BECOMING INNOVATIVE:

Avoiding the “Cargo Cult” Fallacy

by

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"***Any useful statement about the futures should appear to be ridiculous***" Jim Dator

The latest buzzword in the corporate world is INNOVATION. Titans of India’s companies, numerous industry associations and policy makers in Government have concluded that if we are to be competitive on the world stage, there has to be greater emphasis on R&D.

To the author, it sounds like déjà vu all over again! First in the mid to late ’70 while working the Center for Science Policy and Management of R&D at the Administrative Staff College of India, Hyderabad, and again in the early to mid ‘90s as faculty at IIMB, when on returning from the US with a Ph.D., to join the Indian Institute of Management Bangalore, there was a lot of hype about in-house R&D.

 Unfortunately, nothing much emerged from these futile efforts. Now, there seems to be renewed vigor to foster indigenous technology.

Hell bent of unearthing the secrets to becoming innovative, numerous delegations will scour the world from North America and Europe to Japan. They will come back overawed by what they saw, brimming with stories about how scientists and engineers are envisaging and ushering in the world of tomorrow.

Determined to imitate them to the “t”, Indian companies will go about the task of erecting Technology Centers filled with the latest and best equipment that money can buy. Doctorates and Masters’ degree holders from the top universities in India and abroad will be hired by the busload to staff these edifices. Hundreds of crores of rupees will be ploughed into thousands of R&D projects.

With great anticipation, the business tycoons then await the flood.

Unfortunately, like the proverbial village taps nothing will emerge, except probably a brief derisive and disparaging gurgle of muddy/brackish water. The slew of new products proves to be as elusive as the pot of gold at the end of the rainbow!

The issue is attacked with renewed vigor. Big name foreign consultants will be hired because, given our colonial mindset, the movers and shakers conclude that no one in India can advise them such weighty topics. Millions of Dollars (US) will be thrown around like confetti. The reports the consultants submit will be perused with great diligence, and all the suggestions made implemented with great fanfare.

 Again, with great anticipation, they await the flood. Again, nothing happens. The slew of new products is as elusive as the Scarlet Pimpernel!

Determined to crack the problem, employees will be sent abroad to attend Executive Development Programs on R&D Management, Managing Technological Innovations, etc. Planeloads of foreigners will arrive in the subcontinent to conduct courses on Enhancing Creativity, Getting the best out of Knowledge Workers, etc. New management jargon like the ambidextrous organization, demand-pull vs. technology push innovations, etc., will slosh around the corridors of power.

Again, with great anticipation, they await the flood. Again, nothing happens. The slew of new products is as elusive as the Olympic field hockey gold medal (akin to the Chicago Cubs winning the World Series)!

 Why?

As Richard Feynman, the renowned Physicist narrated in *Cargo Cult Science*: “In the (Pacific) South Seas…(d)uring…(WWII, the islanders) saw airplanes (arrive) with lots of good materials, and they want the same thing to happen now. So they've arranged to make things like runways, to put fires along the sides of the runways, to make a wooden hut for a man to sit in, with two wooden pieces on his head, to (wooden) headphones and bars of bamboo sticking out like antennas -- he's the controller -- and they wait for the airplanes to land. **They're doing everything right. The form is perfect. It looks exactly the way it looked before. But it doesn't work.** No airplanes land…**because (even though) they follow all the apparent precepts and forms… they're missing something essential**…”

 What should Indian companies do to become innovative, instead of going in circles like a dog chasing its own tail? The answer: Double loop learning!

This approach is best captured in the book *'Obliquity: Why our goals are best achieved indirectly'* by John Kay (published by Profile, 2010, as reviewed in the UK newspaper The Independent).

“Obliquity is the idea that complex goals are often best pursued indirectly. In general, oblique approaches recognise that complex objectives tend to be imprecisely defined. These objectives contain many elements that aren't necessarily or obviously compatible with each other. Furthermore, we learn about the nature of the objectives and the means of achieving them during a process of experiment and discovery. “Obliquity recognises that there are no predictable connections between intentions and outcomes. Problem solvers cannot evaluate all available alternatives: they make successive choices from a narrow range of options. Problem solving is iterative and adaptive, rather than direct. Good decision-makers are balancing incompatible and incommensurable objectives. They are eclectic and tend to regard consistency as a make of stubbornness, or ideological blindness, rather than a virtue.

“Effective decision makers are distinguished, not so much by the superior extent of their knowledge, as by their recognition of the limitations of that knowledge. Rationality is not defined by good processes, irrationality lies in persisting with methods and actions that plainly do not work – including the methods and actions that commonly masquerade as rationality.

**Direct action**

\* Objectives are clear

\* Systems are comprehensible

\* We know the available options

\* What happens happens because someone intended it

\* Rules can define the system

\* Direction provides order

\* Good decisions are the product of good processes

**Obliquely does it**

\* We learn about our objectives as we strive for them

\* Systems are complex and depend on unpredictable reactions

\*We can consider only a few possibilities

\* There is no clear link between intention and outcome

\* Expertise is required, tacit knowledge is essential

\* Order often emerges and is achieved spontaneously

\* Good decisions are the product of good judgment

However, not everyone is capable of being proactive, thinking holistically and going to the root cause of the issue. Most tend to be reactive, have a piecemeal approach and address the symptoms rather than the underlying causes!

How does one know what it takes to be the former? Fortunately, there are a number of litmus tests.

First, read

The Student as Nigger, the 1969 essay by American educator Jerry Farber.

If you access(ed) it using Google-Wikipedia and read it online, STOP! Don’t proceed any further. You are the patron saint of vending machines dispensed junk food, the ultimate six sigma-PCMM Level 5 fixated operations oriented type. *Elvis has left the building!*

On the other hand, if you (plan to) take a hard copy and read it on a weeklong retreat at a tea planter’s “chang” bungalow in Assam (or the outskirts of Jackson Hole, WY, with a view of the Grand Tetons), where one deliberates, contemplates and ruminates far from the madding crowd, continue reading. As a connoisseur, you have the potential for abstract thinking.

 The more you dislike The Student as Nigger, the less the likely you have what it takes to be an innovator, manage a team of radical innovators and lead an enterprise that will be really innovative. As George Bernard Shaw opined, you are the not “unreasonable” person who has what it takes to bring about fundamental change in the world.

 On the other hand, if you did not dismiss it out of hand as the ranting and ravings of a left wing loony, but found it intriguing albeit incomprehensible, there is a little spark deep inside, smoldering and ready to emerge.

 Finally, if you really (really! really?) liked The Student as Nigger, are there three lessons you would like to apply to your place of work? If you cannot think of any, don’t worry. Next time you feel the urge to innovate, just lie down with eyes closed and a cold cloth as compress on the forehead, until the feeling goes away. When you crave intellectual sustenance, stick to reading The One Minute Manager or imbibing some chicken soup for the soul.

 On the other hand, if you are able to glean some ideas on how not to treat professional employees/knowledge workers like dirt[[2]](#footnote-3), and how to change the organizational culture from a political entourage to a professional order, then you have the potential for ushering great change. In fact, you deserve a seat among the patricians!

 How could trundling plebeians shed their blinkers and become transformational patricians!

There are four steps: First read the Apple “Graphing calculator” case[[3]](#footnote-4). Second, read Leo Lionni's children’s classic **Frederick**. Third, if you are a middle or senior level manager/ administrator, watch the 1955 movie classic “12 Angry Men” starring Henry Fonda. (On the other hand, if you are a top policy maker - manager or administrator, watch “Invictus” starring Morgan Freeman about how Nelson Mandela ushered in such a dramatic, peaceful change of guard in South Africa. Then, try to understand and appreciate the rationale behind Boleman and Deal’s Leadership orientations, viz., Structural, Human Resources, Political and Symbolic frames, particularly the last two.)

Finally, from Dr. G Venkataswamy of Aravind Eye Care Systems, by watching the “Infinite Vision” video, learn how to manage paradoxes and imbibe the wisdom to:

\*\* Visualize,

\*\* Organize, and

\*\* Energize people.

 Then you will begin to understand why it took Corning Inc, USA, decades to find a market and applications for its “Gorilla” glass technology developed nearly fifty years ago (when there were no MBAs around to micromanage Scientists and Engineers), in today’s touch-screen tablets’ displays and high-end TVs, as well as a protective layer over the screens of millions of cell phones and other mobile devices[[4]](#footnote-5).

 Deep down in all of us are two opposing personalities – a Steve Jobs or Dilbert’s pointy-haired boss! Depending on who triumphs, the nation either has a vibrant future or is destined to wallow in the cess pool of perpetual mediocrity!

 To ensure the former, one must heed the clarion call of the great sage, Swami Vivekananda: “***Come on, O lions, shake off the delusion that you are sheep…***”

The Quotidian Manager! [Why much abused and misused talent rarely achieve their full potential!]



1. Draft for private circulation. Not to be quoted without permission.

The views expressed are personal and do not represent those of IIMB. As this article is meant for the practitioner, references are not given in a manner conforming to generally acceptable academic standards. [↑](#footnote-ref-2)
2. See attached cartoon on how run of the mill executives behave. [↑](#footnote-ref-3)
3. http://www.pacifict.com/Story/ [↑](#footnote-ref-4)
4. http://news.yahoo.com/s/ap/20100801/ap\_on\_hi\_te/us\_tec\_glass\_of\_the\_future [↑](#footnote-ref-5)