

# INNOVATION: A FUSION OF 'PEOPLE'S PROCESS' AND A 'PROCESS FOR PEOPLE'

RAVI ARORA

## About the Author



**Ravi Arora** Ravi Arora is a Vice President at Tata Sons and is responsible for the Innovation programme at the Tata Group. He is a key member of the Tata Group Innovation Forum (TGIF) and has created well-known programmes like Tata InnoMeter, Tata InnoVista, Tata InnoVerse and Challenges Worth Solving to build a better ecosystem for innovation within the Tata organizations. Some of these programs have been published and shared in international conferences and Business schools. Prior to Tata Sons,

he served Tata Steel for 14 years in the areas of Maintenance, Project Management and Knowledge Management. He studied Engineering from IIT-Roorkee and PGPX from XLRI, Jamshedpur. He has recently written (October, 2015) a book on innovation (<http://makinginnovationshappen.com/>).'

I am writing this article in the capacity of leading the Innovation program at the Tata Group. In the last few years, I have learnt many lessons from the close observations and interactions with Senior leaders and managers of various Tata companies. In this article, the attempt has been made to draw a few specific insights and wherever possible, specific examples have been used to make the point more convincing to the readers.

Since the subject is innovation and the context is of Tata Group, it is important to set a quick context.

We don't realise that innovations of the past are taken for-granted after a few years. How many of us would be surprised if someone offers you a nail cutter or a scissor or a safety pin as an innovative product? The most common reaction would be, "What is innovative in it?" Tata Group has a rich history of innovations. Some of us may not be aware of or may not agree with all the innovations that Tata Group has delivered in the last 100 years. Therefore, in order to appreciate any innovation, it is important to remember the context when the innovation was created.

Pension and Gratuity; Worker's Provident Fund scheme in 1901	Tata Steel – India's first integrated steel plant	Eight hour working day	Schooling facilities for children	Maternity benefits	Profit sharing bonus	Tata Consultancy Services – IT services							
1877	1903	1907	1910	1912	1915	1917	1920	1928	1932	1934	1937	1968	1998
Taj Group – Luxury hotels	Tata Power – Hydro power	Free medical aid	Leave with pay, workmen's accident compensation scheme	Tata Airlines – Civil aviation	Retiring gratuity	Tata Indica – India's first indigenous car							

The innovation in the early and mid-20<sup>th</sup> Century in India were around creating new companies. We need to remember that creating a new enterprise was not easy in those days due to several factors like the paucity of capital, infrastructure, automation and human capital. That was also the time when there was a crying need for social development in India. It is in this context that the Tata Group pioneered several business and social innovations (Figure 1), some of which became the international norms several years later.

A few companies created by the Tata Group, were nationalised after independence (eg The New India Assurance, Air India). The Indian economy after independence was insulated from the rest of the world and private investments were quite discouraged. During these days, Tata Group came out with one of the biggest innovations for India: 'IT outsourcing'. TCS introduced to the world a clever concept of breaking down the large chunk of software into reasonable modules, getting them developed in India and then assembling them together and sending them for the clients in the western world. We know that the software industry is now a multi-billion industry in India. Another company that was started in those days with the DNA of innovation was Titan. It introduced Quartz watches at a time when the market was dominated by HMT.

Immediately after the economy opened up in the last decade of 20<sup>th</sup> Century, there was a threat to all the Indian companies from the global multi-nationals. The product of most Indian companies including those of the Tata companies wouldn't have matched to the quality standards of the global companies. It is in this context that Tata Group introduced another management innovation – 'Tata Business Excellence Model'. The model was introduced in 1995 and was the key force in enabling Tata companies take large strides

in institutionalising world class processes and quality standards. After practicing this model for 10 years the then Tata Chairman Ratan Tata, like a true visionary, started exhorting Tata companies to embrace innovation in a manner that was similar to Business Excellence. Clearly the need was to shift the focus of innovation from Tata Sons (creating new companies and industry practices) to Tata companies (Differentiation through business innovations).

The decision of creating a dedicated team to facilitate innovation in Tata companies itself offers a few points to ponder. After a few rounds of discussions, the innovation team was housed alongside business excellence team. The only difference was that the innovation team was asked to keep itself insulated from the business excellence program. It was felt that the 'Business Excellence' and 'Innovation' demand two opposing line of thinking and behaviours. One propagates the importance of strong and robust processes to deliver consistent results while the other thrives on experiments and failures. The reason for this decision was to enable the newly created innovation team to leverage the extensive network that was created between the central business excellence team and the Tata companies. We know how difficult is the deployment of any management practice due to lack of communication and in hindsight one would say that this decision of using existing network to reach out to Tata companies across levels was indeed a master stroke. It is like intravenous therapy which is used for infusing various type of medicines and fluids. The governing body for focusing on innovations was called the TGIF (Tata Group Innovation Forum).

#### *Tata Group Innovation Forum (TGIF):*

TGIF comprises of CEOs and CXOs of Tata companies. The idea was to bring

together a team of evangelists, believers and a few who were willing to experiment the innovation concepts. The innovation team described earlier, which was housed alongside business excellence, was the execution arm of TGIF.



*Capability building* was the first item that the innovation team focused on. Learning missions were organized for senior Tata Leaders to interact and learn from some of the leading companies in the US, Japan and Israel.



At the same time, some of the leading gurus were invited regularly to conduct training programs and workshops

Prof Clayton Christensen, Harvard Business School

Prof Julian Birkinshaw, London Business School

Prof Henry Chesbrough of the University of California, Berkeley

Prof Jean-Philippe, IMD

Prof Bill Ouchi, UCLA

Dr James Canton

Mr. Langdon Morris, Founder, Innovation Labs

The learning from these missions and the workshops were quickly converted into internal publications and training programs that were organised by TMTc (Tata Management Training Centre, the training hub of Tata Group) and the innovation team.

Learnings from the above interactions with Global companies and Gurus triggered a few new interventions which have been created by TGIF to support the ongoing efforts of Tata companies on innovation.

### Tata InnoVista

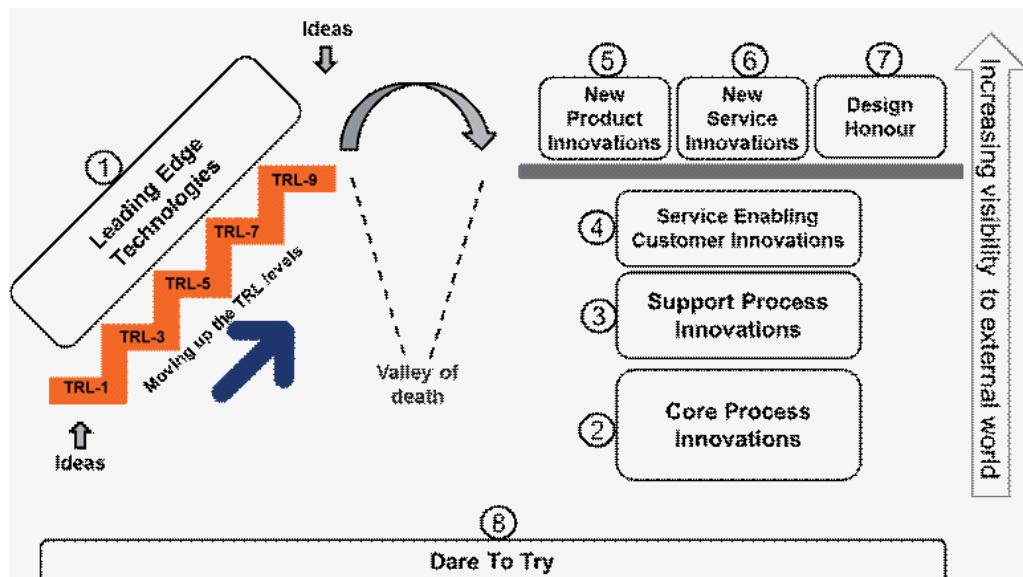
When Tata CXOs visited 3M in Minneapolis in 2006, we learnt that innovators were celebrated like heroes in 3M. We came to know about several awards around technology and innovation and the highest was the Carlton Society that honors topmost innovators. Till date only 160 scientists have been inducted in Carlton Society of 3M. Back home in Tata Group, we even didn't know the innovations of our companies. In one of the quick surveys that we did with around 2000 Tata managers, we found that there was a 'lack of self-confidence to innovate' amongst most Tata managers. The reason for this lack of self-confidence was that none of the companies were identifying the innovative work done by the employees. To address this problem, Tata InnoVista was created. It is perceived by most people as a rewards and recognition program of the Tata Group but for us, it achieves a lot more.

It started with the intent of encouraging and recognising innovators, but we quickly graduated from celebrating the successes to appreciating the struggles of the innovators and then to identifying the harbingers of future innovations. All this has helped us in creating a movement of believers, ideators, supporters and forgiving managers.

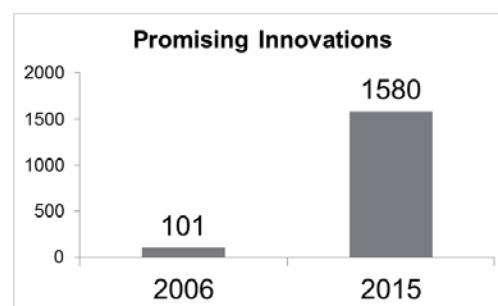
In Tata InnoVista, we have created several categories and sub-categories of awards

in such a manner that every manager in every function has an equal opportunity to get recognised for his/her innovation. As an example, the sub-category on 'support process innovations' is exclusively for functions like Human Resources, Finance, Accounts, Marketing and a few others. The sub-category 'Enabling innovations of customers' gives opportunity to those who

provide those services to customers which results in an innovation for the customer. This helps in increasing customer intimacy and stickiness. Over the past decade, these awards have made significant progress with nearly 30,000 managers from 75 Tata companies spread across 30 countries participating in it.



Tata Innovista helped us build an active vocabulary in Tata Group on the subject of innovation and since it is a recognition program, the deployment of this vocabulary has been fairly fast. Before the Tata Innovista, few Tata companies had stories on innovation to share amongst employees, which as discussed before was the main reason for lack of self-confidence. Now almost every Tata company has inspiring stories not only for their own employees but also for all other stakeholders. By listening & observing the teams from across industries and geographies, managers have themselves learnt that larger and bigger innovations need more diverse people to collaborate within and across the other companies. Honestly, this is a difficult point to drive home!



Tata InnoVista being a recognition program, it attracts managers across levels to participate and share the most recent new work that they have done in the form of innovations. The information gathered through these InnoVista projects is extremely rich as it not only captures the end result but also contains the details of journey in terms of

experiments, roadblocks, collaborations etc. This serves as an excellent content development for knowledge management. All the innovations submitted in InnoVista are read and evaluated by more than 300 middle and senior Tata managers. Everyone gets to read the innovations of other companies. The feedback from these managers clearly indicates that they look forward to reading these innovation projects of other companies because it provides them triggers to collaborate, benchmark and improve their own process.

With a NPS score of over 50% and very high percentage of repeat participants, Tata InnoVista has established itself as an inspirational program for all innovators.

When a relatively much smaller company Metahelix won the award in Tata InnoVista 2015, this is what they said "I believe that very few people know about Metahelix. Now we Metahelix will take pride everywhere in Tata group..... it will be an inspiration for them (our teams) to come back and participate in Tata InnoVista next time."

In the last two years, we have seen the InnoVista rub off on companies. Programs similar to InnoVista are spawning within Tata companies, which will further accelerate our innovation movement.

We know about the beauty pageants and I am referring to Miss India and Miss Universe. While such recognitions have created aspirations amongst millions of women, it has also created a big industry which helps grooming people for such recognitions. On the other hand, look at the program called 'India has got talent (IHGT)', which seemingly supports the participants a lot in improving their skills and performances. Tata InnoVista is similar as it helps nurture the innovators in many ways.

Most of the literature on innovation has been written on the 'Push side' of innovation. Generating ideas and pushing them through the stage gate is what I refer to as 'Push' way of driving innovations. Tata InnoVista program is an example where innovations are pulled/attracted because of the attached esteem value of the program. The current attempt is to multiply the effectiveness of this pull by using strategy to identify opportunities for innovation.

#### *InnoMeter*

At the beginning of this article, we discussed about the Tata Business Excellence Model. Most Tata companies have been using it consistently to improve all their business and operational processes. To make the explanation simple, consider this model similar to having a General physician as your family doctor. The family doctor keeps you fit at an overall level.

But what happens when one fine day you go for an executive health checkup and find that one of your blood reports is adverse and you are referred to a cardiologist? You tweak your fitness regime by changing your diet and exercise. This not only takes care of your heart but also make you even fitter.

InnoMeter does the same for us. It is a performance evaluation of a team or a company or a business unit on innovativeness. The culture, process and innovation strategy are the three components of this innovativeness. Not only the outcome of InnoMeter but the exercise of conducting InnoMeter itself is enjoyed by the companies. It involves a short survey and several silent discussions with groups of managers. In most cases the outcomes of InnoMeter are not as good as indicated by the Business Excellence measures, which develops a creative tension.

The InnoMeter program has been developed in-house by the innovation team but it has taken inputs from various research of Prof Julian Birkinshaw, KEYS, SOQ, ICQ and Value IQ.

- Once the creative tension is created, companies initiate interventions of largely three types: Building capability on innovation
- Improving the innovation process and culture
- Enhancing the quality and quantity of innovations

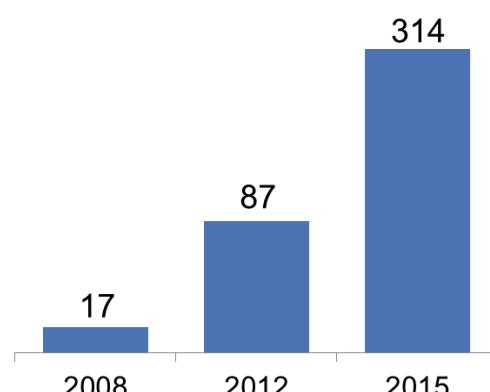
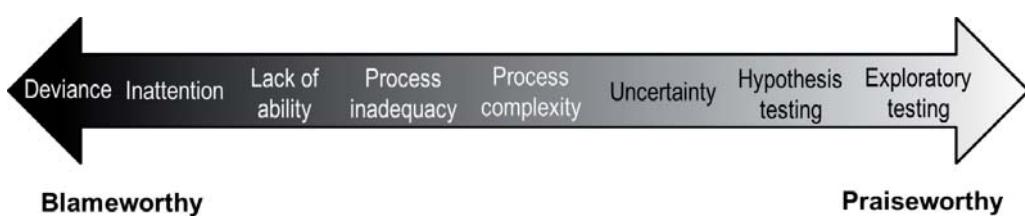
It is here that TGIF supported the companies with a few more interventions:

#### *Dare to Try:*

We heard at 3M: 'Its OK to make mistakes. While mistakes are inevitable, if the employee is essentially right, the organisation will gain in the long run.' We all preach that failures are an integral part

of the innovation and that failures should be acceptable when someone is trying to innovate. We therefore need managers who are not only highly performance oriented but also forgiving. But how does one make all this happen? In the Tata Group, we created a separate recognition in InnoVista called 'Dare to Try'. This recognition, as per the framework (see below) of Harvard management professor Amy Edmondson, falls in the praiseworthy zone. We consider following four attributes to decide this award:

- How innovative was the attempt?
- What were the risks involved and how much was the effort in resolving them?
- What would have been the impact if the attempt was successful?
- What were the learning?
- What was the organisational reaction to this failure?



When we started this award in 2007, we just received six projects. The reluctance

to share failures was evident amongst all companies. Managers are not supposed to fail and if they fail it is either brushed under the carpet or it becomes a black spot in the performance record.

Scott Anthony et al (HBR, December, 2014) calls some projects zombie projects and proposes that every organisation should have an 'amnesty' day when such projects could be offered for closure thereby not spending the resources on projects that have almost no chances of seeing the light of the day. It is like our Government declaring a period when the black money

could be brought back to the country. In our case, the intention is to inspire managers to take audacious innovative projects and put in their best efforts amidst a forgiving organisation.

#### *Open, Collaborative & transparent ideation:*

During our visit to the innovative companies in the US, we heard the following:

- 3M: 'The worst thing I can do is to tell my people to innovate'
- Commandment of 3M: 'Thou shall not kill a new idea'
- Intel: "I don't know where to go with my idea". Never let that be heard in your organisation'

The first few InnoMeter studies clearly showed that companies didn't have an ideation system that is agile, transparent, efficient and effective. We also found that ideation process followed in many companies was very siloed.

The concept of 'Open Innovation' is gaining a lot of popularity and many companies are trying to practice it. In simple words, it suggests companies to look for ideas and solutions from people other than your own employees. We learnt this concept from none other than the father of Open Innovation - Prof Henry Chesbrough of UCLA. Immediately after his workshop, the innovation team attempted to carry out some pilots but failed. No one was willing to share the challenges or problems or topics on which ideas from outside could be invited. We were just not ready!

At the same time we realised that there was an opportunity of leveraging a large and diverse group of people in the Tata Group for collaborative ideation. We decided to adopt this subject of Open Innovation in three stages over a period of time:

- **Stage 1:** Inviting ideas and solutions from within the company across BUs and functions: Break the silos

- **Stage 2:** Inviting ideas and solutions from other Tata companies and also from well-known non-Tata companies: Learn to share problems externally

- **Stage 3:** Inviting ideas and solutions from anywhere (The Open Innovation model)

This is when the need of having a common ideation platform across Tata companies was conceptualised. The growing trend of social networking, prediction market and our intention of promoting collaborative network across Tata companies (Stage 1 & 2) were the three inputs on which the platform was designed.

While designing this platform, we used the following hypothesis:

- A large number of people generate ideas when they want to solve a defined problem.
- Some people generate ideas when they see a new (unrelated) technology but
- Only a few people are able to generate ideas that address unstated problems or opportunities (because only a few are able to spot them).

We started with a program called 'Challenges Worth Solving (CWS)'. Under this program, attempt is made to get the attention of Tata managers for a very short time to solve a few wicked problems of our companies. The results so far has been encouraging as it showed that the culture, confidence and openness is increasing amongst the companies. More than 600 challenges have been thrown by Tata companies and interestingly 42% of the ideas received for every challenge have come from companies other than the one that threw the challenge.

All this seems to be simple but it has posed a lot of road blocks; a few with which we are still grappling viz: How wicked should the problem be? How to select the

ideas? Should they be difficult or simple? Should they be risky? When to award the ideator? What reward should be given? How detailed should the idea be? How much time should be taken to declare the outcome? How do resolve the IP? How to ensure that the implementation is quick? How do we create the ability to balance the short term demands and long term innovation?

I will end by asking a question: Who should be responsible for Innovation? I think the answer is simple. We all know that everyone is responsible for innovation in the company. But to be more precise:

All of us are responsible for the culture and the right process which allows the good ideators, good collaborators and good implementers to come together and find resourceful managers. But we need someone who could think, experiment and build the framework around this. If Strategy, HR and IT are important function and therefore we need Chief Strategy officer, Chief Human Resources officer, and Chief Information officer then if a company is serious about Innovation, I have no doubt that it should have a person for thinking, strategising, rewarding, encouraging, helping, measuring and celebrating innovations.