nd</sup> rank for EC Silicon India)	2012	T-View
4	8 <sup>th</sup> Rank in Zone (West) wise ranking of All India Engg Colleges (Silicon India)	2012	T-View
5	22 <sup>nd</sup> Rank in DataQuest-CMR Survey of Best T-schools in India	2011	T-View
6	29 <sup>th</sup> Rank in Best Professional Colleges of India, Outlook-MDRA Survey	2011	T-View
7	B-School with industry related curriculum Award by BloombergUTV	2013	B-View
8	12 <sup>th</sup> Rank in Silicon India - "What if not IIMs" Survey of 100 Top B-Schools in India	2013	B-View
9	B-school leadership Award by DNA & Stars of Industry Group	2013	B-View
10	Best B-School with Industry Related curriculum , ABP News Award	2012	B-View
11	Best B-School with IT curriculum Award by Devang Mehta Memorial Trust	2010	B-View
12	Best B-School Leadership Award by STAR News	2010	B-View

As mentioned earlier, the institute being both a T-school and B-school participates in both surveys conducted typically for a T-school or B-school.

The intangible impact is also felt in terms of enthusiastic absorption of our Ph D output by institutes which are apparently higher in academic ranking!

## 6. Interesting Connects

In today's networked economy, one cannot remain isolated. The institute is also no exception to this. The institute impact and get impacted by surrounding environment, eco-system and society. The institute being vanguard in IT and Management has developed strong connections with the surrounding ecosystem. This can be elaborated as:

### 6.1 Internal Connects

- a) Connect with students: Students are connected through several academic programmes and also through various student led initiatives. Institute constantly engages students in various activities, both technical as well as managerial. Student festivals are an indicator for this.
- b) Connect with faculty: Faculty are engaged in various activities. Besides teaching, faculty is expected to work on research, extension, and outreach activities. These activities are designed to actively engage the creative and intellectual potential of faculty in unison with students.

### 6.2 External Connects

- a) Connect with growing knowledge economy: Today's economy is highly connected and is based on knowledge currency. The institute has acted as a nursery for grooming talent for the knowledge economy. This talent is reflected in terms of a strong alumni base of over 1700 trained manpower spread across various IT and IT enabled services both in India and abroad.
- b) Connect with the spirit of Entrepreneurship: The institute has also acted as a spring board for entrepreneurs. It has produced entrepreneurs in IT and IT enabled services, thus merging the T-view and the B-view. The institute is also incubating technical/

business ideas which may later become business itself. There is strong foundation laid at the institute to promote the spirit of entrepreneurship through e-cell and technology innovation and incubation centre.

- c) Connect with industry: The institute has developed strong liaison with industry not only local (such as JK Tyres, Godrej, SRF etc) but at the national level (such as IBM). This helps in developing a real life perspective. The industry speakers help in making students realize the practical/pragmatic aspects of the world. The internship programmes done by students with industry help in establishing this connect.
- d) Connect with the community and society: The institute has started several initiatives to stay connected with the society. A regular IT literacy programme is conducted for neighboring community. Similarly, students also teach school children from socially disadvantaged sections of the society. Conducting several impact studies (such as assessment of Janmitra, assessment of impact of quality of service act etc.) is also a pointer to the social relevance of the institute.

It is to be noted that both internal and external connects help in establishing an identity for the institute.

## 7. Insights Gained and Summary

Institution building is not a simple exercise. It takes years to establish oneself. Ram Mohan (2011) demonstrates a good case of IIM Ahmedabad and the efforts taken by its visionary leadership. For a small institute such as IIITM Gwalior, it will take some time before its objective evaluation is done to assess impact. However, the following insights are important:

- a) The best practices and good procedures cannot be just transplanted. Though they are easy to understand, but difficult to implement! These are to be evolved, developed, adopted/ adapted and implemented based on the context and culture.
- b) Any change that is to be implemented must be done keeping in view the stakeholders.
- c) It is a challenging task to maintain a balance of T-view and B-view.

- d) Recruiting faculty remains the key challenge - and is harder for IIITM due to the existence of operation being CS/IT and Management led in which PhDs are less and job opportunities in the industry plenty. This challenge can be addressed suitably by working on several fronts. Providing a good eco-system to attract good faculty is just one of the initiatives.
- e) Typically an Institute has its baggage and own legacy issues which need to be addressed sensitively. Initiatives are to be brought slowly and surely after understanding the culture, context and the texture of its people!
- f) The institute is developing itself as a research-led enterprising Institute- this is quite different than a typical teaching-led Institute. It is here that the T-view and B-view help in realising this.

ABV-IIITM Gwalior is vibrant with its strong alumni base, competent faculty, competitive students and motivated staff. The institute has created a niche for itself in the cusp areas of IT and IT enabled management. The high impact research done by the faculty and students is reflected in both quality and quantity of the papers published, number of training programmes conducted and most importantly social initiatives such as Gyandhara , Buttrfly conservatory, Finishing school programme. The institute has become a model wherein IT besides its various technology facets, is also perceived as an instrument for social change through a strong discipline of Management. Thus the institute can be perceived as a blend of both a T-school and a B-school. It is to be noted that for an upcoming institute - establishing its position is a herculean task - one needs to work on multiple fronts! Amalgamation of both T and B views offers immense opportunities as well as an interesting challenges.

## Acknowledgement

Preliminary version of this paper was developed for making a case for new IITs in PPP mode by highlighting the model of centrally funded IITs. This version was based on several comments/observations received from institute heads of IITs. The author is grateful to all of them. This version was also published in a special issue on "Technical Universities" of Journal Engineering Education (in 2012). Author is thankful to Mr N V Ratnalkar for motivating to write on experience sharing about IIITM.

For the present version, the author is thankful to inputs received from various quarters in consolidating this write up. Especially the interactions with various faculty members and institution builders during the national conference (October 2, 2013) at IIM Indore has helped in crystallising various perspectives.

## References

- Anubhai, P. (2011). The IIMA story: the DNA of an institution, Random House India, Noida.
- Deshmukh, SG. (2012). ABV-IIITM Model: Experience sharing, J of Engg Education, Special Issue on TUs, Jan 2012.
- Ram Mohan, TT. (2011). Brick by red brick: Ravi Mathai and the making of IIM Ahmedabad, Rupa & Co, New Delhi.

---

**S G Deshmukh** earned his B Tech, M Tech and PhD from IIT Bombay and is associated with ABV-IIITM Gwalior. His professional interests include quality management, supply chain management and information systems. He is on the editorial boards of several journals. He is a National Council Member of IIIE.

# *Balance Sheet Effect of Real Investment*

**Subhasankar Chattopadhyay**

## **1. Introduction**

The old debate on the relation between interest rate and investment seem to be back in Indian policy space. Private sector and the central government want softening of interest rate, on the presumption that borrowing cost negatively affects the demand for capital and durable consumer goods. On the other hand, monetary authorities does not want so, as that may harden inflation and fuel further inflationary expectation. It was widely speculated that the wish of the central government will be reflected in monetary policy, once the new governor assumes office, but it did not materialise fully.

The debate is excessively preoccupied with the downward sloping demand for capital goods (and consumer durables) with respect to borrowing cost (interest rate). The debate often overlooks the fact that interest rate is not the sole determinant of the level of investment<sup>1</sup>. If it were, the level of investment would remain unchanged most of the time as interest rates are often policy driven and are changed infrequently. Therefore the policy debate must be carried out looking beyond the usual investment demand schedule. This paper tries to do so by offering a different perspective.

In the relevant literature (see section 2 below) - in understanding the relation between stock of liquidity and the level of investment - the causation begins from a change in stock of liquidity. In Keynes's General Theory (1936), changes in nominal money stock affects the interest rate via liquidity preference. This in turn alters the cost of capital and, subsequently, spending on durable goods, such as fixed investment, housing, inventories and consumer durables. In turn, changes in aggregate demand affect the level of production. This process has come to known as monetary transmission mechanism. Therefore the fundamental reason for changes in expenditure is relative abundance or scarcity of liquidity that is willingly effected by monetary authority. However, the stock of liquidity available in the economy may affect investment in several ways

without requiring interest rate to change first - a good example is liquidity trap.<sup>2</sup>

This paper explores one such possibility by posing a simple question - can composition of balance sheet affect the level of investment? The literature does not address this issue explicitly as transmission mechanism is about the effects of changing stock of liquidity on the economy. If the stock of liquidity is held constant to suppress the effects of transmission mechanism and the level of investment goes up (due to say 'animal spirit'), what are likely 'ex-post' balance sheet effects on financial markets that may call upon suitable intervention from monetary authority? The framework developed in this paper is based on general analytical argument and is not India-specific as such.

To understand why such an enquiry may offer useful policy insight, let us first quickly look into the relevant literature.

## **2. Literature**

Let us look, in turn, into the issue of investment finance as set out in the theories of Keynes and Kalecki and in the literature on credit channel of monetary policy.

### **2.1. Investment Finance in Keynes and Kalecki**

The distinguishing feature of investment goods production is that while expenditure (on labour, material etc.) is to be incurred now, the returns would be spread over multiple future periods. Financing of investment is the mobilization of liquid funds for this current expenditure which is a point input. The amount of funds to be obtained goes up with the level of investment. The issue is at what cost this funds can be obtained and how this cost would change with the level of investment. Cost essentially means the rate of interest. Intuitively it appears that requirement of more funds due to higher level of investment ought to exert pressure in the

<sup>1</sup> See chapter 8 of Romer (2006) for a detailed discussion on investment.

<sup>2</sup> Another example is a shift in the investment schedule caused by changes in business sentiments or by the so called Keynesian 'animal spirit'.

financial market in terms of pushing the interest rate up.

The linkage between investment finance and its cost has recurred and is captured in different ways in literature. The issue of investment financing is captured in the standard Keynesian IS-LM (Keynes, 1936) model in the following way. Starting from an equilibrium position, when (autonomous) investment goes up, say due to higher future profit expectation, IS curve shifts to the right and income goes up by virtue of the multiplier. Higher income calls for a higher transaction demand for money. Given a fixed nominal stock of money, higher transaction demand has to be met by releasing liquidity from the pool held for speculative and precautionary purpose. To induce people to do that willingly, interest rate must go up. So in the ex-post equilibrium both interest rate and income are higher. Note that such effect on interest rate is due to transaction demand and is not related to issue of investment finance as such.

When the equilibrium is reestablished after increase in investment, there will be additional saving arising out of higher income, and it is exactly enough (ensured by multiplier) to finance initial change in investment. Financement of investment is linked to additional saving available arising out of higher money income. This argument is captured by the statement that 'investment is self-financing', or 'investment finances itself'. This implies that there will be no problem of financing investment in the aggregate. Investment will eventually be matched by corresponding saving. Until saving equals investment, investment-saving gap will lead to changes in income but not in interest rate (recall that saving is function of income only in the standard IS-LM model) when excess capacity exists in the economy. This means that investment financing is not a problem as any level of investment can be financed at an unchanging rate of interest. The supply of funds is perfectly interest elastic in the sense that investment in the aggregate is not subject to a fund constraint.

Kalecki (1942) showed that, when wage earner do not save, real gross profit earned by capitalist as a class depends on their consumption and investment decisions formed in the past, with corrections made for unexpected

changes in the inventory and prices. Saving out of this profit can continue to finance the same rate of investment in the subsequent period.

What happens if capitalists wish to invest and/or consume more? Kalecki argued that such increased expenditures are self-financing in the following way. Imagine that a particular capitalist borrows from the Central Bank (or for that matter from commercial bank), to invest over and above the level of preceding period. When such finance is spent, essentially that amount will be received by other capitalists under the form of profits (due to assumption that workers do not save), and put again into a bank as a savings deposit or used to pay off a debt to the Central Bank. Thus, Kalecki argues that, the circle will close itself. He also pointed out that credit inflation (money supplied by the banking system) is required to take care of an increase in investment. It is needed partly to finance investment and partly to support higher transaction demand due to higher level of economic activity and prices.

The statement 'investment finances itself' resembles that of Say's law, remembering that multiplier causes income to increase only in demand constraint economy. However, it must be emphasized that this statement does not anyway indicate that finance is irrelevant, but means only that finance is not a constraint in the aggregate.

After the publication of General Theory, Ohlin (1937) challenged Keynes's view on investment finance and pointed out that there is a problem of reconciling savings and investment until the multiplier works itself completely. The problem is the following; suppose there is an exogenous increase in effective demand due to change in investment. Consequently, via the multiplier, output will rise to meet the increased demand. However, during the process of adjustment towards the new equilibrium, planned savings and planned investment are not equal. Keynes then introduced the concept of 'revolving fund' to take care of interim difficulties in financing process when investment is not equal to saving. This is what is called the 'finance motive' which is a temporary demand for liquidity and is different from the demand for active balances which will arise as a

result of the investment activity whilst it is going on (Keynes, 1937 A, pp. 246). Such demand for fund is temporary as the very need arises because of the transient nature of disequilibrium in the financial market.

*.. "finance" is essentially a revolving fund... When the flow of investment is at a steady rate, so that the flow of ex-ante investment is equal to the flow of ex-post investment, the whole of it can be provided in this way without any change in the liquidity position. But when the rate of investment is changing in the sense that the current rate of ex-ante investment is not equal to the current rate of ex-post investment, the question needs further consideration (Keynes, 1937B, pp 666).*

It seems that, if a pool of liquidity is set aside, above difficulty can be side stepped and there will be no undue pressure on the interest rate during financing of investment. However if that is not sufficient, monetary authority will have to accordingly adjust the volume of liquidity even when the level of investment demand remains the same. Further, Keynesian theory does not distinguish between 'external' and 'internal' finance. It does not matter whether firms draw down their own reserves (retained earnings) or chooses to borrow from financial sector. In Keynes, external and internal finance are perfect substitutes, therefore there is no wedge between external and internal finance costs.

This paper will pose this issue against possible balance sheet effects of real investment by employing a framework due to Hicks (1977). To sharply bring out balance sheet effects, i.e. to focus on the direct effect of financing real investment, we shall assume that the stock of liquidity is held constant during the financing process. This would suppress the conventional transmission channel. Further, as in Keynesian theory of money market, we will adopt stock equilibrium for determination of interest rate. For this reason it is appropriate to look at the effects of real investment on balance sheet.

## 2.2. Credit Channel of Monetary Policy

Given uncertainty about the future, market outcomes will be efficient and Pareto-optimal as long as agents hold symmetric beliefs about the nature of uncertainty.

But often there is asymmetry of information among agents. Therefore efficient contracts may not be possible for one simple reason: one party's insufficient knowledge about the other party involved in a transaction may prevent taking accurate decisions. In the context of financial markets, entrepreneurs often have more information about the project 'quality' than the investors. Under such condition, Keynesian assumption that internal and external funds of a firm are perfect substitute and therefore both have the same cost will no longer be valid. The difference between external and internal costs is known as 'external finance premium'. According to the literature on credit channel of monetary policy,<sup>3</sup> monetary policy affects the size of the external finance premium. Such premium reinforces the conventional transmission process. Two mechanisms have been suggested to explain the link between monetary policy actions and the external finance premium: the balance sheet channel and the bank lending channel.

The balance sheet channel postulates that the external finance premium should depend on borrower's financial position with net worth (measured by liquid assets plus marketable collateral). Higher net worth enables a borrower to self-finance a greater portion of investment project or enables to offer more collateral to guarantee the liabilities. Such insight explains why borrowers are often need to meet certain financial ratios, or are required to make down payments. An extensive theoretical literature has evolved around this idea to argue that endogenous pre cyclical movements in borrower balance sheets can amplify and propagate business cycles, a phenomenon that have been referred to as the 'financial accelerator' (Bernanke et. al., 1999).

Banks play an important role in overcoming informational problems in credit markets; as a result many borrowers are substantially bank dependent. Banks remain the dominant source of intermediated credit in most countries and specialize in overcoming informational problems and other frictions in credit markets. In the presence of asymmetric information

---

<sup>3</sup> There is a vast literature on monetary transmission mechanism under imperfect information set up. See for instance, Bernanke and Gertler (1995) and Bernanke et al (1999) for general reference and Bhaumik and Majumdar (2007) and Bagchi, Das and Moitra (2002) for studies in the Indian context.

monitoring by banks can improve efficiency. Banks are better suited to economise on monitoring costs. Firms and banks develop long-term relationships, thus mitigating the effects of moral hazard. Monetary policy may also affect the external finance premium by shifting the supply of intermediated credit, particularly loans by commercial banks. Therefore, a reduction in the supply of bank credit, relative to other forms of credit, is likely to increase the external finance premium and to reduce real activity. This is the bank lending channel.

The framework that would be developed in this paper takes a different approach altogether. The credit channel literature shows how quality of today's balance sheet affects planned investment expenditure. Our analytical framework seeks to find out how 'ex-post' balance sheet affects planned investment expenditure. The conventional transmission mechanism begins with a change in the money supply and is therefore not suitable to address the question posed here. So to assess such financial consequences of real investment, we keep endowment of money constant - to block transmission channels of all variety.

We build up our arguments in sections 3 and 4.

### 3. The Financing Process

Macroeconomic equilibrium given by equality of saving and investment may be viewed from the perspectives of financial and commodity (real) markets. On the commodity market side, saving is unconsumed output and it is matched by investment which is demand for new capital goods by firms. On the financial side, saving is used for acquisition of financial assets that is matched by acquisition of financial liabilities by firms purchasing new capital goods. If saving is not equal to investment in the aggregate then it creates disequilibrium in asset as well as commodity market. Former leads to changes in interest rate whereas the latter causes output/prices to change. In Keynesian theory, disequilibrium or saving-investment gap is closed by changes in output (through multiplier). In contemporary finance, however, trading in asset is crucial to track changes in relative prices (which is relative rates of return) driven by changes in asset composition. Real investment affects asset markets in two ways. First, investment expenditure leads to

asset accumulation, physical (production of capital goods) and financial (saving out of money income). Second, there is a change in the asset composition and hence in the relative prices of assets. The first effect is termed as scale effect and the second as composition effect here. The scale and composition effects may be compared with income and substitution effects of standard consumer theory.

To track financing process, assume that there are two financial assets, money ( $M$ ) and share capital ( $K$ ) available to hold wealth with a given stock of money ( $M = \bar{M}$ ). There is one unit of share capital held by the households for each unit of physical capital held by firms. Let  $P$  be the money price of share capital and assume that it is market clearing supporting the equilibrium volume of asset exchange. We also assume that the financial wealth ( $\frac{\bar{M}}{P} + K$ ) is concentrated in households. Investment in any period is financed by issuing new share capital. This increases the stock of share capital in each period. At the beginning of the period liquidity preference has been satisfied through holding of desired ratio of money to share capital and is equal to the ratio in which they are supplied.

To carry out an investment plan firms demand money (finance) from household against fresh issue of share capital. Funds are then spent on new capital goods and associated expenditure on labour etc. This leads generation of income, additional saving out of additional income and subsequently households take decisions on disposition of the new saving.

Once investment activities are completed, the asset markets would be affected in the following way. First, investment expenditure leads to asset accumulation, both physical and financial. Second, changes in asset composition calls for a change in the relative prices of the assets ( $P$ ) brought about through trade in existing assets. Assuming that the process of financing does not involve additional money creation (to rule out standard monetary transmission mechanism) what is the ex-post effect on the relative price of assets in equilibrium?

The price can be thought of as the return to share capital or equivalently the interest rate. To induce household

to part with the liquidity (equivalently to induce them to decrease the ratio of money to share capital) the price of share capital must rise to the extent at which it is just not worthwhile for investors to offer further inducements to holders of money to reduce their liquidity any more. At that rate of interest the demand for share capital will equal their supply. Once this transaction is complete, investors buy investment goods. So money holdings by firms come down. Income is generated in the investment goods sector accrue to the household and hence money circulates back to them. This restores the desired holding of money stock by the household. But due to supply of new share capital, the ex-post ratio of supply of money to share capital is lower. This ratio to be held willingly by the household, return to share capital must go up. So the ex-post interest rate must be higher than that in the beginning of the financing process.

Recognise that this ex-post effect is the outcome of changes in asset composition in the household balance sheet. We call this effect as the composition effect of investment finance. What is the likely effect of asset accumulation on the financial markets? The financing process brings about an increase in the stock of wealth through real investment. Since the process does not create money, this change is entirely due to higher ex-post endowment of share capital. In the beginning of the process, the households willingly held a part of their wealth in a non-interest bearing assets, i.e. in money. Ex-post, there is no reason to expect them to deviate from such a behaviour, so that a part of the additional wealth ought to be diverted to additional holding of money. This means that the wealth elasticity of money demand is not zero. As a result the equilibrium price of share capital must fall and that of money must rise (as the stock of money is given); in other words we should expect a rise in the interest rate. We call this ex-post wealth effect as the scale effect of investment finance.

The Keynesian 'finance motive' may now be given a re-interpretation. A 'motive' should lead people to hold additional stock of money willingly i.e. voluntarily. From this perspective it would seem appropriate to link finance motive to the financial consequence of real investment on the asset markets and specifically to the

ex-post scale effect of investment financing. The scale effect gives rise to additional and voluntary demand for money by economic agents. It is also evident that this demand may not be temporary in nature like in Keynes' finance demand. Moreover, this demand may vary depending on the strength of wealth elasticity of money demand for each individual.

To summarise, there are two ex-post effects of investment finance on the interest rate. First due to the composition effect, and the second is due to the scale effect. Both result in an increase in rate of interest in the illustration taken above. If we were to write a money demand function for the households, it would look like the following.

$$\frac{M^d}{P} = f(Y, i); f_1 > 0 \text{ and } f_2 < 0$$

$$i = g\left(\frac{\bar{M}/P}{K}, \frac{\bar{M}}{P} + K\right); g_1 < 0 \text{ and } g_2 > 0$$

Keynes and Kalecki emphasise that the endowment of money with the household is ex-post unaffected because of the 'Widow's Cruse' property. So the need for ex-ante investment finance does not create any pressure on the money market.<sup>4</sup> However in our exercise of financing process we do not get the Keynes-Kalecki result, though the assumption of constant money supply and adoption of stock equilibrium for determination of interest rate are intact. Our result is different from that of Keynes and Kalecki because of the ex-post scale and composition effects of higher endowment of share capital (and wealth) resulting from real investment. This shows that the biblical Widow's Cruse property is not valid in the aggregate and consequently it cannot be ascertained that funds are not a constraint for investment.

#### 4. Disaggregated Balance Sheet

We now expand balance sheet to explicitly include financial sector consisting of central and commercial banks. This classification is similar to that of Hicks (1977, pp 76-77). An investment process begins with expenditure of liquid assets, either already held by a firm (e.g. retained earnings) or acquired through issue of new securities. A decision to invest is a decision to

<sup>4</sup> Changes in interest rate due to transaction demand are not relevant here.

become illiquid as the ex-post balance sheet of the firm would contain more illiquid assets (capital stock) and lesser liquid assets. What are the likely effects of a change in the composition of the balance sheet on the aggregate economy?

The balance sheet of a macro-economy is segregated into three sectors. There is Central Bank whose job is to conduct monetary policy as usual. Then there are banking sector and real sector. We club balance sheets of firm and household and denote it by real sector that produces commodity. The Central Bank does not lend directly to industry, so that it holds securities of only financial sector. This keeps the exogeneity of money supply intact as in Keynes (Hicks, 1977, pp 76). Real sector's assets are money,  $M$ , term loans to financial sector,  $f$  (consisting of retained earnings of firms + household saving), and real assets,  $K$ . A notional liability is to be added for accounting balance, but is not shown here. Banking sector's liabilities are borrowings from real sector,  $f$ , and from Central Bank,  $F$ . Its assets are loan to real sector,  $I$ , and money,  $m$ .

The respective assets and liabilities are shown below.

	Liabilities	Assets
Central Bank	Money ( $M + m$ )	Financial Securities ( $F$ )
Banking Sector	Financial Securities ( $F + f$ )	Industrial Securities ( $I$ ) + Money ( $m$ )
Real Sector	Industrial Securities ( $I$ )	Real Assets ( $K$ ) + Financial Securities ( $f$ ) + Money ( $M$ )

Here total money supply or liquidity ( $M + m$ ) is fixed by the Central Bank as in the IS-LM framework. For the present purpose let us interpret this aggregate supply of liquidity as the revolving fund meant for investment finance. This is done to focus on the issue of the adequacy of fixed pool of liquidity (and also to block usual monetary transmission effects) to take care of the requirement of finance for an unchanging level of investment.

Keynes-Kalecki position that in the aggregate financing of investment is not a constraint can now be shown at once. If we add the asset and liability side of all the sectors, we are left with only the real asset (capital stock) of industry, with a notional liability in the accounting sense. When investment projects are taken up, although sector wise balance sheet positions are different after the investment-saving equilibrium is reached, assets and liabilities would cancel out once again with higher real capital stock in the aggregate. Investment does affect the composition of assets and liabilities of different sectors. But such changes in sector wise composition of assets and liabilities are suppressed in the aggregate. Whatever be the source of finance, it cannot become a constraint in the aggregate. However, changes in the sector wise balance sheet cannot be ignored. The process and method of financing are important.

Let us assume that securities, i.e. financial and industrial, are less liquid than money. So in the liquidity spectrum, real assets are most illiquid and money is most liquid. The terms at which finances are obtained would depend on the existing relative liquidity position of the financier. The relative liquidity position is given by the ratio liquid-to-illiquid assets. If this ratio is already low then to induce the financier to become even more illiquid, a higher cost, in terms of interest rate payable, has to be incurred.

Now let us look at various ways in which funds can be mobilized. Assume that the process of financing involve a Keynesian short period so that the absolute level of price is fixed. Starting with above balance sheet position, real sector now wishes to invest by which real asset ( $K$ ) will go up. Process of investment begins with money expenditure; formation of fixed assets is a consequence. Now current investment will increase future output. So a higher level of money stock, ' $M$ ' (higher transaction demand) would be required by the business. Clearly, current investment expenditure cannot be financed out of existing ' $M$ ' to a great extent.

There are two alternatives left. Funds can be borrowed from banking sector by increasing ' $T$ ' (external finance), or can be spent out of retained earnings by reducing ' $f$ ' (internal finance). When ' $T$ ' is increased, there is no

direct effect on real sector's liquidity position. However in the balance sheet of banks 'T' goes up and 'm' goes down (because liability side is unaffected). The required finance is obtained from the pool of liquidity held by the banking sector. The ex-post composition of assets ( $\frac{m}{l}$ ), the relative liquidity, of banks goes down. As the effect is confined to banks' asset side only, liquidity is sharply diminished.

In the latter case, both 'f' and 'm' are diminished. Note that in this case, real sector's liquidity is diminished to the full extent of additional expenditure 'K'. For banks, a fall in 'm' reduces liquidity whereas fall in 'f' increases liquidity. So relative liquidity position of banks ( $\frac{m}{l}$ ) is less affected in this case. Hence, when the real sector draws on own fund the total effect on liquidity of banking sector is less severe than when the real sector borrows from banking sector.

So an increase in real investment, with a constant supply of liquidity ( $M + m$ ), must reduce liquidity somewhere. If investment is financed by borrowing (issuing more 'I'), the main loss of liquidity falls on the banking system. When financing draws on own reserves (reducing 'f' and exchanging it with 'm'), the loss of liquidity mostly falls on real sector itself. For banks, the ex-post liquidity position in both the cases will be of important consideration for charging interest rate. On the other hand, when real sector spends out of retained earnings, it has to take into account interest foregone on financial securities 'f' and its ability to further choose this method. Hence the methods as well as the choice between the methods are significant while taking decisions on financing of investment.

This is for the change in the composition of assets. What is the consequence of a likely scale effect?

#### **4.1. Disaggregated Balance Sheet: Scale Effect**

The industrial sector would require more 'M' for the requirement of higher transaction demand for money, resulting from higher circulation of output due to higher real assets 'K'. There is another additional source of demand for money. Because of real investment, wealth of the economy,  $(\frac{M+m}{P} + K)$  goes up. There would be

additional demand for money if some of the additional wealth is sought to be held in liquid form. This scale effect would call for an increase in interest rate at a given level of liquidity. This additional demand can only be zero if wealth elasticity of money demand is zero, which clearly is an extreme assumption.

While Keynes's financial system comprised Central Bank (monetary authority) and capital market, a further disaggregation of sectors shows that the method of financing has effects on the liquidity. It cannot be ascertained that interest rate will remain unchanged in the face of such a greater demand for liquidity unless it is supplied from outside (here central bank). This analysis also sharply brings out another crucial feature of investment finance. As per Keynes, a given revolving fund for finance is insufficient only when level of investment changes. But it is now evident a revolving fund is not sufficient to keep liquidity pressure at bay, at an unchanged level of investment. Our analysis shows that any non-zero investment would exert balance sheet effects that are potential enough to change the interest rate. Further, when the level of investment remains constant over periods, depending on the method of financing, liquidity would be redistributed between sectors. Clearly, in investment finance, which sector holds the liquidity is an important consideration.

The financing process offers us another insight. The Keynesian transmission mechanism says that money or liquidity affects the level of investment through the changes in interest rate. Our analysis so far shows that investment may be directly affected by the availability of liquidity (or money supply) without requiring a change in the interest rate. This suggests that one can conceive of an investment function which contains liquidity as an explicit factor.

#### **5. Discussion**

The issue of investment finance deals with the likely constraints on the availability of funds in the aggregate and a consequent curtailment of the level of investment. To compare the literature on credit channel with our approach, note three important differences. First, our financing process does not involve any money creation; the stock of nominal money is given. By doing so, the

question of transmission mechanism of all variety through changes in money supply is ruled out. Second, our analyses do not rest on the issue of the 'quality' of the balance sheet of the borrower. In other words, ex-post effect of the requirement of financing does not involve market imperfections like information asymmetry. Third, our unit of analysis is at the level of sectors unlike at the firm level in this literature. In assessing the Keynes-Kalecki position on the financial consequences of real investment, it is crucial to keep two of their assumptions intact. One is the constant endowment of money; another is the stock equilibrium to determine the interest rate. The conventional transmission mechanism begins with a change in the money supply and thus one of the required assumptions is violated at the very outset.<sup>5</sup>

In our approach of looking into segregated balance sheet of the financial sector, it is the ex-post liquidity ratio that is relevant for decisions making on the part of industrial and banking sectors; not the 'quality' of the balance sheet. The internal funds of industry in our case can be designated as financial securities ( $f$ ) plus money ' $M$ '. A part of this internal funds, ' $M$ ', which is the most liquid part, cannot be used because of a need of higher transaction balances required in the future. We have not distinguished between liquidity held by banks, ' $m$ ', from that by industry, ' $M$ ' in terms degree of substitutability. The important issues here are the amount of liquidity and who holds it. Though it is also relevant for credit channel literature, the emphasis is on the perception of the quality (for e.g. whether securities are readily marketable) by the financier. So the 'effective' liquidity held by the firm may be lower than the 'actual' level. This paper argues that there may be enough liquidity (of high quality) available in the aggregate but financing by more borrowing may pose a problem because the existing liquidity condition of the banking sector may be tight, though it may be quite true that industry holds sufficient liquidity.

The credit channel literature shows how quality of today's balance sheet affects planned investment

expenditure. Our analytical framework seeks to find out how ex-post balance sheet affects planned investment expenditure. In our case, both the financial and industrial sector would endogenise ex-post liquidity ratios and take financing decisions accordingly. Focusing at the level of industry and banking sectors even out individual firm or bank heterogeneities. A poor quality balance sheet of a specific firm would have much benign effect on the aggregate level of realised investment. Upon aggregation, information asymmetry, if present, would be operative at the sectoral level. One can surmise that firm level information asymmetries would have much reduced stature on the sectoral level. The bank lending channel would also be less functional as information flows happen between two sectors rather than between a firm and a bank. As a result it is possible to focus more on the availability of liquidity rather than on the nature of imperfections of the market.

## 6. Conclusion

Keynesian proposition that financing investment is not a problem in the aggregate relies on effective demand problem and multiplier. Any level of investment demand can be financed without any repercussions on money market because additional investment demand would always find matching saving through multiplier. The focus is on aggregate liquidity and therefore conventional monetary transmission mechanism relies on the effect of changing liquidity on interest rate. Our analyses show that, when one looks into sectoral balance sheet with fixed stock of liquidity, constancy of interest rate can no more be ascertained. Real investment creates pressure on interest rate via scale and composition effects of liquid-to-illiquid assets of a sector. Therefore balance sheet effects may require additional liquidity adjustment by the Central Bank in the intervening period between two monetary policy reviews depending on the course of real investment.

The usual monetary policy transmission mechanism can therefore be further extended to capture 'ex-post' balance sheet position of different sectors. When the level of investment goes up (through a shift in the investment schedule), interest rate would go up because of higher demand for money for transaction purpose.

<sup>5</sup> Nevertheless, it must be emphasised that market imperfections are as important as balance sheet effects in determining borrowing cost.

But this may not be the only effect. It may so happen that, there is enough liquidity at the aggregate level, but the distribution of liquidity (ex-ante and ex-post) is such that method of financing becomes important. This effect is going to further complement the effect on borrowing cost due to credit channel of monetary policy. Distribution of liquidity is as important as volume of aggregate liquidity and complications arising out of asymmetric information captured in the quality of liquidity. This perspective may offer monetary authorities important insights to conduct monetary policy.

### Acknowledgement

The author gratefully acknowledges detailed comments by Prof. Amitava Bose on an earlier version of the paper and useful comments from an anonymous referee of this journal.

### References

- Bagchi A. K., Das P. K. and Moitra B. (2002). Are Listed Indian Firms Finance Constrained? Evidence for 1991-92 to 1997-98. *Economic and Political Weekly*, February 23.
- Bernanke B. and Gertler M. (1995). Inside the Black Box: The Credit Channel of Monetary Policy Transmission, *The Journal of Economic Perspectives*, 9(4), 27-48.
- Bernanke B., Gertler M. and Gilchrist S. (1999). The financial accelerator in a quantitative business cycle framework. In: Taylor J. and Woodford M. (Eds.), *Handbook of Macroeconomics*, vol. 1C. Amsterdam: North-Holland.
- Bhaumik S. and Majumdar S. (2007). The Impact of Monetary Policy on Corporate Borrowing in India: An Empirical Investigation. *Money and Finance*, September.
- Hicks J. (1977). *Economic Perspective: Further Essays on Money and Growth*. London: OUP.
- Kalecki M. (1942). A Theory of Profits, *The Economic Journal*, 52(206/207), 258-267.
- Keynes J. M. (1936). *The General Theory of Employment, Interest and Money*. In Moggridge (Ed.), *The Collected Writings of John Maynard Keynes* (vol 7). London: Macmillan.
- Keynes J. M. (1937A). Alternative Theories of the Rate of Interest. *The Economic Journal*, 47(186), 241-252.
- Keynes J. M. (1937B). The Ex-ante theory of the rate of interest. *The Economic Journal*, 47(188), 663-667.
- Ohlin B. (1937). Some Notes on the Stockholm Theory of Savings and Investments II. *The Economic Journal*, 47(186), 221-240.
- Romer D. (2006). *Advanced Macroeconomics* (3<sup>rd</sup> ed.). New York: McGraw-Hill/Irwin.

**Subhasankar Chattopadhyay** is a faculty in the Economics area of Indian Institute of Management (IIM) Indore. He is a Fellow of IIM Calcutta specializing in Economics and Finance. He holds a Bachelor's degree in Physics and Bachelor of Technology in Electrical Engineering from University of Calcutta. Prior to current engagement, he worked as an Assistant Professor with IMT Nagpur. His research interests include Keynesian, Intertemporal and Structuralist Macroeconomics. His teaching interests include Macroeconomic Theory, Macroeconomics for Developing Economies, Financial Economics and Asset Pricing. He can be reached at subhasankarc@iimindr.ac.in.

# *Organizational Transformation: The Case of Republic Bank of India (REBI)*

**Ranjeet Nambudiri and Radha Ravichandran**

## Abstract

This case study narrates the situation of a large bank, christened Republic Bank of India (REBI) that has undergone a radical transformation. The objective of this case study is to identify triggers leading to large scale transformation efforts and examine the response of a stable and slow moving organization to such triggers. The case study is descriptive in nature and focusses on the content, process and challenges in a large scale change intervention program.

REBI, a ninety year old public sector bank, was facing competitive pressures from New Private Banks (NPBs) and also lagged on the technology adoption front. The bank was known for efficiency in branch operations, however, had inherited an inward looking culture with little focus on marketing and sales. As the external environment changed, private banks started expanding aggressively into the semi-urban and rural markets that were considered the stronghold of public sector banks like REBI. As a response, REBI undertook a cultural transformation exercise called Project Restructuring (PR), aimed at making the bank market-focused, sales-oriented and customer-centric.

The case study provides a brief overview of the Indian banking industry and conditions that prompted Project Restructuring at REBI. This is followed by a detail description of Project Restructuring beginning with the ideation, visioning exercise and communication channels used to overcome resistance among employees. The case study then describes the four pillars of change viz., growth in retail assets, growth in SME, enhancing branch service and centralization of key processes. The change process is explicated in terms of specific activities undertaken at the branch level as well as the rebranding

exercise at the corporate level. Finally, challenges faced by REBI are discussed.

**Key words:** Change management, restructuring, intervention, cultural transformation

## Introduction

The transformation initiative of Republic Bank of India (REBI), christened Project Restructuring (PR) had shown excellent initial results with an increase of nearly 25 percent in Current Account Savings Accounts (CASA) business. The top management team desired to be proactive and well prepared before Union Government announced another round of licenses to new entrants in the Indian banking space. REBI had achieved good results in previous financial years showing Year-on-Year growth of more than 20 percent in total business, advances, deposits, net profit and other income. Asian Banker had just rated REBI as the 3<sup>rd</sup> strongest bank in India. It was widely held that the transformation initiative introduced three years back was instrumental for this turnaround in performance.

However, the question facing the top management team of REBI was how to keep up the tempo of the change initiatives. PR had not yet touched many parts of the REBI system. Moreover, new private banks (NPBs) were fast expanding into the semi-urban and rural markets. REBI had leveraged technology and arrived at the same platform as leading banks and were now comparable in terms of product innovation, alternate channel presence and technology adoption. However, the vision statement of the current year was still some way away as REBI aimed to break into the Top 3 banks of the nation.

This case study, though based on real events, is a fictionalized version and any resemblance to actual entities or persons is coincidental. There are references to actual organizations and people in the case study. Names of organizations and persons have been changed to protect their identity.

## The Indian Banking Industry

Reforms were initiated in the Indian banking industry in early 1991. As a result new private sector banks were established, interest rate was deregulated, relaxation was made in the Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR), and foreign banks were allowed either in the form of branches or wholly owned subsidiaries among other initiatives. This led to the sector becoming extremely competitive. NPBs and foreign banks were early adopters of latest technology and used advanced technology to offer innovative products and better service quality. At the same time, newer opportunities arose as the demographic profile of the customers was changing. Markets opened up for corporate accounts and high net worth individuals (HNIs). NPBs offered better service quality and customer experience resulting in a trend of shifting customer loyalty. At the same time customer expectations from the banks increased significantly. New entrants into the banking sector were free from the legacy of problems of Non-Performing Assets (NPAs). Backed by a fully computerized establishment they could adopt advanced IT based hardware and software solutions rapidly. NPBs were able to offer the earliest version of what is today known as a core banking solution because their branches were networked through a common technology platform. Transaction time was brought down dramatically, thus enhancing the customer service quality. Around the same time, Public Sector Banks (PSBs) offered the voluntary retirement schemes (VRS) resulting in exodus of senior level officers from the PSBs to the NPBs. Though PSBs had the advantage of greater reach, the PSBs outmaneuvered this using alternate delivery channels and direct selling agents. PSBs were losing their market share to more aggressive new private sector banks.

### Republic Bank of India: Need for Change

REBI was one of the leading PSBs of India. The bank began operations in the early part of the 20<sup>th</sup> century and was nationalized by the Government of India (GoI) in 1969. The bank had grown through a strategy of organic growth as well as a few acquisitions. Steady growth and profits characterized REBI and in the early

2000s it issued an Initial Public Offering (IPO) followed by a follow-up offer, both of which were hugely over-subscribed. It was generally perceived to be a stable and traditional bank.

REBI had a 4-tier structure consisting of the Head Office, Zonal offices, Regional offices and branches. In 1998-99 the zonal offices were dropped to create a leaner structure. The bank also attempted to modernize its human resource systems by adopting best practices from across the globe. Information technology initiatives were unavoidable, and REBI had computerized 70 percent of its branches by 2000. It was in the process of augmenting the alternate delivery channels like ATMs as well as adopting core banking solutions. ATM network increased 100 times in 10 years while hardly 50 branches were added in the same period.

REBI was known for the strength and efficiency in branch operations however, was considered weak in reaching out to potential customers. Like any other PSB, the bank had never felt the need to indulge in aggressive sales. However, this changed when with changes in the external environment. Competition in the form of NPBs, increasing awareness of the customers, and technology advancements created pressure on the bank to maintain its market position. The trigger for change came when NPBs also started expanding into the semi-urban and rural markets that were traditionally the stronghold of PSBs and threatening the market position of PSBs in these markets. Branches of NPBs focused completely in sales and marketing as the branch operations were centralized. Feet-on-street was the strategy as branch personnel aggressively pursued sales targets. Internal reports indicated an impact of the external environmental changes. The bank was growing but the growth was slower than the market, especially in fee income, retail loan accounts and current and savings accounts (CASA).

To adapt to these changes and meet the expectations of stakeholders REBI went in for planned change efforts and transformation of the organization. As such, the bank was not faced with a significant decline in performance. However, the trigger for change was a desire to figure among the Top 5 banks and at the same time reverse the slow growth in few segments. Republic

Bank of India approached a leading management consulting firm to advise them on the transformation initiative. At the same time, the bank was clear that the transformation would be driven internally. Hence, 10 core team members were appointed to chaperone the project. The consultants visited branches along with core team members to understand the existing systems, processes, organizational culture, and skill gap.

The consultants suggested a transformation process which was then christened Project Restructuring (PR). The process aimed at transforming people, reengineering and improving processes with the support of technology, exploiting technological advancements to improve service quality and delivery and imbibe sales and marketing orientation amongst the rank and file of the bank. The aim was to inculcate a culture of sales and marketing from the corporate to the branch level and transform into a sales-oriented, market-focused, customer-centric work culture.

### **Project Restructuring: The Content**

#### **Buy - in of Top Management and Rank and File**

Management of change is usually driven from the top. However, the top management of REBI was quick to realize that a consultative process would be more effective in inculcating a sense of ownership among the employees. The bank held a conclave for the top management which was facilitated by their management consulting agency. Top managers introspected about the performance of the bank, its strength and weaknesses, preparedness to take on future competitive pressures and other related issues. Many of the participants questioned the need for change when the bank was performing reasonably well on most parameters. However, the change management group argued forcefully in favor of the change initiative and highlighted the dip in critical parameters like CASA ratio, retail loan accounts while also indicating the data on customer satisfaction indices. The matter was driven home by surfacing the several challenges facing PSBs in general including aggressive marketing and the technological edge of the NPBs and the changing preferences of customers. The top management group called the attention of the participants to identify areas

of immediate improvement and change. A survey held amongst the participants identified 9 critical areas with marketing and sales, human resources, and information technology emerging as the most critical areas. Many senior officers were of the view that marketing and sales needed immediate revamp. REBI set out a road map for the future in the form of a vision statement. After several rounds of discussions involving the officer association and staff Republic representatives the bank drafted the Vision Statement.

#### **Communicating the Change Agenda**

Town hall meetings were arranged across the country to reach out to the staff with the new vision statement. The top management briefed the staff about the changing market scenario, aggressive competitors, changing demographics of the consumers and their preferences, and the dominant role of technology in banking. The need for change was highlighted. REBI used a metaphor of "redesigning a moving vehicle" to mobilize support from the staff members. The metaphor infused the employees with vigor and motivated them toward the transformation targets.

The top management identified two critical aspects of growth viz., "instilling the drive of sales and marketing across bank staff and reconfiguration of the business model to enable us to grow for the future". The objective of PR was set out as "Transformation of Republic Bank of India into Sales oriented, customer and market focused financial services organization"

#### **Main Themes of Project Restructuring (PR)**

Sensing the exploding growth potential in retail and SME sectors, REBI identified these segments as thrust areas. To achieve the aggressive growth targets set out, the bank needed to focus on changing the marketing orientation, sales and service attitude across the hierarchy. The initiative also called for back office centralization to free the branch staff from operational roles and thus enable them the bandwidth to go out to the market for direct sales.

Thus, the four pillars of PR were identified as

- 1) Growth in Retail asset (Marketing & Processing)

- 2) Growth in SME (Marketing & Processing)
- 3) Branch sales and service (Improving customer experience in branches)
- 4) Centralization of key processes.

The top management had clearly identified that for this transformation to be successful it would need to be driven through internal change agents. The bank hence embarked upon the task of identifying "coaches" to drive the change program. The coaches were mandated to spend between 3-5 weeks at each branch and demonstrate the selling process as REBI launched the training through a "participative" approach. This was necessary because a large proportion of the branch personnel had never been involved in the selling process. Many of them believed that they would never be able to conduct cold calling and field based sales activities. The coaches were expected to bring about a transformation in these beliefs because they themselves had been officers without prior selling experience and hence the tacit message was that selling was a skill that could be gained.

### **Project Restructuring: The Process**

#### **Pilot Phase and Phase 1**

Republic Bank of India selected Mumbai, Pune and Hyderabad centres in the pilot phase. These centres were chosen because they offered a typical combination of HNI customers, salaried middle class and SME of various types. 70 coaches were assigned to the branches in these centres. These coaches demonstrated the best practices by actually doing banking business on the floor of the branch, and involving branch personnel in outbound sales activities. The employees not only learnt the nuances of marketing techniques and technology based service delivery but also started believing that selling was a skill they could learn. Restructuring initiatives were tailored for each type of branch viz., retail asset branch, retail banking branches and credit thrust/SME branches.

#### **Pillar 1: Retail Assets**

In the retail segment, specialized branches for retail assets (RAB) were converted into centralized processing

centres for retail loan termed as Republic Loan Points. Branches would now generate leads and intimate the RLP. At the RLP marketing officers were expected to follow up on these leads. A comprehensive Lead management system software supported online response to leads generated by the field staff and relayed it to marketing officers for conversion. Credit and documentation officers looked into the creditworthiness and document execution part. The RLP also had staff to manage loan repayment, follow up and customer service. Assured turn around time of 2 days for vehicle loans and education loans and 5 days for other loans requiring legal formalities was the norm. Thus, REBI targeted a significant improvement in customer experience and service quality. The bank outsourced Contact Point Verification, Centralized Processing of Applications and Post-dated cheque Management activities to outside agencies. Branch staff was encouraged to plan outbound sales and, marketing at point of sales (car dealer showroom, builders' construction site etc). Builders and car dealers were aggressively pursued for possible alliances for home loan and 4-wheeler loan respectively. Campus loan camps were held at premier institutes for promoting educational loans and providing on the spot in-principle loan. Thus, the thrust of Project Restructuring was on transforming into an aggressive sales organization.

#### **Pillar 2: Small and Medium Enterprises (SME)**

SME coaches were posted in branches with the aim of improving the credit flow. These SME coaches helped branches explore the potential around nearby catchment areas and also supported marketing efforts for a range of products which included deposits, current account, short term/long term loans, and fee based products. The branch staff generated leads through customer referrals and outbound marketing in industrial estates and commercial markets. The coaches also trained credit officers in marketing skills and best business practices. Seven SME central processing centers (SMECP Centers) were established in the major metro centers and were headed by senior executives. SMECP centers acted as processing hubs for Business Banking Branches. The advances officer at each branch along with branch

manager would lead the SME business effort. Marketing officers posted at the SMECPC would generate leads and also take care of conversion of leads from branches. The processing officers and technical evaluation officers scrutinized the proposal and submitted to the grid for clearance. SMECPC marketing officers identified clusters and adopted intensive marketing techniques to attract these clusters. The bank adopted a focused and intensive sales strategy to target the SME segment and this was evident from the positive results in this segment.

### **Pillar 3: Enhancing Branch Sales and Service**

#### **Sales Initiatives**

Branch offices were converted into marketing offices to include advances department, savings/current account department, cashiers, fixed deposit department and customer relationship managers. Each department was expected to promote products, depending on the business potential of the customer they handled. For instance, the cashier could promote alternate delivery channels like ATM/debit card. Branch sales initiatives also included reaching out to existing customers for other businesses like cross selling of third party products to HNI customers, salary account for corporate clients and SME customers through tele-marketing. Staff members were made to undergo intensive training programs. Lead generation was the primary responsibility of customer-facing employees, who then forwarded these to product owners. Product owners had conversion targets, while lead generation targets were set for the branch. The coaches showcase how to put up stalls in potential centers, fixing appointment with influential contact people for meeting to promote the banks services and door-to-door campaigns.

#### **Service Improvement in Branches**

While aggressive outbound selling was the order of the day at Republic Bank of India, the transformation initiative also focused on enhancing the customer experience. Project Restructuring, not only aimed at sales growth but also at improving the customer experience in the branch and migrating them to alternate channels thus reducing branch operations. Branch ambience was enhanced by changing the layout, offering

best-in-class wait areas, leisure reading material and top class infrastructure including fully air-conditioned cabins and lobby. Lobby banking was introduced in select cities with facilities of drop box, ATM, touch screen kiosks in an exclusive aesthetic section within the branch.

The bank assigned dedicated relationship managers to handle privilege account clients. Privilege lounges were set up for HNI customers. Customer service officers were mandated with a target of 100 calls per month to review service delivery quality, update of personal data and explore potential for cross selling. The bank quickly realized the importance of training their branch staff of technology advancements. Coaches conducted intensive training programs for the customer facing staff to enable them resolve customer queries rapidly.

### **Pillar 4: Centralization of Processes**

Centralization of back office processes was the backbone of the transformation process. The success of the other 3 initiatives depended on the speed with which back office operations were centralized. This would significantly reduce the burden of routine repetitive work of the branch personnel and enable them to focus on managing customers in the branch. 5 key processes were centralized namely inward clearing, outward clearing, account opening, cheque book issuance and generation of account statement. The core team drew up a road map for centralization. As PR reached the completion of Wave 1 the bank had already centralized 100% clearing of both inward and outbound in 19 centres. Personalized cheque book issuance for all branches in India was centralized in Mumbai, taking centralization to national level. Concurrently, coaches trained the branch staff in the technology based centralized processing. This allowed integration of branch operations with the centralized back office and gave the branch ample time to focus their energies on acquiring, retaining, and converting potential customers.

#### **Phase II**

Coaches stayed in a region for up to 3 months and at every branch for nearly 2 to 3 weeks. Efforts of Phase II led to a set of trained officers who turned into coaches

taking the number of coaches to around 140. 46 regional offices out of 55 were covered in Phase I. PR as a national rollout was carried out through this chain reaction. As the next step and to support the transformation effort Republic Bank of India created business verticals on specific business segments both on asset and liability side. This led to realignment of branches along specific business segments to enable focused development. The seven verticals focused in large corporates, SME, retail banking, personal banking and operations, rural and agriculture business, transaction banking, and treasury and international business. Of these, the transaction banking vertical was unique to the industry as for the first time any bank was providing a specialized and robust payment and settlement system and cash management services.

The transformation process was rolled out across the branches in 2 phases and was accomplished over a period of 18 months. The whole exercise focused on combining the power of people and technology, building relationships through people and fast and efficient delivery of services with technology support. Republic Bank of India covered 1000 branches under technology in 6 months' time on war footing to support PR initiatives and became the first PSB to be 100% on core banking.

### **Project Restructuring: Enabling Mechanisms**

Project Restructuring had completely revamped the branch structure and operations. Marketing support systems for retail and SME businesses at the regional offices were established. This called for creation of several enabling structures and processes. Some of these are discussed in the subsequent sub-sections.

### **Role of the Branch Manager**

The branch manager is perhaps the single most visible face of the bank for retail customers. Republic Bank of India wanted the Branch Managers (BMs) to play a larger role within the branch and in the command area. BMs are expected to interact, communicate, motivate and enhance performance of the members of their respective branches. As a team leader the BM was in a position to impact the success of PR either positively

or negatively. Job responsibilities of branch staff had changed drastically and many of the staff members were neither skilled nor trained in sales activities. Many even lacked the self-belief that they could conduct direct selling transactions. Even though, the coach was providing support and training inputs, the BM was entrusted with the critical responsibility of motivating the branch staff, instilling belief and confidence in them and overcoming their resistance to the change process. At the same time the BM was also charged with the responsibility of improving the ambience of the branch. As part of the direct sales responsibilities the BM would mandated to participate in public/social events within and around the command area to increase visibility of the bank. The branch manager was also expected to gauge the command area potential through regular business intelligence and market surveillance activities. By augmenting the role of BMs, Republic Bank of India aimed at transforming sales culture at the front end of the bank and turning them into market outlets. This paved the way for building the organization into one of "sales oriented universal financial services". REBI's case highlights the significance of getting 'buy-in' from key role holders as organizations undertake radical transformation initiatives.

### **Re-skilling**

It was evident that a large majority of the staff, including branch managers, were not equipped to handle their new responsibilities and roles. Many had never taken part in direct sales activities in their career and several were also inadequately trained in technology. Clearly, PR faced its biggest challenge in terms of the skill sets of the existing employees and the success of the project depended in a large measure on the bank's ability to re-skill its people. Strong leadership communication initiatives helped reduce the uncertainty and resistance to change. However, the bank still faced the issue of re-skilling a large pool of employees. Leadership development programs for top management were conducted by reputed business schools while the middle management underwent training in customer service, direct sales and managerial competency enhancement.

## Rebranding

REBI was careful not to initiate any re-branding exercise till there was complete confidence over the results of PR. The top management reasoned that when a new client walked into a branch after seeing the new promotional campaigns s/he should experience the "new and changed Republic Bank of India". This experience would generate a lot of positive word-of-mouth and go a long way in sustain the change effort. A pan India customer survey covering Republic Bank of India customers, potential customers and private bank customers was conducted. The survey revealed that PSBs were perceived to be laggards in technology based service delivery and suitable only for old generation customers. Republic Bank of India wanted to project their new transformed avatar of being a customer centric bank with state of the art technology. The bank engaged a leading advertisement and communication agency to facilitate the rebranding exercise. The exercise began with a change in the logo, with the new logo signifying the proposed customer-centric approach. Similarly, the bank's ad line was replaced with a new theme that depicted as a new-age bank that understood customer needs, thus targeting the younger generation of clients.

Several internal meetings, circulars and employee engagement activities were carried out to take the employees into confidence about the need for rebranding. The campaign was launched with two TVCs and four print advertisements. All advertisements focused on the newly imbibed customer-centric approach. Value for money, multi-channel delivery, assured service delivery within time and transparency in business dealings were the brand promises made through the rebranding exercise. The initial response to this campaign was quite positive.

## Challenges Faced during Implementation

Project Restructuring was an elaborate exercise that spanned nearly 2 years. The transformation initiatives were phased out and carefully planned at every stage. Even so, such a massive exercise cannot be executed without challenges and Republic Bank of India was faced with several such issues during the project design and implementation. The question at the top of the mind

of most of the employees was "what is the need for such an exercise when the bank is performing well in all aspects, on all parameters including the share price movement in the stock market". The biggest challenge facing the transformation team was to convince the contended and complacent employees about the initiative. Extant literature states that convincing employees of the need for change in the absence of a visible external or internal trigger is among the biggest challenges for a change agent (Beckhard & Harris, 1987). REBI tackled this problem with the hands on involvement of the senior management beginning with several town halls meetings conducted by the CMD.

However, inspite of a strong communication initiative, the bank faced some resistance to change. Branch managers no longer had the responsibility of handling branch operations and this led to some discontent. Branch managers were now prodded into moving out of their comfort zones. Those with several years of experience and adept at handling branch operations had to move into field sales roles. It was expected that some employees would not react favorable to this. Learning while doing was not easy for many of the long-standing employees, some of whom resented the extra pressure created by sales targets and customer issues. Lead generation targets were met with less resistance, however, frontline employees were wary of customer complaints because once the lead was generated the customer was no longer in their control. Moreover, with changes in the job description of the branch employees it was expected that the KPAs (Key Performance Areas) would undergo alteration. The bank aims to address this issue in the next phase of the change initiative.

## Impact of PR and the Road Ahead

Republic Bank of India introduced several new products both asset and liability items. PR initiatives started showing results as early as during the course of phase II implementation. Branch sales and service initiatives enabled the bank to increase CASA by 23.2% over the previous period. Performance at personal banking branches in garnering SB account, deposits and CASA was much higher compared to other branches and overall bank average. Likewise SMECPC and RLPs contributed much more than the other branches towards MSME and retail loan respectively.

The Asian Banker ranked Republic Bank of India as the 7th strongest bank in Asia Pacific region and 3rd amongst Indian banks. The bank was in 275th place amongst most valuable global banking brands in the current year (up from 351 in the previous year) By Brand Finance Plc. Financial Express, Earnest & Young survey of best banks in India for the current year ranked Republic Bank of India as 3rd in growth and 4th in efficiency and profitability amongst nationalized banks. Thus it seems the transformation initiative though long drawn and effort intensive had produced the desired results.

Realizing that customer service excellence is the key success factor in the current competitive situation and human capital as the key enabler to achieve service excellence, Republic Bank of India wanted to focus on these two aspects in Restructuring II to be launched in about two years' time. The bank is all set to unleash PR II with customer service excellence and HR development as the prime focus. Aggressive branch expansion to the tune of 500 branches per annum for next 5 years is planned in order to meet the social objective of financial inclusion which the bank aims to pursue relentlessly encompassing more and more of the unbanked population.

### **Conclusion**

The case of REBI highlights several key issues related to management of change. As is the case with any large organization, REBI seemed to be in a comfortable situation with reasonably sound performance metrics. However, the "corporate cholesterol test" suggested by Vermuelen, Puranam and Gulati (2010:2) would indicate that REBI was in immediate need for change. The external environment was changing rapidly and competitive pressures on REBI were increasing manifold. Internally, the top management had a desire to be recognized as one of the top performing banks in the country. Both these served as the triggers for change in the case of REBI.

As a manifestation of its ninety year old legacy, the bank had a very strong culture and values; beliefs and norms were shared across the hierarchy. Very often, a strong culture can create barriers to the change process as staff members fall into a routine and face inertial pressures. This case study provides a description of how a large

and stable public organization followed a phased out strategy to transform itself. Through the detailed description of the content and process of Project Restructuring it is evident REBI had chosen the appropriate change management strategy. The bank understood that change of this scale and nature could only be effected with the support of its managerial and clerical cadre. Many PSBs had faced the brunt of resistance from their employee unions in the much written about Voluntary Retirement Schemes of the late 1990s. REBI clearly did not want to commit the same mistake and thrust a complex change management program on an unwilling and non-cooperative set of employees.

While, the case highlights several positive aspects of the initiative, it is worth considering the also identifies potential pitfalls. While, the initial results at REBI are positive, it is also worth considering whether one can really attribute the results solely to Project Restructuring. Critics of the planned change claim that it is often not possible to isolate the impact of change management programs (Cummings & Worley, 2009:42). The same can be said about Project Restructuring as well. Another issue that dogs proponents of change is the sustainability of such initiatives. It is often noticed that once the initial euphoria dies down, the change agents find it increasingly difficult to implement the program. Kotter (2007) emphasized the significance of "institutionalizing" the change effort. This includes creating a road map and clearly articulating successive steps in the change program. The organization also needs to identify change milestones and review these periodically. It is evident that the first installment of Project Restructuring has met with success, the question is can the top management of REBI come out with an equally successful sequel.

### **References**

- Beckhard, R., & Harris, R. (1987). *Organizational transitions: Managing complex change*, Mass: Addison-Wesley Publishing Co.
- Cummings, T.G, & Worley, C.G. (2009) *Organization Development and Change*, Cengage Learning.
- Kotter, J.P. (2007) Leading change: Why transformation efforts fail, *Harvard Business Review*, January 2007.
- Vermuelen, F., Puranam, P., & Gulati, R. (2010) Change for change's sake, *Harvard Business Review*, June 2010.

**Ranjeet Nambudiri** is an Associate Professor in the Organizational Behavior and Human Resource Management area at the Indian Institute of Management Indore, India. His research interests include trust and distrust related issues in business and non-business contexts, justice issues during organizational change, managing organizational transformation, high performance work systems, self-managed teams, and organizational commitment. His papers have been published in

International and Indian journals and two of his cases are registered and published on Ivey Publishing. He has presented papers at international conferences like EGOS, Academy of Management, ANZAM, EIASM, AAOM, and AICSDR.

**Radha Ravichandran**, PhD has almost 15 year of teaching experience at an undergraduate and graduate level.

Leave this chanting and singing and telling of beads!  
 Whom dost thou worship  
 in this lonely dark corner of temple with doors all shut?  
 Open thine eyes and see thy God is not before thee!

He is there where the tiller is tilling the hard ground and  
 where the pathmaker is breaking stones.  
 He is with them in sun and in shower, and  
 his garment is covered with dust.  
 Put off thy mantle and even like him come down on the dusty soil!

Deliverance? Where is this deliverance to be found?  
 Our master himself has joyfully taken upon him the bonds of creation;  
 he is bound with us all for ever.

Come out of thy meditations and leave aside thy flowers and incense!  
 What harm is there if thy clothes becomes tattered and stained?  
 Meet him and stand by him in toil and in sweat of thy brow.

*Gitanjali, Rabindranath Tagore*

# *Swami Vivekananda: Bridging the Cartesian Divide of Science and Religion*

**Swami Samarpanananda**

## The Cartesian Divide

It has become a truism for people, down to the prattling babes, to denounce religion in comparison to science. To many, of them religion seems to have no scientific base, and to many others, these two appear mutually exclusive. It matters little that most of them have no idea of what religion is, or for that matter, how science truly works.

Of course they cannot be blamed entirely for the misconception. If Newton, Einstein, Abdus Salam, George Salmon, Pascal, Bhaskara, Aryabhatta and many other great mathematicians and scientists had respect for their traditional religions, then we have Laplace, Richard Feynman, Stephen Hawking, Richard Dawkins and a horde of other scientists who either aggressively ridiculed the idea of religion, or politely shrugged off any mention of the "R" word.

The beginning of the divide between science and religion may be attributed to Rene Descartes (1596-1650), who brought in the concept of the Cartesian divide through his X-axis and Y-axis. It was through this divide that people started looking at matter and mind, God and the world, science and religion, as eternally separated.

The atrocities on the scientific greats like Giordano Bruno and Galileo by the church did not help matters, and thinkers like Voltaire added to the growing discord between the two. By the time Newton came on the scene, God had become a "hypothesis" for Laplace, the French mathematician.

That is how the tradition of the Cartesian divide between religion and science continues.

---

Note: This article is published in Prabuddha Bharata, a monthly journal of the Ramakrishna Mission. IMJ is thankful to the author for his consent to publish his work.

Swami Vivekananda, the prophet of the present age, tried to bridge this divide. It is through his works that one can feel the underlying unity between the two. During his stay in the West, he met and impressed with his views many leading scientists and inventors including Nicholas Tesla, Hiram Maxim (inventor of machine guns), Lord Kelvin Kelvin and many several other great thinkers with his views.

## Religion and Science: A Closer Look

Mundaka Upanisad categorises knowledge into two: Intuitive knowledge about God (para vidya), and Practical knowledge of the world (apara vidya). According to this, anything other than the intuitive knowledge about God (spirituality) belongs to apara vidya, i.e. sciences. Even the knowledge of the scriptures belongs to sciences only, since they talk about going to heavenly places, which are nothing but extensions of this world only. It implies that the true meaning and purpose of religion is to make a person divine, and everything else in religion is secondary.

But can science make one divine? Going by the present definition of science, this seems difficult, since science is all about the world, and religion is all about transcending the world in its entirety. Science teaches us how to turn the wheel of the world, while religion teaches us how to stop our inner wheel. So, no advancement in science can ever encroach upon the realm of religion.

With this idea clear, we can have a closer look at the paths taken by science and religion.

**Their Approaches:** The crucial difference between the approaches of science and religion lies in science being reductionist ("Whole is equal to the sum of its parts"), and religion being holistic ("Whole is more than the sum

of its parts"). Who is right, is a big debate that has been raging on since the times of Aristotle, or even earlier. Science depends on models, which it keeps fine tuning tunes from time to time to adjust the new data and findings. However, the goal of religion is not to explain the universe, but to take an individual to God. Naturally it does not require a model to explain God. Rather, it uses a fixed model to explain the universe to maintain its peace of mind.

It is a fact that religion mixes spiritual truths with religious myths to produce a potable concoction for the masses. So what? Science also mixes facts with scientific myths! Without propagating these myths they will fade away from public memory, and their funding will stop. For example, the timing of Big Bang, birth of the universe etc. are the most entertaining scientific myths of modern times. It is interesting to read "decisive" statements from the high priests of science on these topics. Similar are the cases that we read about regularly in newspapers regarding researches that conclude with "This may lead to...".

### Methods of Knowledge

Scientific theories are developed in two ways:

(A) Reaching a conclusion through a string of successively derived statements from starting theorems, known as axioms. These axioms can be arbitrary, or even absurd, though mutually consistent. When we say that science is born of logic and reasoning, we forget that there are limitations of reasoning processes, which are the mechanisms of proofs and theorems of science. Kurt Godel proved mathematically the limitations of mathematical reasoning, and Wittgenstein and Wittgenstein argued that both language and thought have definitive limits.

Religion, on the other hand, is never axiomatic, and never derived, nor thought out. Masters speak only what they experience themselves. So, if we declare the experiences of a pure mind to be wrong, then what right we have we to consider the perception of an emotionally coloured mind correct?

(B) The second method used by the scientists is to relate

observed phenomena through a theory. In most cases, however, these theories are not laws but mere models, which undergo a change once different kind of data comes in. For example, the universe of Newton and Einstein was definitive, while the universe of quantum physics is probabilistic.

And, how does religion gain its knowledge?

There is a near total misconception about this even among the scientists. In general, they think that religion and religious perception is about extra sensory perception. This idea is completely wrong. ESP, and all other such hocus-pocus may be anything, but it is not religion. These are mere attention grabbing antics by the clever.

Every religion has its roots in the transcendental experience of a mystic, prophet or the founder of a religion. When these great teachers of humanity give up all their worldly connections and desires, and when they outgrow the need of feeding the senses, their mind becomes pure and crystal clear. It is then that they experience the light of God. Hinduism describes this state as transcending the mind, since in this state the mind does not function the way we understand it to function. This state is popularly known as samadhi (or, transcendence), and the knowledge gained in this state cannot be questioned by those who live in gross worldly state. Being of the nature of fullness, this knowledge does not evolve with time. Only when a person has gained the knowledge of pure consciousness (or God) in this state, he becomes truly competent to talk about God.

So, while science evolves from good models to better, religion does not have to evolve because it does not offer theories based on observed facts. Every religion is firmly entrenched in the intuitive knowledge of God, as described by its masters, and hence it develops its explanations of the world and its affairs backwards from what the masters experienced in the depths of their meditation.

Here it may be mentioned that it is not the job of religion to explain anything of the world. To bring peace to the mind of its followers, religion does get into explaining

things. However, it does so simply because the right teacher of the related subject (science, geography, sociology etc.) has not yet taken charge.

Scientists raise questions at the superconscious realisations of the sages, in which they got the knowledge not through their senses, but through something beyond.

Yet these very people seem to forget that many famous inventions and discoveries of science belong to the realm of sheer instinct, which is a much lower version of intuition. For example, knowledge came through chance (Dynamite by Alfred Noble; antibiotic by Fleming), in dreams (Kekule' Benzine structure, Watson's double Helix of DNA structure), and intuitive flashes, after the whole scientific onion was peeled off.

Religions in general, and Vedanta in particular, rely on the validity of *pratyaksha pramana* (Sense Perception), and *anumana pramana* (reasoning) - the two tools that are essential for scientific growth. Acharya Shankara, the great exponent of Vedanta, repeatedly asserted in his commentaries that the validity of direct perception cannot be negated by even a thousand scriptural utterings.

The third method of knowledge is known as *shabda pramana*, which is about the knowledge gained through the words of scriptures. The ideas about God, soul, rebirth, creation etc. cannot come through direct perception, or through reasoning, hence one must depend on what the sages have said about these. After all, the sages had no ulterior motive to mislead people, and they had the purest of pure character, along with a supremely incisive and brilliant mind.

The real strife between science and religion lies exactly on this point. Science won't accept scriptures as the valid source of knowledge, nor would religion give up the scriptures.

Interestingly, scientists keep swearing by "the sages of science" belonging to their own generation! And even when these "wise" are proved wrong, the scientists of the generation refuse to accept their own new prophets! And, they call religious people bigoted!!

**Creation, Life after Death etc.:** Creation is a difficult issue both for science and religion. People want to know

wherefrom we have come, and where we are going. The most popular answer by the religious is that "we came from God, and we are going back to God." And, the popular reply of the present day science to this question is "we come from big bang, and are going towards big crunch."

The Vedas also took up the issue, and came up with two hymns, *Purusha Suktam* (RV X.90) and *Nasadiya Suktam* (RV X.129). The first one takes up creation as having come out from, and by, Purusha (God). The second one takes up the concept of the subtle becoming gross, and then acting on itself. It is thus that *Prana* (the cosmic energy) hammers at *Akasha* (The the finest first particles) to produce gross matter, and the universe.

Every model of creation in Hinduism, excepting the *ajatavada* (the philosophy that there is no creation), can be boiled down to these two hymns.

Swami Vivekananda was fascinated by the concept of creation given in *Nasadiya Sukta*, where it says आनीदवातं स्वधया तदेकं, "the only one that there was, hammered itself to bring out the creation". From this, Swamiji developed the concept of *Prana* (energy) and *akasha* (matter) coming out of the same substance, and these two being one in the *dyu loka* (electric sphere). The great scientist Nicholas Tesla was fascinated by these ideas of Swamiji in 1896, and it would wait for another 10 years for Einstein to work out independently the equivalence of matter and energy in his now famous equation, "e equals m times c squared".

Interestingly, who was ridiculing Einstein for finding out the grand unifying principle of nature? You guessed it. Scientists of his generation!

The same *Nasadiya Suktam* throws up its hands in despair at the impossibility of finding out the truth behind creation and concludes with:

को अद्वा वेद क इह प्र वोचत् कुत आजाता कुत इयंविसृष्टिः

But, after all, who knows, and who can say Whence it all came, and how creation happened?

The gods themselves are later than creation,  
So who knows truly whence it has arisen?

This standpoint of inexplicability of creation is accepted by every religion and religious philosophers. Their most

common answer is that "it is God's will", which essentially means "I don't know the answer".

Acharya Shankara comments that if the goal of the scriptures had been to describe creation, then all of them would have described exactly the same thing, which is not the case. According to him, the one and only one aim of every scripture is to teach a man his divine nature.

If such is the case, then why ridicule religion for its ideas on creation, heaven, hell etc.? People want to know the answer of many riddles of life. But, if he goes on speculating on all this, he will be lost forever in the maze of the inexplicable. So to save the lost, tormented, or curious souls, religion comes up with a simplistic, soothing and satisfying explanation. If the illiterate but believing millions take these answers for the scientific truth, then it is not the fault of the religion.

**One Time Creation?** A lot of confusion between science and religion is caused by the concept of one time creation, popular in Semitic religions. When scientists say that they do not believe in God, they essentially mean to say that they do not believe in a Creator God, who set the world in motion at some point of time. According to Biblical calculations, creation took place sometime in 4000 BCE. Even Newton added his bit by calculating the dates in the Bible and came up with the conclusion that creation took place in 4032 BCE!

But is it conceivable that the Infinite God will create something that is hopelessly limited in time and space? Well, only naive can believe that. Many Western thinkers, including Immanuel Kant, refused to accept this kind of schoolboy theology.

Hinduism goes a step further, and comes with a fully developed idea of cyclic creation in nature. According to it, infinite number of universe is being created, destroyed, and exist at any given point of time.

The idea of multiverse and cyclic creation has just started seeping into science, which suffers from a Semitic mindset, and hence has no idea about how the Indian minds tackled the issues which were born of the idea of infinity in religion.

Rationality: Is religion rational and consistent? The fact is that science assumes axiomatic truths (which may prove false), while religion begins with the words of Masters (which have never been proved wrong). It is indeed unfortunate that many go to the extent of telling that spiritual masters are liars, since there is no proof of what they say. Yet, they cannot disprove the spiritual experiences.

Religion, particularly Vedanta, is fully consistent, does not suffer from inner contradictions, brings meaning in life, and is universally applicable. If this is not being scientific, then what is?

To give an example, we can look at the problem of infinity as seen by the Vedic sages. They came up with the idea "*purnasaya purnamadaya purnam eva avasishyate*" - which means that when infinity is taken away from infinity, it leaves infinity as residue. And, this was spoken at least 10,000 years ago!!!

Interestingly, religion has contributed *Syadvad* (which leads to probabilistic outcome) of Jainism, and *Neti - Neti* (The process of negation) of Vedanta, which are two very powerful tools of reasoning.

Commenting on the role played by religion in the development of science, Freeman Dyson wrote, "Western science grew out of Christian theology. It is probably not an accident that modern science grew explosively in Christian Europe and left the rest of the world behind. A thousand years of theological disputes nurtured the habit of analytical thinking that could be applied to the analysis of natural phenomena. On the other hand, the close historical relations between theology and science have caused conflicts between science and Christianity that do not exist between science and other religions...."

However, religion is not bothered about the problems of infinity, or in problems involving evolution or creation. It is interested only in finding out the true meaning of existence.

**The Issue of Consciousness:** The various religious philosophies have tried to harmonise the world of "Physics" and what lies beyond it in the form of "Metaphysics". One of the popular explanations is by Samkhya philosophy, according to which the world of

experience evolves from Prakriti through Mahat (cosmic intelligence), and Ahamkara (cosmic ego). But Prakriti is inert, while Purusha (soul) is pure consciousness.

But what is pure consciousness? How can one know it?

Sri Ramakrishna uses the analogy of ten pots of water which are reflecting the sun in the sky. With the actual sun in the sky and the ten reflected sun, there are a total of eleven suns. Now when the pots are broken down one by one, the number of suns goes down. When only one pot remains to reflect the sun, we have two suns left. But when that last pot is broken, then how many suns are we left with?

Those who have not read Vedanta, they will invariably come up with "one" as answer, and most of those who have studied Vedanta will come up with "it cannot be expressed", "; although rare, a few of them would understand what the answer means or implies!

This is what *Taittiriya Upanisad* expresses as *yato vacho nivartante....*" the speech fails, along with the mind, to grasp Atman".

In this confused understanding lies the deep divide between religion and common sense, and even most religious preachers hardly understand the issue. And yet, every siddha experienced exactly this very thing, but had to express the experience in different terms because of the limits of our language and understanding.

Consciousness is that which wills, feels and commands. It is eternal, and unchangeable. It is beyond being the subject, or the object of any action. It is not the intelligence of the mind, but mind acts as the great reflector of consciousness. Everything other than pure consciousness belongs to the realm of Prakriti, the nature - both internal and external.

Thus, the entire world of science belongs to the realm of Prakriti, while metaphysics aims at taking a person beyond it, to the state of pure consciousness, which is also Existence-Intelligence-Bliss.

But, will science agree to this dismissive attitude of religion? Never. According to it, the intelligence that we see around us is a mere evolutionary product of matter.

Referring to this the great chasm between religion and science on this issue , Swamiji said, "Every religion has the idea that the universe comes out of intelligence. The theory of God, taking it in its psychological significance, apart from all ideas of personality, is that intelligence is first in the order of creation, and that out of intelligence comes what we call gross matter. Modern philosophers say that intelligence is the last to come. They say that unintelligent things slowly evolve into animals, and from animals into men. They claim that instead of everything coming out of intelligence, intelligence itself is the last to come.

"Both the religious and the scientific statements, though seeming directly opposed to each other are true. Take an infinite series, A-B-A-B-A-B, etc. The question is--which is first, A or B? If you take the series as A-B, you will say that A is first, but if you take it as B-A, you will say that B is first. It depends upon the way we look at it. Intelligence undergoes modification and becomes the gross matter, this again merges into intelligence, and thus the process goes on. The Sankhyas, and other religionists, put intelligence first, and the series becomes intelligence, then matter. The scientific man puts his finger on matter, and says matter, then intelligence. They both indicate the same chain. Indian philosophy, however, goes beyond both intelligence and matter, and finds a Purusha, or Self, which is beyond intelligence, of which intelligence is but the borrowed light."(CW 1.252)

In fact, this effort at the grand unification between the discordant notes of religion and science, is a great contribution by Swamiji.

### **God's Will**

The dichotomy of "free will" and "God's will" is nothing new for the mankind. Since the dawn of spiritual wisdom, the battle between the two has been going on inconclusively. While for most people "God's will" invariably means "I do not know," or "I do not want to take the blame", the philosophers and scientists belonging to the materialist school of thoughts do not believe in the "Divine" at all. For them events follow a pattern either due to chance or due to "free will". The belief of these thinkers is best summed up in the words

of Archimedes, "Give me a lever long enough and a place to stand, and I will move the world."

How does Vedanta looks at the issue?

According to Vedanta, Brahman alone exists. In its impersonal aspect, it is pure Existence-Consciousness-Bliss, and in its personalised aspect it is perceived as God who is the controller of all things, external and internal. The differentiation that we perceive around us in the form of living and inanimate objects, is mere play of name and form, caused by the Lord's inscrutable power, known as maya or Shakti. It is due to this power that God appears to have higher and lower nature. The lower nature of the Lord consists of gross and subtle matter, while the higher nature is pure Spirit, or Consciousness. The living beings are a combination of both lower and higher nature, while non living things are plain lower nature of God.

When it comes to mind, Vedanta is emphatic that it is the highest and the most subtle form of matter. Now, anything that has been created belongs to the universe, and hence has to follow the law of cause and effect. This implies that mind has to obey the laws of causation. In fact, if thoughts were not produced by preceding thoughts, and mind did not follow a pattern, it would cease to be rational. Even our desire to eat or drink is dictated by the demands of the body, which again is governed by strict laws of nature. And, we cannot say that the mind is bound by laws and at the same time also free.

The mind being matter, it is not conscious but it catches the reflected consciousness from Atman and appears to be conscious. It is something like the illuminated glass of a tube light when electricity passes through it.

The mind is not a mere reflector of consciousness but is also tied with the ten sense organs (not the physical eyes, ears etc., but the subtle organs that reside in the brain). After getting the light of intelligence from the mind, these sense organs start straining to be one with their respective objects. This is when desires in the form of attachment and aversion for objects are born in the mind. This is when the individual will, popularly known as "free will", is born. But because mind is not free, the will also can never be free, and hence there can never be a "free will". Talking about this, Swami Vivekananda

said, 'It (free will) means nothing-- sheer nonsense'. What we think to be "free will", is only the mad dance of the senses for their respective objects, powered by the presence of Atman.

Just as it is impossible for an object to move unless some force acts on it, similarly mind too being only matter, it requires something else to make it work. This impulsion is caused by the *antaryamin* (inner consciousness, which is Atman) that resides within every being. When a person does something, he does it through the medium of his mind aided by his senses, but his acts are made possible only because of the presence of *antaryamin* within him. And these acts are governed by a clear set of laws known as the laws of karma. Just as laws of science are a codification of the laws that govern matter, the law of karma is the set of rules that governs the working of the mind.

When a common man looks at the world, he feels that the mind has a freedom of its own, while a religious Hindu sees the law of karma acting upon a person. But a saint sees the working of *antaryamin* (which in essence is God Himself) behind every act of a being.

The popular concept of God is someone who seems to be sitting high above somewhere in the heavens, with probably a super-super computer, and controlling the acts of every being through his trillions and trillions of commands every nano second (a rough estimate). Even if this concept be true, the problem of His partiality for the lucky ones in the world continues. Theologians may break their head explaining the relationship between judgement, mercy and "all his will", but even a child can see that these cannot be reconciled. How can He punish us for what He has ordained for me? How can there be such foul disparity in the world? All the answers that we get are plain naive. No wonder people are becoming atheists.

God of Vedanta is different from such popular concepts. He is pure consciousness, and is the impelling force at the micro and macro level in the form of individualised soul (*antaryamin*) and *Prabhu* (the Lord of the universe). We act because He is residing within us, but that consciousness is mediated by the mind, which is coloured by the defects of affection and aversion of the sense organs for their objects. This makes our personality irresponsible. To use an analogy, the mind mostly acts

like a runaway engine which has its full power supply, but has lost its brakes and steering.

Atman is the *antaryamin* in every living being, and by its very nature of being pure consciousness, it is Brahman itself. Again, God is the personalised aspect of Brahman in this manifest universe, so there is an inherent identity between *antaryamin* and God, although they are not the same. The conscious principle behind the universe is God, while the conscious principle behind an individual is *antaryamin*.

So at the micro level, whatever we do, the source of our acts is Atman only. And at the macro level, He is the mover of energy itself, which makes the world go. Naturally, not a blade moves without His will!

A pure desireless mind is a perfect reflector, from which the defects of like and dislike are gone. A person with such a mind is one with God. Whatever he does or says, is the true will of God, uncoloured by the defects of his mind. That is why it is said that pure mind, pure intellect and pure consciousness are one and the same thing. The goal of life is to free one's mind of impurities which come to it because it wants to have only what it likes and loves of this world. This cleansing can take place only by following what the masters have said. This cleansing is known as "making one's own destiny", for it increases one's inner power by making a good reflector of his mind. It is then that the infinite potential of a person bursts forth. It is then that he acquires true "Free will", which is one with "God's will". He now becomes free, and also realises that "God" alone does everything, for, he is now non-different from God. This is freedom, this is *jnana*, this is *bhakti*.

### Bridging the Divide

In the Mundaka Upanishad, we come across this great question that has troubled the human mind for thousands of years:

शौनको ह वै महाशालोऽङ्गिरसं विधिवदुपसनः प्रच्छ ।  
कस्मिन् भगवो विज्ञाते सर्वमिदं विज्ञातं भवतीति ॥ ३ ॥

-- The sage Shaunaka asked Angirasa, 'Sir, what is that by knowing which one knows everything?' And, as one can guess, the answer given by the Upanishad is, "by knowing the self, everything else is known".

Many wrongly interpret this to mean that the knower

of atman becomes all knowing (sarvajna) in the worldly sense. But that is not the case. The meaning is that if a person wants to know about the possible forms that a substance, say gold, can take, then there cannot be an end to that knowledge. There would be infinite number of forms, shapes etc. However, if he realises that all the ornaments are gold only, then by knowing the characteristics of gold, he would know all that is worth knowing about the various ornaments.

But, that is what science is also trying tries to do. Talking about this, Swami Vivekananda said, "Science is nothing but the finding of unity. As soon as science would reach perfect unity, it would stop from further progress, because it would reach the goal. Thus Chemistry could not progress farther when it would discover one element out of which all others could be made. Physics would stop when it would be able to fulfil its services in discovering one energy of which all the others are but manifestations, and the science of religion becomes perfect when it would discover Him who is the one life in a universe of death, Him who is the constant basis of an ever-changing world. One who is the only Soul of which all souls are but delusive manifestations.

"Thus is it, through multiplicity and duality, that the ultimate unity is reached. Religion can go no farther. This is the goal of all science. All science is bound to come to this conclusion in the long run." (CW: 1. 14)

It matters little what we call that state of unity, but the fact remains that the goal of all knowledge, philosophy, science, religion, and in fact the goal of all endeavours is to find that unity. Consciously or unconsciously, we are all moving towards that grand unification only.

At the more practical level, one has to know that there is no Cartesian divide between the two, and that by opting for the right balance between religion and science, one can bring a high level of synergy in life.

---

**Swami Samarpanananda** is a monk at the Ramakrishna Mission. He is presently attached to its University. He is the author of the book - *Tiya: A parrot's Journey Home*. He is also a Hindi poet.

# *Commentary*

## **Biswanath Swain**

---

I do appreciate the endeavor that the author has taken to discuss one of the pressing issues of the modern era, i.e., the nonreciprocal relationship between Science and Religion. To come up with a possible solution to this issue, the author has paid a conscientious analytical visit into the variety of literature starting from Vedas to Indian Philosophical Schools, and from there to Western Philosophical Schools - which is something that would obviously take the author one step ahead of other philosophical and more particularly other metaphysical discourses of others. However, tackling and unknotting some of the grave issues, like the one the author has taken in this manuscript, by using the diverse analytical methods borrowing from diverse literatures, sometimes, lands us on insurmountable problem(s) that I think the author might also be facing in a profuse manner. Let me put them one after the other.

**Comment 1:** Cartesian Account of Metaphysics holds that both mind (soul) and body (matter) are diametrically opposite to each other because of their inherent properties: while the essence (property) of mind is thought and consciousness, that of body is extension and divisibility. Body is devoid of consciousness whereas mind is devoid of extension and divisibility. Hence, these two entities, mind and body, exist in their own unparalleled way being undisturbed by one another. That is to say, there is, in fact, an unbridgeable gap in between Mind and Body.

The author is right in his interpretation that the Cartesian Framework is undoubtedly a dualistic one, and there is an unbridgeable gap in between Mind and Matter. However, the perspective that the author has taken with a view to elucidate that there is a big gap in between God and the World and that between Science and Religion through his (author's) strong claim that this division has got its mooring from the Cartesian Dualistic Framework is completely wrong. And by doing so, the author might have misinterpreted and misjudged Descartes' stance completely. In addition, the

methodological move that the author has taken to go from the view that 'there is an unbridgeable gap in between Mind and Matter' to the view that 'there is a gap in between God and the World that has got incepted from the stance of Descartes', that I found, is something fallacious. It is said so because in all his writings, nowhere Descartes has asserted a position that the existence of God is extraneous and unrelated to the existence of the world.

Rather he espouses a model where he states that it is true that Mind and Matter are diametrically opposite to each other and there is no interaction among themselves; but these two entities are operated by God in a very structured and planned way - the way He arranges every other entities in this world. As Descartes puts it:

God alone is the author of all the motions in the world in so far as they exist and in so far as they are rectilinear; but it is the various dispositions of matter which render them irregular and curved...God himself has taught us that he has arranged all things in number, weight and measure. The knowledge of these truths is so natural to our souls that we cannot but judge them infallible when we conceive them distinctly (Descartes, vol. I, 1985, p - 97)

In a continuation to his explanation of the relationship between matter and God, Descartes states that the matter(s) including our body that we come across and that we possess are neither the product of an "imaginary power" nor that of "some Goddess", rather a collection of some qualities taken together, which are preserved by God. In the words of Descartes:

by 'nature' here I do not mean some goddess or any other sort of imaginary power. Rather, I am using this word to signify matter itself, in so far as I am considering it taken together with all the qualities I have attributed to it, and under the condition that God continues to preserve it in the same way that he created it. (Descartes, vol. I, 1985, p - 92)

In his discussion of "Treatise on Man", Descartes clearly elucidates that each man is composed of a soul and a body. It is God who formed both the entities of different properties and make them combined together to fetch the good result required for a man. The insight of Descartes would be of great help here:

[T]hese men will be composed, as we are, of a soul and a body. First I must describe the body on its own; then the soul, again on its own; and finally I must show how these two natures would have to be joined and united in order to constitute men who resemble us. I suppose the body to be nothing but a statue or machine made of earth, which God forms with the explicit intention of making it as much as possible like us. Thus God not only gives it externally the colours and shapes of all the parts of our bodies, but also places inside it all the parts required to make it walk, eat, breathe, and indeed to imitate all those of our functions which can be imagined to proceed from matter and to depend solely on the disposition of our organs. (Descartes, vol. I, 1985, p - 99)

Hence, from the above discussion it clearly shows that Descartes does not vouch a thesis of the non-existence of God. Nor does he hold that God is completely unrelated to and eternally separated from the world, the matters, the soul, and all the worldly entities. Nor does he assert that the beginning or the origin of soul or mind and that of body or matter is something empty or void (that the author states emphatically that the existence of mind and body are like X-axis and Y-axis. By holding this view, the author might be making a mistake that it is true that the existence of mind and body are like X-axis and Y-axis, but the origin of X-axis and Y-axis is '0', but the origin of mind and that of body is not '0', rather something which is all-perfect and embodiment of all qualities or properties - God. It is He who operates both the entities in a very sophisticated way.)

**Comment 2:** The statement that the author has given "Wittgenstein argued that both language and thought have definitive limits" needs supporting arguments from the book titled "Tractus Logico-Philosophicus" written by Ludwig J. J. Wittgenstein. Wittgenstein does not say

that both language and thought have limits, rather he categorically states that language contributes to the process of thinking. There are limits with the domain of language, and because of these limits, we cannot think properly, and hence, our thoughts are limited. But as such, in principle, thought is not supposed to have limits. Once again, the limits in the thought are there because of the limits in the language. And altogether, Wittgenstein has discussed this perspective in a different context, not in the context of what the author has used.

**Comment 2.1:** But how this discussion is related to the discussion of the method of knowledge and the main topic, i.e., the gap in between Science and Religion.

**Comment 2.2:** By giving importance on the thesis that 'our thoughts are limited', is not the author holding the view that religion is limited. It is said so because religion is the product of the process of faith and belief in something which is not couched within the material and scientific framework. And in this process, the author is contradicting himself.

**Comment 3:** The axioms by nature cannot be arbitrary and absurd, rather they are something from which all the thought processes of a normal human being starts. And because of this they cannot be considered as false at any point of time. For example: "A is A", "It is self-contradictory to say 'I am not I am'" etc. Famous examples are the "Laws of Thought" given by Aristotle. All the axioms are not only applied on the domain of science, but also applied on all the domains where the thought process is being used.

**Comment 4:** The author at one point of time saying that there is no common platform that religion and science shares. Again he is saying that science is based on perception and observation who are the products of the use of sensory-motor organs and at the same time, the author is holding that "Religions in general, and Vedanta in particular rely on ... thousand scriptural utterings". This shows that there is an intersecting point between science and religion. Hence by bringing this discussion the author might be self-contradicting.

**Comment 5:** There is a conceptual and analytical error that the author might be committing by holding that

the knowledge through Shabda Pramana does not come through the method of perception, rather through reasoning. It is said so because when an individual gets the knowledge in a scripture or the knowledge about God from someone else (who must be trustworthy), that individual in question uses his/her eyes or ears to get those pieces of knowledge. That is to say the individual in question uses the method of perception, of course may use reasoning.

**Comment 6:** In the work titled "Critique of Pure Reason", Immanuel Kant has used two concepts: one is "Phenomenon" and other is "Noumenon" (plural noumena). The objects which are there in the form of phenomenon are something which are located in the spatio-temporal world, and thereby can be perceived. Whereas the objects which are there in the form of noumenon are something which can never be perceived by sense organs as they do not exist in the spatio-temporal world. They can only be comprehended by the faculty of reason. So it is very much conceivable, from the Kantian perspective, that some of the creations are limited in time and space.

**Comment 7:** Syadvad is a theory espoused by Janism. They hold that knowledge that we have about any object in this corporeal world is not complete and perfectly right because whenever we perceive a given object, we perceive from one perspective. So by perceiving that object from one perspective, we cannot/should not claim that the piece of knowledge that 'I am having' is real, and a fact. This discussion is nowhere related to religion.

**Comment 8:** The author might not be aware that there is a similarity in between the thesis of Sankhya

Philosophy and that of Rene Descartes. Both (Sankhya theoreticians and Rene Descartes) are having dualistic framework, and at the same time both also espouse that it is the "Iswara" or "God" who is playing an important role in making Purusa (Mind) and Prakriti (Matter) function in a systematic way.

**Comment 9:** Philosophers in general are not atheists. Some of them believe in the existence of God whereas some of them do not. If we take all the schools of Indian Philosophy, we would definitely find that there are schools like Sankhya, Yoga, Nyaya, Vaisesika, Mimansa (purva and uttar), and Vedanta comes under the orthodox school of philosophers who believes in the certitude of Veda and its creator whereas schools like Bhuddism, Jainism and Carvaka are considered as heterodox school of philosophy who do not believe in the existence of God, nor in the certitude of vedas. About which the author himself has already pointed out. So it clearly shows that all the philosophers are not heterodox and atheists.

## References

Descartes, Rene. (1985). *The Philosophical Writings of Descartes*, vol - I. Trans. John Cottingham, Robert Stoothoff, and Dugald Murdoch. New York: Cambridge University Press.

**Biswanath Swain** is a faculty member in the area of Humanities and Social Sciences at Indian Institute of Management Indore. He has earned his PhD (Cognitive Science) from Indian Institute of Technology Kanpur, and MA (Philosophy) and MPhil (Deontic Logic) from University of Hyderabad. His major areas of interests are Philosophy of Mind, Philosophy of Action, Ethics, Philosophical Logic, and Business Ethics. He can be reached at biswanath@iimidr.ac.in.

# *How to build Successful Personal Brand*

**Nithiya Anil Changavalli**

---

Success is defined as the attainment or accomplishment of something aspired, planned or endeavoured. Sustaining success involves multiple factors, primarily hard work, smartness and right attitude. Many successful people who have risen to mighty heights have often stumbled and their ability to survive was a result of their enduring commitment to perseverance and values. These morals form the basic mantras for a successful life or career and their importance is emphasized in this article through the success story of Mr. Venkat Changavalli. Mr. Venkat's deep rooted principles have propelled him to rise from a simple back ground and reach heights in his career, which he has sustained over decades across many obstacles.

Born in a small village in Andhra Pradesh, Mr. Venkat was raised in a frugal background as one of the eight children born to a school teacher father and mother who was a home maker. After completing his primary schooling, Mr. Venkat pursued secondary education in a small town and higher education in the city and went on to graduate as an engineer from the National Institute of Technology (REC) Warangal, and as a post-graduate in management from the Indian Institute of Management, Ahmedabad (IIM-A). Mr. Venkat started his career in 1977 in Mumbai as a Management Trainee at Lupin Pharma and went on to achieve a total of 36 years career experience that included his role as the CEO of Symrise and EMRI (Emergency Management and Research Institute). After fifteen years of overall multi-functional experience in finance, planning and marketing.

His career spans across multiple industries ranging from pharmaceutical to textiles to fragrance and flavours and to emergency management. These career moves have exposed Mr. Venkat to multi-city cultures ranging from that of Mumbai to Bangalore to Chennai and Hyderabad and he has worked under multiple ownerships ranging from the family-owned Lupin to publicly owned MNC (CIBA-GEIGY) the family-owned multinational, Dragoco (later named Symrise), to the

non-profit organisation, EMRI (108 Ambulance Service), which operates as a public (Government)-private partnership. None of these changes ever daunted Mr. Venkat, who though thoroughly bred in a small town, never feared to explore new places and take on new challenges.

The bold career moves he made early in his career prompted him to experiment newer roles in the following years and have enabled him to understand varying perspectives that have made him more mature, more broadminded and more respectful towards other cultures and people.

One of the principles that Mr. Venkat strongly advocates to everyone is that no individual should ever be scared to rise up to any kind of challenge at any stage in their life or career. His first major challenge arose when he considered applying to IIM-A despite his low proficiency in English, a drawback he felt would be an obstacle in his quest for higher education in a reputed institution. So what motivated him during such moments of low confidence? His strong academic record especially in mathematics and the confidence and faith that some of his seniors and elders had in him. They encouraged him to apply as they felt that this opportunity would help him nurture his leadership qualities. This instigated a surge of confidence in Mr. Venkat and he completely overcame his fear and decided to fight his weakness by dedicating time reading newspapers to improve his vocabulary. And the result? He was offered an opportunity to pursue Post Graduation in Management at IIM-A and the resulting experience laid a strong foundation for his future endeavors.

Another important turn in Mr. Venkat's career was in the year 1992 when he decided to quit the Dragoco Ltd, as he found his boss to be corrupt and incompetent. He did not want to work with a senior whose values clashed with his values. A year later after his boss was removed, he was asked to rejoin the company as the CEO and transform the failed joint venture company into a

---

Note: This article is based on Experience of Mr. Venkat Changavalli, Management Consultant and Leadership Mentor.

profitable one. The reasons quoted for his reinstatement at a higher post were purely his competency and integrity. Mr. Venkat accepted the offer and successfully led the company for 11 years to a significant position in the fragrances and flavours industry. To achieve this milestone, Mr. Venkat worked very diligently to build a strong infrastructure of processes and people. He also successfully managed the company during trying times that included the transition of Dragoco from an India managed joint venture to a purely German managed company.

In 2005, a new chapter began in Mr. Venkat's career when he took up the role as the CEO of EMRI. It was a complete surprise to him when the former Chairman of Satyam, Mr. Ramalinga Raju, approached him with this offer. This was going to pronounce as an entirely novel experience for him as he had to break away from the corporate business world he was used to and adapt to a totally new system. An opportunity to take up yet another challenge and prove success in a totally different field motivated Mr. Venkat to accept the offer. He invented the emergency helpline number 108, conceptualized the set up of the emergency call centre and helped devise new information technology to help locate the victims, hospitals and ambulances in order to shorten response times. The emergency service was launched on 15<sup>th</sup> August 2005 at Hyderabad with 15 ambulances in the state of Andhra Pradesh. Six years later, EMRI operated in 12 different states and accoladed a record of saving approximately 520,000 lives. However, in 2009, things went amiss when the Satyam Computers-Ramalinga Raju crisis threw Mr. Venkat in complete dilemma. After parting ownership, Raju requested Mr. Venkat to continue to lead EMRI. Mr. Venkat resolved to stand up and fight for EMRI and save the unique project. He promptly took appropriate steps that prevented EMRI from collapsing. His main agenda was to establish EMRI as an entity completely outside of Raju and Satyam and to scout aggressively for a new funder. Despite facing intense criticism from media, Mr. Venkat boldly embraced the situation and remained focused on obtaining financial support for EMRI and take care of his employees. Amidst all the confusion, EMRI continued to operate and provide uninterrupted

services to people. Mr. Venkat mobilized support from stakeholders (bank, governments, technology partner, society members) and continued to empathise and motivate his employees. A few months later, EMRI successfully got a new owner and Mr. Venkat emerged more positive, more humble, more self confident, armed with more commitment and passion to save lives.

Crisis struck again on 10 January 2011 when the new EMRI management wanted Mr. Venkat to separate from EMRI. This was yet another unexpected turn for Mr. Venkat but as usual, he did not lose his resolve. Since April 2011, he has been practicing as a leadership mentor, management consultant, trainer and inspirational speaker. He is providing Management Consultancy including Leadership Mentoring to large organizations in Health Care and Self Care sectors, conducting corporate training programmes in the areas of strategic thinking, leadership, innovation, execution, human resources, marketing, public-private partnerships, life and self-management skills etcetera. He also mentors professional entrepreneurs for business, partnership and leadership development through Innovation. Mr. Venkat also serves on the board of State Bank of Hyderabad and is a visiting faculty at IIMA, Indian School of Business (ISB), IIMI, ASCI and London Business School (LBS).

In his role as a mentor, Mr. Venkat emphasises that adversity is like walking through fire and one should stick to good values and ethics and maintain positive attitude and energy during difficult times. He firmly believes that if one lasts this phase, they emerge more self confident, more positive, more humble, more humane and overall more successful. Mr. Venkat, till date, continues to implement and advocate the same principles and values he has been practising for decades that have helped him stand the test of time and continue to spell success in his life and career.

---

**Nithiya Anil Changavalli**, has over eight years of experience across diverse industries such as pharmaceutical, information technology and consulting. She has specialization in biotechnology and biochemistry from the University of Madras.

# *Intelligence Measurement: Recommendations for a Research based Strategy in Employment Testing*

**Sangeetha Rajan**

---

The concept of intelligence has long been a point of great interest for researchers and practitioners as a predictor of work performance and other achievements. Simonton (2006) found that individual differences in intelligence were consistently related to leader performance, including assessed performance of the Presidents of the United States. Reports such as these indicate the importance mental ability assumes in our daily lives.

The history of research on mental ability is loaded with controversies - technical disagreements on what can and cannot be measured, theoretical differences on the nature of intelligence as well as ethical issues on what should constitute the content of the intelligence test. This article discusses some of the major conceptual positions regarding intelligence and evaluates their everyday utility in the Indian business context. It is intended for human resource practitioners who make decisions about mental ability measurement. In the course of my work with corporate clients, I have observed that these decisions are often based on cost considerations, on the convenience that a tool or a consulting company selling a tool offers, on reputation of a tool, a researcher or a consulting firm, and several other criteria, which, though important, may not be central to serving the main purpose - that of choosing candidates who are likely to do well on the job.

In the first part, what we know about mental ability and intelligence is reviewed by outlining the general intelligence argument. Next, some alternate theories of intelligence and their applicability at the workplace are studied. The Indian view of intelligence is also described as it forms a context for those practicing in India. Lastly a strategy for applying what we know about intelligence to occupational selection in India is recommended.

## **The General Intelligence Argument**

Briefly, around a hundred years of research, debate and experimentation have been invested in studying the

variable called intelligence. Although there has been a lot of fine tuning, especially in the matter of culture fair tests and controlling racial and other biases in intelligence testing, the mainstream psychology view of intelligence has remained by and large unchanged since the work of Spearman and Binet in the early 1900s. Charles Spearman (1904) first coined the term General Intelligence (*g*) and held that when branches of intellectual activity are dissimilar, the correlations between them can be explained entirely by a common fundamental factor - what he called the law of Universal Unity of the Intellectual Function. The differences between these diverse branches of intellectual function, he claimed, can be explained by specific intelligences (*s*). Alfred Binet (1905) studied the mental state of children to make decisions about their appropriate academic

placement, whether within a regular classroom or special education for retarded individuals. An especially useful aspect of their revised 1908 Binet-Simon scale was that they provided for the possibility of expressing the mental level of a child in relation to the age group whose average performance he/ she matched. This later came to be known as mental age. Once more, a unitary view of mental capacity is represented by this early theory.

In the western conception of intelligence, theories about intelligence and measures of mental ability have developed side-by-side so that the theoretical history of intelligence is intertwined with advances in statistics and psychometrics. Factor analysis especially became important to the vision of mental ability as conceptualized by leading psychologists in the western world. Spearman's two factor theory was the first major theory about intelligence in the twentieth century. Lewis Terman is famous for his revision of the Binet-Simon scale (known as the Stanford-Binet Tests) and for formulating the concept of Intelligence Quotient (IQ). Dr. Arthur Sinton Otis, who trained under Terman,

adapted the test to create the Army Alpha and Army Beta tests in the 1920s for recruiting soldiers to fight in World War I. This was the first time that a group testing format was used. A slight departure from the entirely monolithic view of intelligence occurred with L.L. Thurstone's (1938) Theory of Primary Mental Abilities, according to which intelligence consists of seven major factors - Verbal Comprehension, Verbal Fluency, Inductive Reasoning, Spatial Visualization, Number, Memory and Perceptual Speed. The next twenty odd years were essentially spent researching better ways to measure intelligence and the focus was more on psychometric concerns rather than conceptual issues. The Wechsler scales, developed originally in the 1930's and 1940's, are particularly famous and the revised versions continue to be in use even today to test the mental ability of children and adults. Wechsler defined intelligence as the, "aggregate or global capacity of the individual to act purposefully, think rationally and deal effectively with the environment". Despite their being several factors of intelligence brought into the mix by this time, definitions such as Wechsler's still emphasize the supremacy of g. Another popular measure of general intelligence, that made its appearance for the first time in the 1930's, is Raven's Progressive Matrices, a set of non-verbal tests presented in the multiple choice format. These tests too continue to be in use today. The late 60's and early 70's saw the emergence of some more models of intelligence - such as Guilford's Structure of Intellect Model, Vernon's Hierarchical Theories, the concepts of Fluid and Crystallized Intelligence as proposed by Cattell, and Jensen's Level I and Level II abilities.

Two main controversies surrounding research around intelligence have been firstly, whether g is a psychological entity or a mathematical abstraction, and secondly, whether it is innate or learnt (Lohman, 1989). While some scientists expanded the definition of intelligence (e.g. Thurstone's 1938 Primary Mental Abilities), statistically there were still overlaps between g and other forms of intelligence which suggested that this was merely an extension and validation of the theory surrounding the g factor. In fact, the more the research that went into intelligence, the more the importance that was gained by g. Hernstein and Murray

(1994) examine the role of IQ in social and economic differences in the United States. They indicate that general intelligence correlates negatively with many other variables such as unemployment, divorce, having illegitimate children, poverty, incarceration and school dropout rates, and positively with variables such as income and socio-economic status. Gottfredson (1998) says that the g factor explains most the differences in performance between individuals on a diverse range of mental tests. In essence, she puts g at the apex of what she calls a "hierarchy of mental abilities" and argues that it is mostly inherited. She also defends Hernstein and Murray's work and insists that researchers and practitioners need to acknowledge the fact of individual differences in intelligence rather than soft-pedaling the issue. While the data cannot be ignored and certainly Hernstein and Murray's book *The Bell Curve* made people sit up, it is probably due to such research that the concept of g has faced its share of criticism through the ages, and alternative models have been proposed (e.g. McClelland 1973, Gould 1981, Sternberg 1985, 2004, Gardner 1983, 2003), some of which we consider in the next segment.

While there is no doubt that there are individual differences in mental ability, the issues have been around how these are manifest, how they should be treated/ measured and what conclusions can be drawn. As a recruiter, how should I view the data before me? Should I reject a candidate with suitable experience based on his/ her poor intelligence test score? Gottfredson (1997, 1998) says that no other single predictor measured to date has more predictive validity for job performance. She claims that not only does g exist but that it is very important in the practical affairs of life. According to her, the average predictive validity across jobs in the US economy ranges from 0.3 to 0.5 (on a scale of 0 - 1.0). She also quotes research by Hunter (1986) which suggests that validities are higher if work sample is used as a criteria rather than supervisor ratings, and goes on to argue that the more complex the job, the more important g is in predicting performance. Behling (1998) quotes the instance of several employers hiring people based on general intelligence. He also says that g is probably of more import when jobs require individuals

to learn quickly rather than depend on the already held knowledge, when the job requires a great deal of problem solving, and when autonomy is high. Even so, the correlation with performance during the training period seems to be higher than between intelligence and on-the-job performance. According to Sternberg (2001) however, validity estimates for g accounts only for 20-25% of variance in performance leaving 75-80% unexplained. The dialogue around mental ability testing eventually led to several alternate theories and models, some of which are also useful at the workplace. A few of these are discussed in the following segment.

### **Alternate Models of Mental Ability**

While most psychologists and researchers until the 1980's were won over by the unitary model of mental ability offered by the concept of g, there were a few who conceptualized human intelligence differently. Lev Vygotsky and Jean Piaget in 1970s proposed separate developmental theories of cognition and reasoning. Although there is some evidence to link Piaget's model to general intelligence (e.g. Humphreys, Rich and Davey [1985]), both theories were developed to explain the mental development of children and subsequent research also concentrates on children. The interesting thing about Piaget's theory is that he conceptualized intelligence as primarily functional in nature having an operational component responsible for dealing with the transformational aspects of reality and a figurative component responsible for dealing with the static aspects of reality. For Vygotsky, learning always comes before development. Both theories therefore assume that mental ability is more dynamic in nature than suggested by the general intelligence argument.

In the 1980's there was a surge of interest in looking at intelligence as multi-faceted. Howard Gardner and Robert J Sternberg both proposed theories of intelligence that spoke of non-unitary view of mental ability. Gardner's (1983) theory of multiple intelligences gained a lot of popularity in the educational setting since it was easy to understand, more inclusive and provided solutions for all-round development of children. There is research that validates the theory by linking scores on the various intelligences to occupational choice/

stream of work (Shearer [1997, 2006], Preito et al [2005], Harris and Sykes [undated]), but there seems to be hardly any research linking scores to performance in a corporate environment. The theory is an attractive one, but the measurement of multiple intelligences is still a major problem since they cannot be captured by paper-pencil tests (Armstrong, 2009). As on date, therefore, its utility in an occupational context is limited.

Sternberg's (1985) theory is more promising. Briefly, he suggested three main aspects to intelligence - Analytical intelligence which accords with the traditional idea of "book smarts", Creative intelligence which has to do with dealing with novel situations or finding new approaches to solve a problem, and Practical intelligence using which individuals create a fit between themselves and their environment. Sternberg and Grigorenko (2001) define practical intelligence as "the ability to find a more optimal fit between the individual and the demands of the environment through adapting to the environment, shaping or changing it, or selecting a new environment in the pursuit of personally valued goals". It can be characterized as "street smart" or "common sense," and it supplements academic intelligence or "book smart." Practical intelligence encompasses the abilities one needs to succeed in everyday life, including in one's job. They suggest that the best way to measure practical intelligence is through simulations including in-basket exercises, situational interviews, and situational judgment tests (SJT's). They report correlations of 0.13-0.37 between SJTs and performance ratings for various jobs, which is encouraging from a human resources point of view. The authors further explore the relationship between tacit knowledge and practical intelligence, and say that Tacit Knowledge tests (TK tests) are useful in the work context because they measure something more than g. They quote, among others, an earlier study (Wagner and Sternberg, 1985) on bank managers where the obtained significant correlations between TK tests and performance criteria, such as percentage of merit-based salary increase ( $r=0.48$ ,  $p < 0.05$ ) and generating new business for the bank ( $r=0.48$ ,  $p < 0.05$ ). This kind of data suggests that it might be well worth our while to consider evaluating practical intelligence in the employment context. Both Gardner's

and Sternberg's theories have come in for a lot of criticism from the g camp for their non-psychometric origins (e.g. Klein [1997], Gottfredson [2003], Visser et al [2006]), but with research around the globe strengthening these perspectives they acquire greater relevance to employment testing.

The discussion this far has centered on theories of intelligence that have all originated in the western world. When considering the Indian employment context, it is also necessary to assimilate the Indian view of intelligence and its impact on employment screening.

### **The Indian View of Intelligence**

Discussing intelligence in the Indian context is a little confusing. There is the traditional view of intelligence as expressed by the Indian texts. And apart from the Sanskrit philosophic traditions, there are other linguistic traditions to consider which may have their own views about the definition and place of intelligence in worldly affairs. In addition, the perspective of the lay person of today could be quite different. So when we say the Indian view on intelligence, we could be speaking of any of these perspectives.

The Sanskrit-Indian view of intelligence/ mental ability/ wisdom has always described it as varied, contextual as well as constant, and encompassing much more than just the ability to deal with words or numbers. Traditionally, the ability to discriminate or 'viveka' is considered the hallmark of intelligence. The Sanskrit word 'buddhi' is the closest translation of the word intelligence. Buddhi derives from Budh (to be conscious of) plus ti a suffix indicating act, state or fact (Baral and Das in Sternberg Eds. 2004, Tripathi and Babu in Misra Eds., 2009). The mind is to be analyzed, trained and developed to explain and obtain the goal of enlightenment and release from rebirth. Intelligence is almost only discussed in the context of knowledge that will enable this enlightenment. The first meaning of intelligence is therefore awareness/ consciousness. Buddhi includes determination, mental effort, and even feelings and opinions in addition to such processes as knowledge, discrimination and decision making. The realization of Buddhidepends on one's own effort, persistence and motivations. This is not to say that the

hereditary component of intelligence is overlooked. In the Indian view, the child can inherit karma (loosely defined as the benefits or costs incurred by earlier thought or deed) from his ancestors and mental ability is also viewed as a family trait. This rather flexible, practical and inward view of intelligence can be found in religious and moral texts too.

As per the Vedic view, cosmic intelligence is the basis of all life and pervades everything animate and inanimate as per the limitations of the physical manifestations of body and mind. In plants there is a capacity of feeling; in animals, sensations, memory and, even to some extent decision making, is to be seen. In humans, there is, as per this view, the additional power of discrimination, or intelligence that allows the individual itself to realize its oneness with the universal consciousness. Rao (2008) says that in contrast to the Western bio-centric view, Indian psychology has consciousness as its core concept, its defining characteristic irreducible to brain states.

In the Bhagavad Gita (Chapter 2), Arjuna asks Krishna to describe the man of settled intelligence who is steadfast in spirit and firmly founded in wisdom. Krishna answers by saying that when one puts away desire and the spirit is content in itself, a person is considered stable in intelligence. When a man dwells on the objects of the senses, attachment to them is produced. From attachment springs desire, from desire comes anger, from anger rises bewilderment and from bewilderment comes loss of memory and that destroys intelligence. When the mind runs after the roving senses, says Krishna, it carries away understanding, even as a ship is carried off-course by the wind. Those of disciplined mind, who move among the objects of sense with the senses under control, have pure spirit and also the power of concentration so that they experience peace and happiness.

The Indian view of intelligence can also be explored by examining Indian lore. One story from the Panchatantra describes the lion that sprang to life. Four friends were walking through a forest - three of them were very learned and had just completed their education. The fourth was a simpleton. On the way, they came upon the remains of a lion that had died. One of the scholars

displayed his knowledge by reconstructing the bones of the lion, another scholar added flesh and blood, and the third was about to breathe life into the form when the simpleton intervened. He reasoned that it was dangerous to bring a lion to life and tried to dissuade his friends. But they merely laughed at his fears and seeing that he was not able to convince them, the simpleton climbed a tree to await the inevitable. The third scholar brought the lion to life which promptly attacked and killed all three of them. Another story describes the fish ShataBuddhi and Sahasrabuddhi, and their friend, the frog Ekabuddhi. Both the fish were handsome and intelligent, and knew many tricks to escape any trap. When they overheard fishermen saying that they would be casting their net in that pond, the fish were unconcerned since they knew so many ways to escape. The frog however, knew only one thing, and that was to avoid danger. So he escaped the net by leaving the pond well in time while his two fish friends were caught by the fisherman's net. Countless similar tales abound in Indian lore - the cunning hare that brought about the end of the foolish lion, the scholar who could not swim, the stories of Tenali Raman (from South India) or Birbal (North India) or Gopal the jester (Bengal) who solved problems for their respective kings using their quick wit, humor and creative thinking. Together these stories underline the belief that the highest form of intelligence is that which can be practically applied. They agree that wisdom is not the product of book learning alone. Intelligence has very many manifestations and the gifts of an individual need not be typical, academic or for that matter, unitary.

Srivastava and Misra (2007) conducted a study to understand the amount of congruence between the traditional views of intelligence and the contemporary Indian perspective. Their analysis of Sanskrit suktis (sayings, proverbs) revealed four dimensions of intelligence - Cognitive competence, Social competence, Entrepreneurial competence and Emotional competence. Of the sub-factors, the most important were Control of emotions (especially anger), Sensitivity to context and Hard work. Their analysis of Hindi proverbs also led to the same four factors, delineating intelligence as plastic, adaptive and real. Hard work once more emerged

as an important and distinguishing characteristic. Intelligence, as per this analysis, was not confined to the success of the individual alone. Rather it aims at achieving the common good. Srivastava and Misra, as part of the same study, also interviewed 1885 men and women at rural and urban locations across India and found the same dimensions of intelligence in their definitions. Social competence was more important in lay people's understanding compared to textual content, but it was still the same four factors that emerged showing a great deal of alignment between the textual definitions of intelligence and the common person's view of intelligence in India.

### **Putting What We Know about Intelligence to Work**

Theoretical debates aside, many of the points discussed in this article have an immediate bearing on the decisions surrounding employment testing. Informed by an understanding of the key issues, it is possible to create an extremely functional strategy around the use of ability tests in the Indian business context.

Intelligence is a deeply researched concept and a wide choice of tools is available today which can give us an approximation of an adult's mental ability. If a tool is chosen after checking its credentials, it is likely to give us a good range of test performance scores on which to base our decisions. Workplaces in India are becoming more like workplaces anywhere else in the world, especially for the English-speaking managerial cadres, so that the objection that the test is designed abroad becomes less of a problem as the years pass. The tests also tend to be designed in a more culture-fair manner so that bridging the gap between east and west on this count is easier.

The concept of g has come in for a lot of criticism on the grounds of perpetuating racial and class differences, which is a point that cannot be ignored. When an intelligence test is used for a relatively homogenous mainstream educated, predominantly urban population in India, it is not a problem. But if we need it to perform more inclusively, we could run into a host of difficulties. India is home to more than 1000 languages and dialects and for most Indians, English is not a first language (in fact it may not even be a second or third language). IQ

tests loaded with verbal content in English therefore tend to perform poorly in non-metro locations in India. A high investment option is to design tests in a variety of languages - it would involve not only translation, but finding parallel question content that is applicable in the context surrounding that particular language. Recruiters therefore tend to fall back on the non-verbal and/or numerical segment scores to indicate intelligence. Unless the test is so designed (such as Raven's Progressive Matrices which are entirely non-verbal), the interpretation arising from this proceeding might be faulty. Further, during the course of my doctoral research applying the multiple intelligences framework in a qualitative study, I discovered indications that scores in verbal and numerical tests may be subject to the effects of learning, practice and exposure. For example, in the case of math, there were individuals who confessed to a fear of numbers (math phobia). It is not that they are unable to make sense of numbers in the course of their work, but that they experience an aversive response when compelled to take a test involving mathematical operations. On the other hand, there were individuals who were ostensibly good with numbers (given their educational track record involving degrees in engineering, science and architecture), but did not prefer to apply logic to solve problems. Their test scores therefore do not reflect their real ability with numbers. In a study on third year undergraduates I found many Statistics majors reporting that they did not like math because of the way it was taught. It is evident that scores on these tests are influenced by a variety of factors. It is important that the decision-maker carefully examines the content of the test to ensure that it is relevant to the population being tested as well as to the job or set of jobs, and this is apart from reviewing the reliability and validity coefficients provided in the manual. As Frost (1993) puts it, "how quickly a man can add or subtract becomes meaningless in a practical sense when both the accountant and engineer will inevitably use a calculator or desktop computer which performs arithmetic operations a million times faster than any human." When this due diligence is done and a test chosen, the results can be fairly accurate.

In general, traditional tests of g or mental ability batteries are appropriate for entry level management positions or for those entering an organization with two-three years of experience. In service and knowledge oriented industries such as banking, telecom, IT etc., they can be used well even at the non-managerial level if suitably designed. g is a strong predictor of learning which is what is required in the initial phase of the employee's career. Many organizations are doing exactly this, but their reasons are different. In practice I have observed that the more distanced managers get from the test-taking process, the lower their scores on traditional mental ability tests. That is, at higher managerial levels where employees took their last test perhaps eight or ten years ago, they tend to score very poorly on speeded tests. Additionally, in India where formal learning and test-taking are not a life-long phenomenon for most people, test motivation suffers a good deal. HR managers then tend to eschew testing for mental ability at a senior level either because senior level candidates just refuse to take tests or try to negotiate around them, or because scores of experienced candidates become quite low and render meaningful interpretation impossible. My point is that the practice of using mental ability tests at entry level is correct, but clarifying the why will help create an overall better strategy for employment testing. Additionally, even when used at the entry level, a mental ability test is more useful as a filter to screen out entirely unsuitable applicants rather than a tool to assist in a choice between two suitable applicants. To explain, when recruiting from a large pool of applicants, HR managers could use ability tests to narrow down the list of candidates who will go on to the next step in the selection process. But the decision to select cannot be based on the test score. While a threshold level of mental ability is required for most jobs, beyond a point it loses its predictive power. For more experienced candidates, a different kind of assessment is probably called for such as Sternberg's suggestion of testing for practical intelligence/ tacit knowledge using simulations. In some domains, there are gaming options, usually as part of assessment centers that provide a proxy for a mental ability test. Case studies requiring complex decision-making and moving away from the multiple-choice-single-answer format may help make a better selection

decision. There are two challenges associated with this method - one that case studies or similar open-ended assessments require experienced assessors to evaluate the candidate correctly, and second, that they have to be specially designed to approximate job-related decisions as closely as possible since they are context specific. However, the investment may be justified by the superior rigor of such a testing process. Further, the Indian view of mental ability accords well with the idea of practical intelligence or a non-unitary view so that such measures may have greater face validity, thereby improving test motivation and reducing resistance even when used for internal promotions or reassessments.

One last point which has not come up in the literature around mental ability testing for employment is that despite claims by researchers in the g camp about the predictive power of intelligence, other factors too may play an important role in job performance, such as personality traits. The Big Five personality traits of Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism (emotional stability) have received a lot of attention as predictors of job performance. Of the traits, Conscientiousness has been consistently linked to job performance (Jimoh [2008], Rothman and Coetzer [2003], Mount, Barrick and Strauss [1999], Barrick, Mount and Strauss [1993], Behling [1998]) and many practitioners in India swear by Raymond Cattell's 16PF and Saville and Holdsworth's OPQ (a later derivative of the 16PF specially designed for occupational use) for their utility in predicting performance. Other popular tools include the FIRO-B and the DISC. David McClelland and his colleagues have similarly done a lot of work to promote the use of competencies instead of intelligence in selection practices. While this article is not about personality assessment, I bring in this aspect to give a perspective to the role of mental ability assessment in employment testing. While assessing mental ability can help make a better decision about selection/ promotion/ placement, it cannot be the only factor guiding the decision.

## Conclusion

In sum, what is recommended as a strategy is using a judicious mix of methods based on an understanding

of the options and the concerns surrounding each kind of assessment. In the Indian context, where social competence, hard work and emotional control are seen as components of intelligence, it may be necessary to evaluate personality along with measures of cognitive ability. An important concept not covered in this article is that of Daniel Goleman's (1996) Emotional Intelligence which resonates well with the Indian concept of intelligence. Given the importance of the interpersonal dimension in the Indian vision of the intelligent individual, the personal interview is also a critical source of information. Measures of general cognitive ability used at the entry level as a filter and measures of practical intelligence at more senior levels will work well for large organizations which have the size and scale to afford the investment. There is no doubt that mental ability is important to work performance. It is consistent with general wisdom as also supported by scientific research. The more HR managers are familiar with the issues discussed and are able to make informed decisions about how to use mental ability measurement, the better they would be able to add value to the selection decision.

## References

- Armstrong, Thomas. (2009). *Multiple Intelligences in the Classroom* (3rd Ed) ASCD: Alexandria, VA, USA.
- Barrick Murray R, Mount Michael K, and Strauss Judy P (1993) Conscientiousness and Performance of Sales Representatives: Test of the Mediating Effects of Goal Setting. *Journal of Applied Psychology*, 78(5), 715-722.
- Behling Orlando. (1998). Employee Selection: will intelligence and conscientiousness do the job? *Academy of Management Executive*, 12(1), 77-86 Bhagavad Gita, Chapter 2, Verse 54-68.
- Binet, Alfred. (1905). New Methods for the Diagnosis of the Intellectual Level of Subnormals. *L'Année Psychologique*, Vol. 12, pp 191-244. Translation by Kite, Elizabeth S (1916) In *The development of intelligence in children*. Vineland, NJ: Publications of the Training School at Vineland.
- Frost, C.F. (1993). The Changing Face of Intelligence. Gift of Fire, Issue No. 59-A, May 1993. Available on the official website of the Prometheus Society <http://216.224.180.96/~prom/oldsite/articles/changingface.html> Accessed on September 23, 2012
- Gardner Howard (2003) Multiple Intelligences After Twenty Years. *Paper presented at the American Educational Research Association, Chicago, Illinois*, April 2003.

- Gardner, Howard. (1983). *Frames of Mind: The Theory of Multiple Intelligences*. Basic Books: New York.
- Goleman, D. (1996). Emotional Intelligence. Bantam Books: New York.
- Gottfredson Linda S. (1997). Why g Matters: The Complexity of Everyday Life. *Intelligence*, 24(1), 79-132.
- Gottfredson Linda S. (1998). The General Intelligence Factor. *Human Intelligence*, ExploringIntelligence, 24-29.
- Gould Stephen J. (1981). *The Mismeasure of Man*. Norton and Co: New York.
- Harris, Kevin A and Sykes Eric W: Professional Predispositions: Assessing Multiple Intelligences Theory in Undergraduates. <http://kaharris.iweb.bsu.edu/ProfWritings.htm> - accessed August2010
- Herrnstein Richard J and Murray Charles. (1994). *The Bell Curve: Intelligence and Class Structure in American Life*. Simon and Schuster Inc: New York.
- Humphreys, L.G., Rich, S.A. & Davey, T.C. (1985).A Piagetian Test of General Intelligence. *Developmental Psychology*, 21, 872-877.
- Jimoh, A.M (2008) Emotional Labour, Conscientiousness And Job Tenure As Predictors Of Job Performance Among University Administrative Workers In Southwestern Nigerian. *International Journal of African and American Studies*, 7(2), 27-38.
- Lohman David F (1989) Human Intelligence: An introduction to Advances in Theory and Research. *Review of Educational Research*, 59(4) (Winter 1989), 333-373.
- Lohman David F (2001) Fluid intelligence, inductive reasoning and working memory: Where the theory of multiple intelligences falls short. *Paper presented at the annual meeting of the American Educational Research Association in Seattle, WA*, March 2001.
- McClelland David C. (1973) Testing for Competence rather than for "Intelligence". *American Psychologist*, January 1973, 1-14.
- Misra, Girishwar (Eds.) (2009). *Psychology in India (Volume I): Basic Psychological Processes and Human Development*. ICSSR: New Delhi
- Mount Michael K, Barrick Murray R and Strauss Judy P (1999). The Joint Relationship ofConscientiousness and Ability with Performance: Test of the Interaction Hypothesis.
- Preito L, Bermejo R, Ferrando M, Ferrandiz C (2005). Multiple Intelligences and Exceptional Children. *Paper presented at the European Conference on Educational Research*, Dublin, Sept 2005.
- Rao, K.R, Paranjpe A.C, and Dalal A.K (2008). *Handbook of Indian Psychology*. Cambridge University Press: New Delhi.
- Rothman S and Coetzer E.P (2003). The Big Five Personality Dimensions and Job Performance. *Journal of Industrial Psychology* 2003. 29(1), 68-74.
- Shearer Branton (2006). Towards an integrated model of Triarchic and Multiple Intelligences. [http://www.miresearch.org/reports\\_and\\_papers.html](http://www.miresearch.org/reports_and_papers.html)
- Shearer, C. Branton (1997). Reliability, Validity and Utility for a Multiple Intelligences Assessment for Career Planning. *Paper presented at the annual meeting for the American Psychological Association*, Chicago.
- Simonton DK (2006). Presidential IQ, Openness, Intellectual Brilliance, and Leadership: Estimates and Correlations for 42 U.S. Chief Executives. *Political Psychology*, 27(4) (Aug., 2006), 511-526.
- Spearman, C (1904) "General Intelligence", objectively determined and measured. *American Journal of Psychology*, 15, 201-293. Available in <http://psychclassics.yorku.ca/Spearman/>
- Srivastava A.K and Misra G (2007). *Rethinking Intelligence: Conceptualizing Human Competence in a Cultural Context*. Concept Publishing Company: New Delhi.
- Sternberg R. J (1985). *Beyond IQ: A Triarchic Theory of Intelligence*. Cambridge University Press: Cambridge
- Sternberg R. J (2004). *International Handbook of Intelligence*. Cambridge University Press: Cambridge.
- Sternberg Robert J and Grigorenko Elena L (2004). Successful intelligence in the classroom. *Theory into Practice*, 43(4) (autumn 2004), 274-280.
- Sternberg, Robert J and Grigorenko, Elena L (2001). Practical Intelligence and the Principal. Research report published by the U.S. Department of Education. Available at <http://tv.isg.si/site/ftpaccess/elogedusavoir/Practical%20Intelligence%20and%20the%20Principal.pdf> accessed on September 23, 2012
- Terman, Lewis M (1916). The Binet Scale and the Diagnosis of Feeble-Mindedness. *Journal of the American Institute of Criminal Law and Criminology*, 7(4), (Nov, 1916), 530-543.
- Thurstone L. L. (1946) Theories of Intelligence. *The Scientific Monthly*, 62(2), (Feb 1946), 101-102.
- Thurstone, L. L. (1938) *Primary Mental Abilities*. University of Chicago Press: Chicago.
- Visser B.A, Ashton M.C, and Vernon P.A (2006). g and the Measurement of Multiple Intelligences: A Response to Gardner. *Intelligence*, 34, 507-510.

**Sangeetha Rajan** is a psychologist, management consultant, trainer and educator and is a visiting faculty at IIM-Indore. She holds a doctoral degree awarded by the Tata Institute of Social Sciences for researching the mental profile of artists. This paper on intelligence measurement is an outcome of twelve years of work as a management professional applying psychometrics in the organizational context and research work done towards her dissertation.

# *Perspectives on 'Lean In'*

Madhusri Shrivastava

The corporate world is routinely reproached for its dearth of women leaders. Consequently, the clutch of women who have presumably shattered the 'glass ceiling', are feted, felicitated, and held up as trophies. They are eagerly seized upon as role models by those on the fringes of success, perhaps to demonstrate that, notwithstanding stories in the media, organizations are not laggards in the journey towards gender equality. So when Sheryl Sandberg, the personable COO of Facebook, writes a book, it resonates in the corridors of management institutes halfway across the world. Understandably so, because B-Schools are the incubators of prospective corporate executives, all of whom virtually experience life through the social media.

Sandberg's pronouncements have been hailed as a clarion call to women and derided with equal intensity for being overly facile. Further, her advice to women has drawn flak for addressing the concerns of a segment of elite, affluent women who can afford the phenomenally high cost of hired help at home. This article is not merely about her book; it is also about reactions to her exhortations to women to 'lean in' to their careers, realise their potential and set right the gender skewness in the corridors of power.

The polyphony of criticism she draws is testimony to the contentious nature of any debate that hinges on providing a level playing field. She posits that women fail to seize opportunities, anticipating problems in their attempts to achieve work-life balance, particularly in the wake of pregnancy and childbirth. She urges them not to leave before they have left... that is, not to prune their aspirations till push comes to a shove, and the decision to pull out of the workforce becomes imperative.

One of her most significant observations is that women are hamstrung by their diffidence. Karen Peetz, President of BNY Mellon, the world's largest bank, echoes her sentiments when she says, 'What holds back women is not lack of ability, but lack of confidence' (Business Line, 18 October 2013).<sup>1</sup> Since a display of confidence is generally misconstrued as a sign of competence, women

are invariably bypassed in favour of men at selection interviews and appraisals. Indeed, research has revealed that women's social conditioning often predisposes them to underplay their achievements. It is noteworthy that feminist scholars such as Juliet Mitchell (1966) had drawn attention to the insidious ways in which domestic work, maternity, sex, and the socialization of children are manipulated to create intangible mental bonds in women, making their inferiority and inequality seem natural to them.

A survey carried out by Powell and Graves (2003) indicates that a good manager is universally seen as possessing predominantly masculine characteristics. They contend that this 'masculine stereotype of the good manager is self reinforcing and inhibits the expression of femininity by women in management positions' (pp.137-39). However, this general perception is in contradistinction to recent studies that link modest behaviour to emotional intelligence, one of the distinguishing characteristics of transformational leadership (Chamorro-Premuzic, 2013). A considerable body of research in management posits that the masculine traits valorised in discussions on leadership are scarcely the ones modern organizations need for success. On the contrary, the purportedly feminine qualities of empathy and humility, and a reasonable ability to question the validity of one's own decisions, help create an environment conducive to personal and professional growth. Women in the professional workforce are increasingly pointing out that contemporary research advocates the need to 'Lean back', not 'Lean In'. In her 2013 article for the Forbes Leadership Forum, Vaughan observes that

Sandberg glorifies traditionally "male" characteristics - outspokenness, credit-taking, and constant presence in the work environment. These values may be linked with individual professional success, but do they actually translate to success

<sup>1</sup> This is reflected in their linguistic styles too, further reinforcing the perception that they lack confidence. (Tannen, 1995).

for society as a whole? Lost in the debate about how and how much we should be leaning in, we miss the point. Rather than telling women to match men's behavior, we should be encouraging everyone to lean back, to emulate a more feminine leadership style that is better correlated with society's well-being.

In accordance with expectations of stereotypical behaviour from managers, organizations are seeking to equip women for leadership roles: either by helping them acquire 'masculine' qualities, or by making the workplace environment more woman-friendly, or else, by celebrating their 'special' qualities of interpersonal skills. Meyerson and Fletcher observe that the persistent clamour for a level playing field has made corporate organizations introduce a slew of measures to assimilate, accommodate... as well as celebrate women. Such an approach 'gives women stilts to play on an uneven playing field, but it doesn't flatten out the field itself' ((2000, p.130). Thus they argue that while the symptoms of gender bias are addressed, the bias continues to remain deeply entrenched.

Besides, affirmative action of any kind breeds resentment and contempt amongst those who are outside its ambit. It reinforces the belief that the beneficiaries of these diluted selection criteria are inferior in their abilities, and hence unworthy of the positions they occupy. The fact that a felicitous fusion of socio-biological and cultural forces may place one half of the species in a position of privilege is not easy to acknowledge!

In an attempt to explore the implications of issues raised by Sandberg's book, a group of B-school students participated in a discussion. It emerged that in India bias often surfaces at the level of entry in the form of insinuating questions about the woman interviewee's plans for the future (read marriage). In the course of the interaction a participant interposed that employers were predominantly concerned with ensuring that the organization benefited from the time and resources invested in a prospective employee. Of course, justice demands that a competent woman not be penalised for acquiescing to societal norms such as patrilocality; fair dealing dictates that provisions be made for her to take

time off for childbearing and childrearing... but organizations, by their very nature, are impelled by self-interest, and not by justice! It appears that talk of gender equality in corporate organizations is mere tokenism. Men endorse it wholeheartedly because it is politically correct to do so; women advocate it enthusiastically, while masking their own misgivings about the feasibility of the balancing act!

As they struggle to cope on the dual fronts of home and workplace, even the most capable women face allegations of irresponsibility and insufficient commitment. Guilt is therefore a woman's constant companion; and to overcome its attendant anxieties, women redouble their efforts to be 'perfect'. The pressures and pulls of trying to 'have it all', of not losing the hard-won privileges of the women's movement, are generating a crop of edgy, overly competitive women, out to prove they are no less efficient than men... and no less nurturing than their mothers!

Women in the developed countries too, have a long way to go before they can achieve a level playing field. Anne Marie Slaughter, Sandberg's most vocal critic, demolishes the shibboleth that women can attain perfect work-life balance. Young women today are acutely conscious that they would be required to make more compromises than their partners. We welcome women into the corporate fold, without insisting on a more equitable distribution of household responsibilities. Slaughter contends that, while society has changed the way it looks at women, the manner of looking at men remains unchanged.

So do our young men think any differently from their counterparts in the earlier ages on matters concerning women, work and domestic chores? It would be an interesting exercise to take a quick sojourn through the mind of a 'modern' Indian man, an icon of the youth brigade. In his article 'Home Truths on Career Women' (2012) Chetan Bhagat expounds

**....choosing a capable, independent and career-oriented woman can also bring enormous benefits... [for] a man who marries a career woman gets a partner to discuss his own career with. ....A spouse who understands office politics and can**

**give you good advice can be an asset. Two, a working woman diversifies the family income streams. In the era of expensive apartments and frequent lay-offs, a working spouse can help you afford a decent house and feel more secure about finances. ...Of course, all these benefits accrue if men are able to keep their massive, fragile egos aside and see women as equals...**

Presumably, this is the opinion of a man who can keep his ego aside. What is ironical is that the entire piece hinges on the 'benefits that accrue' to a man who has a working wife. Juxtapose this piece with lines from the eighteenth century pamphleteer and reformer William Cobbett's advice 'On Choosing a Wife':

**...a knowledge of domestic skills affairs is so necessary in every wife that the lover ought to have it continually in his eye... [because] lovers may live on aerial diet, but husbands stand in need of solids...**

Lest one be tempted to infer that Bhagat's advocacy of a working wife constitutes advancement over Cobbett's emphasis on domestic skills, one should note the superficiality of the change in attitudes towards prospective spouses. The Man's needs are central, primary; his spouse is the modern equivalent of the Biblical 'helpmeet'. Her value therefore, lies in her ability to fulfil His need!

In her inimitable style, the redoubtable American feminist Gloria Steinem once stated that 'some of us women are becoming the men we once wanted to marry'. But, she continued

**...we figured out that not enough men are becoming the women they wanted to marry. And that is the next part of the revolution; right? We'll always have two jobs until all the work of the home and the rewards of the home and child rearing are equally shared by women and men. Like yes, raising daughters more like our sons is a good thing. But how about raising our sons more like our daughters? (2004)**

## References

- Bhagat, C. (2012, July 29). Home truths on career wives. *Times of India*. Retrieved on 3 February 2013 from [http://articles.timesofindia.indiatimes.com/2012-07-29/all-that-matters/32923106\\_1\\_indian-men-new-woman-life-partners](http://articles.timesofindia.indiatimes.com/2012-07-29/all-that-matters/32923106_1_indian-men-new-woman-life-partners).
- Cobbett W. (1831). Advice to Young Men, and incidentally, to Young Women, in the Middle and Higher ranks of Life. New York: John Doyle.
- Chamorro-Premuzic, T. (2013). Why Do So Many Incompetent Men Become Leaders? *HBR Blog Network*. Retrieved on 26 October 2013, from <http://blogs.hbr.org/2013/08/why-do-so-many-incompetent-men/>
- Vaughan, C. (2013). Lean in? No, Lean Back! *Forbes Leadership Forum*. Retrieved on 26 October 2013 from <http://www.forbes.com/sites/forbesleadershipforum/2013/09/20/lean-in-no-lean-back/>
- Krishnan, A., & Merwin, R. (2013, October 18). Women Quit when it Gets Tough. Business Line. Weekend Life (p.1).
- Meyerson, D.E., & Fletcher, J.K. (1999). A Modest Manifesto for Shattering the Glass Ceiling. *Harvard Business Review*. January-February 2000.
- Mitchell, J. (1966). Women: The Longest Revolution. *New Left Review*. Juliet Mitchell. Women's Estate. Penguin 1971.(p.182, pp. 75-122). <http://www.marxists.org/subject/women/authors/mitchell-juliet/longest-revolution.htm>
- Porter, E. (2013, September 24) To Address Gender Gap, Is It Enough to Lean In? New York Time. Economic Scene. Retrieved on date 25 October 2013 from [http://www.nytimes.com/2013/09/25/business/economy/for-american-women-is-it-enough-to-lean-in.html?\\_r=0](http://www.nytimes.com/2013/09/25/business/economy/for-american-women-is-it-enough-to-lean-in.html?_r=0)
- Steinem, G. (2004). Leaps of Consciousness. Keynote speech delivered by at the 3rd Annual Women & Power Conference, organized by Omega Institute and V-Day in September 2004. Retrieved on 27 October 2013 from <http://www.feminist.com/resources/artspeech/genwom/leaps.html>
- Tannen, D. (1995). The Power of Talk. *Harvard Business Review*. 73(5), 138-148.

---

**Madhusri Shrivastava** is a faculty in the area of Communication at the Indian Institute of Management Indore. Her research interests include Communication, Cultural Studies, Literature and Media studies.

# *Global Tilt : Leading your Business through the Great Economic Power Shift*

**Satheesh Kumar T. N.**

**Ram Charan (2013). *Global Tilt : Leading Your Business Through the Great Economic Power Shift*, Random House Business, Price: Rs. 699/-, Pages 336, ISBN: 9781847941060.**

Ram Charan, who echoed Thomas Carlyle's view of Economics as a 'dismal science' in many of his writings, has written a book on the subject he dislikes, viewing it through a different lens. Conventionally economies were referred to as Western, indicating the advanced economies of the west like the US, Europe etc., and the underdeveloped or lesser developed or developing economies of the East (barring Japan) like South Korea, China, India and other SE Asian counties. But Charan takes a distinct view that economic power is shifting from the North (US, Western Europe, Japan etc.) to the South (countries that fall below the thirty-first parallel) like China, Middle East, India, Brazil, Sub-Saharan Africa, South Africa, Mexico etc.).

He notes that wealth is moving from North to South where companies and their leaders display fierce entrepreneurial drive, creating jobs and prosperity, and achieving double digit growth for their countries. The South companies are rapidly building scale and are challenging companies from the North on all fronts. Charan opines that the South is driving change and the North is afraid of it.

Charan feels that many business leaders from the North are blind to the magnitude of the changes that are taking place. While some are taking proactive steps by transferring technology, brands, know-how and real assets to South, in pursuit of higher growth for their companies than can be achieved in their home countries, many continue to blame cheap labour, currency manipulation, protectionism etc. of the countries of the South. Charan warns that leaders of the North will ignore the changes or shifts at their own peril. He lists six realities that are facing the leaders, not only in the North but also in the South:

1. The world is in an inevitable transition to a more even distribution of opportunity and wealth. This is due to the people's desire for a better life. While the road may not be straight or smooth, the direction of the journey has already been set.
2. The global financial system which connects the economies of all countries every second of the day, is highly unstable. The basic problem is that no one truly understands how it works but its malfunctioning has caused recessions and destruction of economies, be it the South East Asian currency crisis in 1997 or the financial meltdown in the 2007 to 2009 period from which many countries are yet to recover. Uncertainty will continue to be the norm for some more time into the future.
3. We are in a war for jobs. Although total employment will continue to increase globally, every country wants a larger share of the job cake with the explicit purpose of strengthening its middle class, improving its standard of living, increasing its financial reserves, and also to ensure political stability. Despite all the talk about the world being one, nationalism and protectionist policies are still the driving forces, with no clear agreement about the rules of the game.
4. Emerging countries of the South are creating their own rules for economic progress and executing their plans to win jobs and resources for their people. Many countries like China, Singapore and Taiwan have explicit economic strategies, different from the free market policies of the countries of the North. Others like Brazil and India are in the process of shaping their own strategies. Many of them follow protectionist policies and their governments are proactive to protect their countries' self-interest.

5. Companies are competing against countries - not just other companies. The competition equation shifts dramatically when a country's government supports a domestic company with the idea of achieving world dominance. State-sponsored companies, with all their resource back-up and objectives not necessarily skewed to profit requirements, can act in peculiar ways different from market demands, and hence can scale up quickly, decide to lower prices and to reduce returns, influencing the returns of an entire industry.

6. Companies from the North may themselves be sowing seeds of competition in exchange for access to emerging markets. In 2007, China welcomed US and European aircraft makers to build plants in China on the condition that they form joint ventures with domestic companies. Such relationships lead to open exchange of information, whereby technology and knowledge can flow in. Today Commercial Aircraft Corporation of China (COMAC) is gearing up to compete head-on with Boeing and Airbus with a plan for a homegrown narrow-body aircraft set for launch in 2016. The same could be true of India also. In certain industries, non-Indian companies are allowed to establish and /or expand if they give Indian firms ownership stake. In certain areas like defence and nuclear business, Indian companies must hold a majority stake.

Charan goes on to explain how political power can shift as a consequence of economic power shifts. For example, the US influence in the South is seen to be declining. Brazil, for instance, has refused to go with the US in its sanctions against Iran for nurturing nuclear ambitions.

While some of the advantages of the South as a destination for funds flow or low cost operations may decelerate over time, the tilt will continue due to various economic advantages like market size, and will drive changes in the global economic landscape, reshaping the competitive dynamics and industry structures across the globe. Some African countries prefer to deal with

China over America because, whereas America pushes for a democratic ideology, China does not.

Today, the country which has money has the power. The countries which hold promise of high economic growth opportunities enjoy even more power. Economic power creates political power and not the other way around. Many countries have set up sovereign wealth funds which use the money for acquiring assets or other key resources that give such countries immense political clout. According to Charan, three-quarters of all such money is in the middle east or Asia, most of it accumulated from the sale of natural resources like oil as in the case of middle-east countries, or from massive trade surpluses as in the case of China.

In Chapters 2 to 7, Charan explains the tilt or economic shift in more detail and suggests how companies and their managements have to deal with this tilt, in terms of strategy, leadership, organization structure etc. The last chapter explains how companies must drive growth when major markets like the US, Japan and Europe are stagnating, and how to stay competitive in markets like Asia, South America and Africa where cost competitiveness is the key. Charan points out that it is possible, narrating some real life examples.

A commendable book, one of the first detailing the shift in economic power from the erstwhile developed countries to the fast developing countries, and how this affects companies, top leaders, the very organizations. A handy companion and must-read for today's CEOs who operate in a global economic scenario. Charan's trademark simplicity in explaining complex business (economic) issues is once again the plus point of the book.

---

**Satheesh Kumar T.N.** is a Professor in DC School of Management and Technology, Pullikkanam, Kerala. He teaches Human Resource Development, Corporate Finance and Strategy. His interests include Corporate Governance, Leadership & Management Education.

# *Conquering the Chaos: Win in India, Win Everywhere*

**Kajari Mukherjee**

**Ravi Venkatesan (2013). *Conquering the Chaos: Win in India, Win Everywhere*, Harvard Business Review Press, Boston, MA, Price: Rs 895/-, Pages 232, ISBN 9781422184301.**

The book celebrates the distinctiveness of India as a place to do business. The essence of it is that those who learn to be successful here can succeed in other unfamiliar and difficult environments as well. The book makes a persuasive argument that rather than looking for way to quickly skim the market, it makes sense for multinational companies (MNCs) to make long term commitment to this unique land. Rather than getting overwhelmed by the chaotic nature of Indian business landscape, MNCs should learn how to innovate and succeed in a humongous price conscious but demanding market with its atypical set of requirements. Though the biggest barrier to succeed in India seemingly stems from internal culture and mind-set at headquarters of MNCs. Propensity to look at the new market for easy gains using sales-oriented approach, inability to trust local leadership adequately combined with tendency to rigidly replicate products, business models and operating systems that have worked at home market drives many MNCs business in India into a "midway trap"; insignificant as compared to global growth and profits.

The author, Ravi Venkatesan, has helmed Indian business of two world class MNCs, spanning two ends of industrial spectrum - engines and software, namely Cummins and Microsoft. He led both to great heights of growth and success. So, when he speaks through this book, it makes a compelling reading. He combines his personal experience and interviews with CEOs and senior leaders of around thirty companies in different industries, as well as discussions held in various forums with accomplished country managers. Venkatesan has tried to address the fundamental question as to how MNCs should approach India as a business landscape, as "winning in India" is important not only for its in-situ market but also for other emerging markets that are

similarly challenging. The author has provided practical perspectives and actionable advice using real-world anecdotes, which are aimed at operating managers.

Doing business in most emerging markets is tough. But, both in its potential and its challenges, India is prototype of many other emerging markets. Market potential of all such markets is tempered with varying combination of corruption, volatility, chaos, governance issues, weak institutions and poor infrastructure. India, with its unique amalgamation of huge potential, substantial managerial capability, decent talent pool and developed institutions acts as cauldron for MNCs to hone their strategy. There is not one India, but many India co-existing that demands atypical strategy by MNCs. Based on annual income data, the entire country can be stratified as a flattish pyramid with a fat base. The small affluent segment at the top - "the Australia at the top of India" as Steve Ballmer of Microsoft calls it, resembles the markets of home country and thus MNCs feel most at ease to sell global products at global prices. But, their box of ready templates fail to deliver as MNCs try to deepen their presence in the price-sensitive, quality-conscious, features-demanding middle market. Cracking this middle market requires considerable innovation, who perhaps wants "70 percent of the value of the global product at 30 percent of the price". Then, there is the bottom of the pyramid, who survives on less than \$2 a day; they represent not an opportunity to earn fortune, but "an opportunity to earn trust and goodwill through corporate social responsibility and shared value initiatives".

Venkatesan lists out the criteria for real success in India for a MNC, namely, the company is leader in its industry in the local market, delivers 10-20 percent of the new growth in revenues and profits on global basis and uses the domestic production capability to win in other

markets. The author cites JCB, Cummins, Microsoft, GE, McDonalds as some companies that have scored well on these parameters. Such companies straddle the market pyramid, create localized business model, take a long term view of growth and leadership, treat India as a geographic profit center and develop resilience to deal with India's corruption, uncertainty and volatility.

Most MNCs, after initial days of quick success, enter into midway trap where growth is determined by the industry tide; the driving force is no longer with the company. Only those companies who can get out of this frustration zone can move onto to the market leadership position. One oft-repeated but still missed out point is that MNCs consider India as an extension of their own market, and are surprised and distressed when they find that it is not so. The author argues that this is so as most MNCs hand over responsibility of Indian market to the global sales or international business unit at the corporate. Indian market is not ready to accept most goods, and sales leadership has many other markets, more amenable to their goods. Thus, India continues to rank much low and at times disappears altogether from their radar. Rather, what a complex market like India needs is an entrepreneurial general manager, reporting directly to the CEO or similar top management of the MNC to ensure unwavering attention, appropriate and timely decisions and most importantly, investments with longer payback period.

Next, MNCs need to modify their operating models that balance the local responsiveness, spanning customer opportunities, market shifts, and competitors' moves, and global standardization. They also need growing resilience to deal with corruption and cope with volatility. The author makes a very important point - that barring a few industries, it is possible to do business in India without being corrupt and having to bribe. What is needed is conviction and serious focus from the top. A culture of compliance and strong local leadership gives signal to the business landscape of what the company will do, and more importantly not do. The social memory is respected and many times much more effective in thwarting undue expectations.

Emerging markets require capability to deal with

turbulent environment. The author suggests that the first step to develop resilience to operate in India starts with making country managers explicitly accountable for the image, reputation and influence of the company in India. He quotes respected former Chairman of Hindustan Unilever Ashok Ganguly who talked about the unwritten philosophy that guided the company since independence - that what's good for India will be good for the company. History of past imperialism results in rather ambivalent attitudes of Indians towards MNCs. They are welcome for financial muscle and latest knowhow, but there also remains lurking fear of their hegemony tendencies. Thus MNCs may do well in adopting the deep commitment of HUL to the country that Indian society appreciates.

The book discusses at length how to make joint ventures work, and shares lessons from JVs that have worked well. However, while listing the JV failures in India, the book misses out on the spectacular failure of certain JVs of earlier era like Proctor & Gamble - Godrej JV. One wishes to understand how the contours of JVs, standards of due diligence, and appreciation of opportunities, expectations and challenges of respective partners have evolved in last twenty years.

The only chapter that seems superfluous in the book is the one devoted to growing leaders for business. All the challenges highlighted and panacea suggested is staple to any book devoted to leadership. That the chapter has to cite examples from ICICI, and Tata Steel (HUL being the only MNC) underscores the mundaneness of the discourse.

The reader may have another grouse. The list of successful MNCs in India from which major learning are culled seem to be surprisingly small. So after a time there are not many interesting examples being cited, rather a few are being analysed time and again. So, this may lead to reader fatigue. Also, almost all studies are from MNCs that are giants. There are many smaller MNCs who have also entered India. Examples of how some of these coped up with opportunities, diversities and adversities of the country is sorely missed, especially as they will be more resource constrained compared to the giants. Lastly, there are copious examples from a

MNC with century old presence in India, namely HUL. Nothing new seems to emerge from the discussion- all examples are generally known. Also, some may argue that HUL did benefit from a very long learning curve; so deeply is the company identified with Indian milieu that it is the only one in Unilever stable with country name tagged.

The book lays lot of emphasis on changing mindset, leadership qualities, trust and visceral understanding of emerging markets by the global CEOs as a recipe for success. These may sound rather cliché at some level as these seem to be too person-centric and linked to the CEO's idiosyncratic personal liking of high context culture and country, which most emerging markets are. Also, building resilience to run a business without succumbing to petty corruption and managing to cope with volatility could have been bolstered by real life examples; otherwise to reader it may sound too utopian to be true.

Venkatesan earmarks bulk of his attention to the role of leadership in making MNCs succeed in India. The role of right country manager to grow a business cannot be overstated. A personal anecdote may not be misplaced here. I had been closely associated with a MNC that started operations in China and India almost at same time. The Indian outfit worked as per template and clocked the mandated profit per quarter as required by global headquarter. The result was that ten years after its entry, it was still a moppet compared to others in same industry. Chinese country manager, on the other hand, took a different strategy to grow the business. He insisted with global leadership that in an emerging

market, looking for quarter on quarter profit is neither viable nor justifiable. Thus, he invested in gaining traction in the market, rather than look for quick wins. Result was painstakingly created industry and university associations, and presence in various forums across all economic clusters in the country. As service offering of the MNC was extremely new to the Chinese market, to build credibility, he initiated the practice of gratis service such that client understood the heft of the deliverables. In ten years' time, not only was the business largest in its industry but it had also managed to create novel product and service offerings, which were adopted by the parent company for global growth. The divergence in fate of both companies was glaring by 2007, Chinese business had a seat in the high table of global decision making, and Indian leadership was up for a change.

All in all, the book is a quick and easy read for operating managers of MNCs. They can do soul searching based on the three parameters of success suggested. After all, it is not easy to win in a market with high dose of both vitality and volatility.

---

**Kajari Mukherjee** is an Associate Professor in Indian Institute of Management - Indore. Her research interest is in organization design; she uses complexity paradigm to examine theoretical perspectives of organization. She also consults and researches in areas of compensation management and corporate social responsibility. Prior to joining academics, she spent two decades in corporate, both public and private sector. She brings in a unique combination of experience, having handled both line role, as head of departments and consultant role as head of projects.

# *The Elephant Catchers: Key Lessons for Breakthrough Growth*

Wallace Jacob

**Subroto Bagchi (2013). *The Elephant Catchers: Key Lessons for Breakthrough Growth*, Hachette India, Price: Rs. 499/-, Pages xii + 232, ISBN: 9789350095836.**

Elephants have been a source of inspiration to humans from times immemorial. In the days of yore, male elephants were used in war; elephants were also used for lifting and transporting heavy or very heavy logs. They help zoos and circuses to earn money. They have also motivated creative people to develop/invent new products. For instance, Juhaim Ibnu Abdul Jabbar developed EDD (Elephant Deterrent Device) that helps elephants as well as human beings. When an elephant becomes wild, not only the life of the elephant but also human lives are in danger. Juhaim Jabbar's product is intended to help both human beings and elephants in such situations. Elephants have inspired elephant catchers who in turn have inspired Subroto Bagchi in framing a caption for this book. Interestingly, the name of the book itself invites one to learn. The enthralling tome under review is an engaging account of the endeavours of a few path breakers and path makers. In the words of Vivekananda, the strongest force on earth is the force of an idea (Singh, 2012). The work under review is a treatise on ideas being converted into actions, idea-generators and working ideas.

Is it possible to educate 8500 students in an institution, ensuring balanced growth with stability, camaraderie and allround development without charging any fee from the students? Is it possible to flourish in the present scenario without sophisticated computerized information systems? Can an organization attain growth without any strategies in place? Can a commercial be made out of people who have left this world for their permanent abode? Moreover what are the advantages that accrue from commercials featuring stalwarts who left this world long ago? Can a road leading to the airport also serve as a second runway for a 747 jumbo jet? How do firms invest in capacity creation for the

future? Are intelligent, intuitive and hardworking individuals necessarily good problem-solvers also? What can be the implications if the CEO and the heads of the HR and finance functions are related to each other by family ties? The book under review provides lucid answers to the aforementioned unsettling queries.

The book under review has been effectively divided into six sections. The first section contains four engaging chapters which set the tone of the book. The second segment contains five chapters which provide deep insights into the modus operandi of some of the real icons of change and development. The third section contains two chapters. The fourth segment contains three chapters which keep the reader glued to the book. The penultimate section contains six chapters and the concluding section contains two captivating chapters.

The first chapter explains how an institution, set up by a religious trust which has been in existence for almost six centuries, provides education and residential facilities with food to almost 8500 students at no cost to the students and yet functions effectively, efficiently and successfully. The chapter dwells deep into an actual self-regulating system which does not use the latest technological gadgets or complex algorithms. The second chapter dissects the complex relationship between strategy and scale. The chapter contains brilliant examples drawn from Unilever, IBM and Apple. Through examples of Marriott International, the third chapter explains how the latest technological developments can be used to provide customers comfort in times of stress. The chapter also throws light on the methods employed in Singapore to build a lasting infrastructure. The fourth chapter traces the trajectory of a business from its inception, infancy, growth to stability phases.

The fifth chapter explains how Subroto Bagchi and his team managed to win a contract from a European Telecom giant despite the propensity of the European firm to build collaboration with one of the two other well-known companies. The chapter explores the subtleties of emotional reasoning and logical reasoning. The sixth chapter is a monograph on Sales Management and the Peter Principle. The seventh chapter contains the detailed exposition of a strategy used by a firm to reduce a partner firm to merely a resource provider and becomes the de facto service provider. The eighth chapter contains a few important eye-opening facts related to mergers and acquisitions. The ninth chapter explains how the media is unfairly trying to control businesses and alter the mind-sets of the readers/viewers. The tenth chapter enlists the responsibilities and functions of the board of directors. In the eleventh chapter Subroto Bagchi lists the lessons pertaining to consultancy services which he himself learnt while working in a very big organization.

The twelfth chapter is on the brand value and the logo of a company. The thirteenth chapter explains how the fourth estate can be used favourably by an organization or a company. The fourteenth chapter is devoted to corporate social responsibility (CSR).

The fifteenth chapter dwells on the differences between hiring people for their education, years of experience, pedigree, and hiring people on the basis of their ability to build, capacity to think differently. The sixteenth chapter dwells on the role of leaders in an organization and conundrum such as 'White space time', and 'lock-step'. The seventeenth chapter examines the intricacies of the Agile methodology and its benefits over the traditional Waterfall model. The eighteenth chapter focusses on the issues businesses need to focus on at different stages after their inception. The nineteenth chapter lists the key areas that leaders and second-rung leaders need to lay focus on. The twentieth chapter dwells on the travails of succession planning. The twenty-first and the twenty-second chapters dwell on planning for the tough times that a business or a company might have to face.

However the reader may have a misgiving after reading

the work under review. On page 55 the author speaks of Philip Kotler's 4Ps (Product, Price, Place and Promotion). The erudite Philip Kotler has no doubt written several books on Marketing Management but 4Ps was a term coined by E. Jerome McCarthy in 1960 which has since been used by marketers throughout the world. On page 67 the author says, "In India, even after the laws relating to Foreign Direct Investment (FDI) have been altered, restrictions remain in certain sectors of the economy" without providing much practical evidence. When the reader pursues a book related to Management he is more interested in finding out which law(s) has/have been altered? Which are the new laws? And how do they directly and indirectly (or adversely) affect businesses? Besides some of the business models touched upon in the book could have been explained more comprehensively. Simply writing a few fancy terms without comprehensive explanation is a well-planned recipe for disengaging the reader.

Nonetheless, the work under review is a fast-paced thriller which simplifies many complex and abstruse theories, hypotheses and conjectures. It will be of immense help to the champions of risk management, disaster management, economics, and business ethics. It contains real-life management practices being carried out at Sparsh Hospital in Bengaluru, Missionaries of Charity (having its caring presence in nearly 133 countries) and a few other multinational companies. In short the book will enable the reader to develop a deep comprehension of C.K. Prahalad's concept of 'next practices' and the hidden insecurities in some of the known business models.

## References

Singh, Jaswant (2012), *The Audacity of Opinion: Reflections, Journeys, Musings, Amaryllis: An imprint of Manjul Publishing House Pvt. Ltd.*, pp 27

**Wallace Jacob** has done his M. Phil. in Management. He is presently working as a Senior Assistant Professor at Tolani Maritime Institute, Pune, where he teaches Principles of Management and Project Management. His book reviews have been published in journals of IIM Lucknow, IIM Indore, IMI New Delhi, Bharathidasan Institute of Management, Tiruchirappalli. He has also presented papers in various conferences.

# Param

Madhukar Dayal

**Samarpan (2012). Param (New Delhi: Harper Collins Publishers), Price: Rs. 150, Pages 205, ISBN: 9789350293904.**

The only thing worse than being blind is having sight but no vision.

- Hellen Keller

I had the first opportunity to attend several of Swami Samarpananandji's lectures in a course for the executive participants at IIM Indore. Swamiji is a champion of the rare art of presenting deep spiritual thoughts and lessons smoothly through simple anecdotes and stories. After "Tiya - A Parrot's Journey Home", he reveals his knowledge and talent once again in Param. While the story is full of soothing anecdotes and words, it also brings out some tough lessons of life.

Admired by everyone for his technology savviness, Param is a person who has lost his real identity somewhere in the cyberworld, realising this only at his surprise answer to his friend Jing's question - what would you like to do if you were to die in seven days (and with it the thought, what stops you from doing it now, in Param's mind)? This sets Param off on a life changing journey during which he meets numerous characters and lives unforeseen experiences.

Through thought provoking one liners (a selected collection is presented in the following Table) Swamiji persuades the reader to reconsider the unsocial impact of the largely accepted 'modern' style of living. Today's bizarre truth that "people of The City never stuck to a job or relationship for long" represents the restlessness in people's minds while moving from one place to another, and from one person to another, in a never ending search for the elusive mental peace.

Poppy, the continuously barking dog, represents our inner voice, the conscience, which is always trying to guide us to do the right thing, but which we human beings often choose to ignore, just like we ignore a dog barking in the street. Poppy leads Param to The Village, and later, also back to the railway station, representing our conscience's continuous faithfulness to us; of its being with us in all our journeys.

The story of the fight between jackfruits and pumpkins, which is resolved when both of them realise that they are fruits, reminds one of the otiose struggle between segments of mankind across the planet, however, with little hope of their being as lucky as the mentioned fruits! The story of the clod of earth and the worm highlights the purifying pain that one has to go through before achieving proximity to the Divine, for which there are no short cuts.

Swamiji hilariously redefines friends as "close, casual, and cyber" (neither close nor casual!). The megacity's citizens sleep overnight and "get up drained and exhausted" in the morning! The plight of new generation is brought out in the words: "India, the land of wisdom, is struggling to become the land of illusions. Everyone is trying to become what he is not, instead of being what he is." A concept elaborated further in the Mask party later in the story.

Chilli and Polta, two village kids, remind one continuously of the immature child in each of us. Polta is in continuous pursuit of money and fame, the short-cut way! And, Chilli, reflects our 'get the desired result, somehow, anyhow' side pulling the meaning of 'ends justify the means' a stretch too long! Once, Chilli brings in a (stolen) pumpkin as gift for Param to get good marks in his exam!

Subtly, Swamiji raises the concern that "...young people in India seeking employment never asked what job they were supposed to do. They only wanted to know the pay and perks"!

Polta's creative thinking, which we perhaps systematically drain out from our children in the schools, is demonstrated in his mutiplicity of answers to the numbers that can be derived from the use of only two and three (two thirds, 1, 1.5, 5, 6, 8, 9, etc). In my own

experience, I have tried asking students, what would be forty nine squared (only one student, who had had some lessons in Vedic mathematics from a Guru, was able to answer in one of the sections I taught). And, once explained how a common formula learnt by all, (a minus b) whole squared, can be used to find it mentally in a few seconds, students are awed! Surprisingly, on asking what would be one hundred and fifty seven squared next, extremely few are able to use (a + b + c) whole squared to work it out mentally!

Swamiji points out the drop in our society's moral values and its cause through Kisan's voice: "...the morality of a moralist lies in finding the immorality of others." Also, through the Pandit's voice, Swamiji explains that "Achievement inspires awe in those who understand it, and invites ridicule from those who do not understand." "I will shoot you" coming from the village drunkard, Tarang, reflects in the precise words how human beings feel several times every day in interacting with their bosses, colleagues, and so on!

### Table

- Jing and he (Param) had grown up together and continued to be good friends, which was rather unusual for the younger generation of The City.
- People of The City never stuck to a job or a relationship for long.
- Yesterday's real is today's virtual, and today's virtual is tomorrow's real. There is no real difference between the real and virtual.
- Collective cheating is mere inflation, while individual cheating is cheating - something that must not be tolerated.
- The train has existed even before this earth was born, and will continue to exist even after it dies, because it is an idea. And ideas know no death.
- Behind the suavity lies the savage. Scratch a little, and you get the fangs of the barbarian instead of the smile of the gentleman.
- Poppy, the dog: "To be loved and caressed we must be owned and chained..." represents the human dilemma about love which often reduces to being a desire to own and possess (or lust?).
- I can't read. That saves me from encountering a lot of lies.
- Spoken through Chilli's voice: "Those who can, bribe and cheat; those who cannot, pray." and "Success matters; not the path we take to attain it", similar to the profound quote "The end excuses any evil" by Sophocles (in Electra, c. 409 BC), and more popular in another form as "Ends justify the means".
- Through Chilli's voice again: "Tell us something about your vices and sins. We don't have much of those here in the villages!" Also, not failing to take a dig at Param's impatience by asking him whether he is married and following it with "My father says he learnt patience only after his marriage. Now it is clear to me why you are so impatient with us."
- Everyone is trying to be what he is not!
- Through Ludo Baba (partially re-worded): "Society teaches to serve yourself and talk about others. But the hidden dimensions of life lie in serving others and talking to your own self - silently".
- Ordinary people feast, but the great ones fast.
- Mobility sometimes requires the support of stability.

The introduction of Maddhu is subtly followed by the example of a bird, Mynah, trapped in a bush. Param takes care of the trapped bird and heals her with just a little effort, demonstrating the little help, support and guidance that today's lost souls, like Maddhu, need to return on the right track but which our society is unable to provide. Polta's desire to keep it in a cage reflects our society's system of dumping criminals in jails and forgetting about them instead of developing effective mechanisms of corrective and curative systems. Param gets bruised in pulling the bird out of the bush reflecting the mud slung on anyone in our society who tries to uplift a lost soul. We have rapidly forgotten the words of our wisest, Mahatma Gandhi, "Hate the crime, and not the criminal."

Suyash, the wise cobbler, reminds us of the dignity of work and that it is not important how others look at you; what is far more important is how you look upon yourself! The village idlers at the tea shop, who have learnt to blame the government, karmas, and god for everything, portray today's misdirected youth in our society.

The example of Ferris Wheel portrays inevitable ups and downs in our lives, with the common complaint of dearth of happiness and abundance of sorrow, represented through the words: "...how can a kilo of delight compensate for the giga of fright?" It teaches

us that the ride is circular and an up after a down, just like a down after an up, is inevitable.

The debate between a river and a tree represents the link between perpetual motion (the river), eternal stability (the tree) and their connect with all life forms in the universe. Sona, the deer, represents the large numbers of (gold like) distractions that sway us from our goal, at times even making us forget our friends and family (Poppy, in the story). Swamiji reminds us how fragile the thread of relationship between two human beings is, one storm and it is broken. While it can be repaired again but a sore 'knot' remains in it permanently. Indra, the rope climber, reminds us not to forget our childhood dreams and pursue them. I already see that the story has many more dimensions which will reveal themselves when I read it again!

---

**Madhukar Dayal** is a faculty in the Information Systems Area of Indian Institute of Management (IIM) Indore. He is a Fellow of IIM Ahmedabad specializing in Computers & Information Systems Area. Dr. Madhukar Dayal has served as a Gazetted officer in the IRSME service of Indian Railways for over twenty years. His wide experience spans Railway operations, Information Technology projects, R&D, as well as, teaching. His research interests include combinatorial optimization, tree search algorithms, scheduling, and exact multi objective multi processor (compute cluster) algorithms for NP-hard problems. He can be reached at madhukar@iimindr.ac.in.

# *Dhandha: How Gujaratis Do Business*

Jitender Kumar

---

**Shobha Bondre (2013). *Dhandha: How Gujaratis Do Business*. Random House Publishers India Private Limited, Price Rs. 199, Pages 284, ISBN: 9788184004243.**

Dhandha is the most common term used for business throughout India. The book on 'Dhandha' is a compilation of success stories of some Gujarati business men. It is written in a simple and inspiring manner that motivates the readers. This book is duly forwarded by Shri Narendra Modi.

The book 'Dhandha' sketches some Gujarati business men: Bhimjibhai Patel-one of the country's biggest diamond merchant; Mohanbai Patel-the leading manufacturer of aluminium tubes; Dalpatbhai Patel-the motelier who went to be a mayor in US; Jaydev Patel-the New York Life Insurance agent, who sold the policies worth \$2.5 billion; Hashu and Hersha Shah-owner of 100 hotels in US. The common thread in all these stories is that all these people believed in a single trail of business. The book demonstrates the power of ambition and highlights the incredible capacity of hard work and incredible business sense of Gujarati businessmen.

The book not just describes the businessmen, but narrates the role of the whole family; how they faced challenges, troubles and obstacles and how they helped during unpredictable events, the failures they faced; The best thing are their amazing attitude for success and determination to work. This book distinguishes the Gujaratis from the rest of the world when it comes to business and shows it in a beautiful manner. The book also reflects on female empowerment: how they have contributed to the success of their partners. The Gujarati women showed that none of the efforts go waste if one put their heart and soul to achieve what one wants.

The first story of this book is titled as "DIAMONDS ARE FOREVER", which is dedicated to Bhimjibhai Patel, that proves 'nothing is impossible'. He didn't know any language other than Gujarati but he proved that language is not a barrier in the way towards success. He was confident and knew key points about diamond industry which is most important component of his business. He believes 'luck favours the brave'. He started his incredible

journey with just Rs.15 and worked for 19 hours a day to make his life better. He always wanted to adopt and learn new things and spent his initial days in learning the art of cutting the diamonds. He strongly believed that only hard work, practical approach and the inborn sense of business can make him a successful businessman. After crossing many hurdles, he became country's biggest diamond merchant. Bhimjibhai not only followed his dream, but also helped his brother to get settled.

The second story "THE CIRCLE OF LIFE" refers to Mohanbai Patel (leading producer of collapsible tubes in the world). The story discussed about one who experimented with a new machine tool for producing ophthalmic nozzle tubes (used for packing eye ointment) with aluminium (usually tin is used all over the world). He tried not for twice or thrice but about 30 times to use aluminium. It shows dedication, determination and the never giving up attitude. He believes that work should be done not just at 96 or 97 percent but at 100 percent. Mohanbai worked for Tata Company at Mumbai before establishinig his business. The book narrates how busy business schedule insisted him for not visiting home for weeks, take rest for only 3 hours a day etc. It shows dedication of Gujarati's for the business and the quality of hard work with huge patience. The determination to establish the best in the world is really inspiring. The entire family worked as a team and their real risk taking ability made their dream true. It reflects the supportive nature of the family.

The third story "MOTELIER BECOMES MAYOR" is about Dalpatbhai Patel who studied in US, and gradually became the first motelier in the region. Like many others, he came to US and experienced many ups and downs, but with time all difficulties were healed up. He had a friend cum motivator, Maganbai who always supported Dalpatbhai and helped him in every intricate circumstances of life. Their partnership proved to be

a great success. They are practical and calculative about things. Neeta Patel, wife of Dalpatbhai Patel proved her capabilities regarding business by managing the motels. It narrates that the Gujarati woman is not less than the man in any way. This story is not just about the success of a businessman but about the person, who always was considerate towards people and helped others. Because of these qualities he was selected as the mayor in US. The chapter shows how one person managed two responsibilities at a time and also showed the qualities of a successful entrepreneur.

The fourth story, "LIFE OF A SALESMAN" is about Jaydev Patel. The story describes a Gujarati businessman's journey towards success and how he struggled in his initial days and ultimately got the status of the Top Agent out of 9000 agents of New York Life Insurance. He started his career as a teacher and then chemist and finally ended with that of an Insurance agent. His talents to sell policies are unbelievable and praiseworthy. Due to his implausible marketing skills, he sold \$2.5 billion worth of policies that was a great success and made a history. But success did not come to his life immediately; sometimes he was not able to sell even a single policy. But his patience did not let him down and his wife always motivated him. She did not lose her patience even when Jaydev lost his job. Jaydev Patel believed that his relationship with his clients is never limited to a professional level, rather it was always an emotional involvement. He adopted new techniques to sell his policies. The great example of his marketing skills is that he sold policy to the attendant who fills gas in his car at service stations. Selling process took long time but he did. He remained down to earth and his emotions are always attached to his schools, family values and his culture. As a social worker, he renovated three schools in his village.

The last story "NOT ONLY PATELS" revolves around a couple Hashu and Hersha Shah. Like others, they also had a dream of achieving reputable position and came to Harris Berg. Both of them worked tirelessly to fulfill their dream. They did not have any money to begin but they had sharp intellect, will power and great capacity for hard work. They started with a small motel of 11 rooms and they pursued their dream to be bigger and today, they are the owners of over 100 hotels having about 11000 rooms. They provide employment to 650 people and also contribute to social service organisations.

During their hectic schedule they did not forget to instill sound values in their children. Jay and Neil, both are highly qualified. With their business skills and innovative ideas, Jay and Neil took the business to new heights. The role of Hersha Shah was remarkable, as she led a pampered childhood but she worked hard and faced challenges. Behind every success story there is a dark face; this story also captures hurdles like recession, robberies, disaster and flood. But they never took their step back. The real businessman is one who overcomes all the difficulties and hard times and converts them into never ending success.

The concluding section shed light on the lives of most of the successful people which reflects that there is no single mantra that causes success. Rather it results from a combination of vision, passion, perseverance, enthusiasm, willingness to learn from failure and unending capacity for hard work. Reading the book Dhandha is quiet interesting and is a fascinating book for the upcoming entrepreneurs. The book cites innumerable instances about human behavior and makes us learn lessons of humanity. The common thread running through each of these stories is the incredible amount of hard work, preservence and patience. Despite of their conservative backgrounds, they are the examples of working in unfamiliar land, often doing double shifts to raise the capital and taking risk. The contribution of their families are nicely captured in the book. The generosity of Gujarati businessmen and their ability to remain rooted to their origins as narrated in the book is commendable.

Some parts of the book needs more clarification. Though the book covers good success stories, putting all energy in earning money without taking care of their family, society and friends reflects money-money culture which may not be correct.

---

**Jitender Kumar** is presently working as an Assistant Professor in Finance at Department of Management Studies, Deenbandhu Chhotu Ram University of Science & Technology, Murthal, Sonipat, Haryana. He earned his PhD in 2012 from Haryana School of Business, Guru Jambheshwar University of Science and Technology, Hisar (Haryana). He has attended more than 10 conferences/seminars at national and international level and has more than 10 research papers published in reputed Journals. He may be contacted at jitenderkumar.mba @dcrustm.org.

## **Guidelines for Author(s)**

### **Research Papers should**

- Have a clear statement of purpose.
- Have a clear statement of importance; why the paper was written and what it contributes to the body of knowledge.
- Be well written and readable.
- Present reliable and valid conclusions appropriate to the methodology employed.

### **Manuscript Requirements**

- Manuscripts submitted for consideration for publication in the Journal should be original and not published/submitted anywhere earlier.
- The body of the article should be in Arial with a font size of 11 points. The title of the article should be in 16-point size. The leading (line spacing) should be kept at 1.5 points.
- The manuscript should follow British English spellings.
- As a guide, articles should not be more than 6000 words in length.
- The Author(s) Profile should be approximately of 100 words and should include the name and professional biography.
- References must be in the APA format and carefully checked for completeness, accuracy and consistency. All the references should be mentioned in the body of the text as well as in the reference table at the end of the article.

For the complete authors guidelines, please visit:

[http://www.iimidr.ac.in/iimi/images/Publications/journal/Guidelines\\_for\\_Author.pdf](http://www.iimidr.ac.in/iimi/images/Publications/journal/Guidelines_for_Author.pdf)

### **Review process**

The editor reviews each paper and if judged suitable for this publication, it is then sent to two referees for double blind peer review. Based on their recommendations, the editor then decides whether the paper should be accepted as it is, revised or rejected.

### **Submissions Process**

The author should send three hard copies along with a soft copy in CD along with related pictures and figures. A copy of the manuscript should be emailed to the editor at the address given below.

#### **Address for sending the materials:**

The Editor

Indore Management Journal

Publications Office

Indian Institute of Management Indore

Prabandh Shikhar, Rau - Pithampur Road, Indore - 453 556, Madhya Pradesh, India

Phone - (0731) - 2439 670

Email- imj@iimidr.ac.in

# Contents

## EDITORIAL

### VIEWPOINT

- 1 Institutions Building
- 5 Reflections on Building Institutions  
Deepak Satwalekar
- 9 Thoughts on Academic Excellence  
V. L. Mote
- 13 ABV- IIITM: Experience of a T and B School  
S. G. Deshmukh

### ARTICLE

- 22 Balance Sheet Effect of Real Investment  
Subhasankar Chattopadhyay

### MANAGEMENT CASE

- 31 Organizational Transformation: The Case of Republic Bank of India (REBI)  
Ranjeet Nambudiri and Radha Ravichandran

### PERSPECTIVE

- 40 Swami Vivekananda: Bridging the Cartesian Divide of Science and Religion  
Swami Samarpanananda
- 47 Commentary  
Biswanath Swain
- 50 How to build Successful Personal Brand  
Nithiya Anil Changavalli
- 52 Intelligence Measurement:  
Recommendations for a Research based Strategy in Employment Testing  
Sangeetha Rajan
- 60 Perspectives on 'Lean In'  
Madhusri Shrivastava

### BOOK REVIEW

- 63 Global Tilt : Leading your Business through the Great Economic Power Shift  
Satheesh Kumar T. N.
- 65 Conquering the Chaos: Win in India, Win Everywhere  
Kajari Mukherjee
- 68 The Elephant Catchers: Key Lessons for Breakthrough Growth  
Wallace Jacob
- 70 Param  
Madhukar Dayal
- 73 Dhandha: How Gujaratis Do Business  
Jitender Kumar