

# Lessons from Tata's Corporate Innovation Strategy

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**M**anaging innovation in enterprise has always been a complex task, but it's become even more so as organizations become more globally distributed and new digital technologies proliferate. Some studies of IT companies have used agile approaches in software development and the IT-enabled global innovation ecosystem,<sup>1-4</sup> whereas others focus on IT's effects on innovation.<sup>5,6</sup> However, it's hard to find examples of non-IT firms that have crafted a practical corporate strategy to manage innovations in a variety of contexts globally across industries, and how they have embraced IT to drive innovation.

Here, we present Tata Group's corporate innovation strategy. We analyze how it provides high-level direction and support while allowing significant room for creativity and autonomy to individual companies and business units spread worldwide in multiple industry sectors to devise their competitive or functional innovation strategies. Tata Group, sometimes called the "GE of India," is one of India's most prominent business groups; it's the largest private-sector employer in both India and the UK, and it owns brands such as Jaguar, Land Rover, Taj, Titan, and Tetley. We discuss how Tata Group managed

innovation as part of its transformation agenda—which also included initiatives such as the Tata business excellence model (TBEM, derived from the Malcolm Baldrige Criteria developed at the US National Institute of Standards and Technology) and globalization<sup>7</sup>—to transform itself from a US\$5.8 billion Indian firm in 1992 to a \$103 billion global corporation in 2014, with more than 65 percent of revenues coming from outside India.

## Tata's Corporate Innovation Strategy

Although Tata Group has a long history of innovations across its companies over the past 100 years or so, few systematic attempts were made to actively and systematically manage innovation at the corporate level. In 2007, Tata Group set up the Tata Group Innovation Forum (TGIF) to plan and roll out group-level initiatives to help Tata companies innovate. In a way, TGIF became responsible for the corporate innovation ecosystem at Tata Group. TGIF comprises CEOs/CXOs and "innovation leads" from Tata companies, and meets quarterly to review progress on existing programs and decide on actions to fill the gaps in the innovation ecosystem.

TGIF encourages Tata companies to create an innovative environment, advises them on

how to improve innovation capability, and creates a group-wide community of "innovation evangelists." It initially focused on building capabilities for innovation through workshops, learning missions (also called InnoMission), and dissemination of concepts and examples. It aimed to build working knowledge by carrying out some quick and low-cost experiments in Tata companies, and to create the drive for innovation using various tools and processes, including improving leadership communications, integrating innovation into the TBEM assessment, and implementing the InnoMeter and InnoVista programs (outlined later).

Major TGIF activities in fostering innovation fall into four broad areas: create capacity for innovation, measure innovation, facilitate innovation, and recognize and reward innovation.

## Creating Capacity for Innovation

TGIF uses three learning mechanisms to build capability for innovations: innovation workshops, learning missions, and dissemination of innovation-related literature and case studies. First, TGIF organizes workshops with leading innovation experts to introduce the concepts of and tools for innovation. Second, TGIF organizes innovation missions—visits to

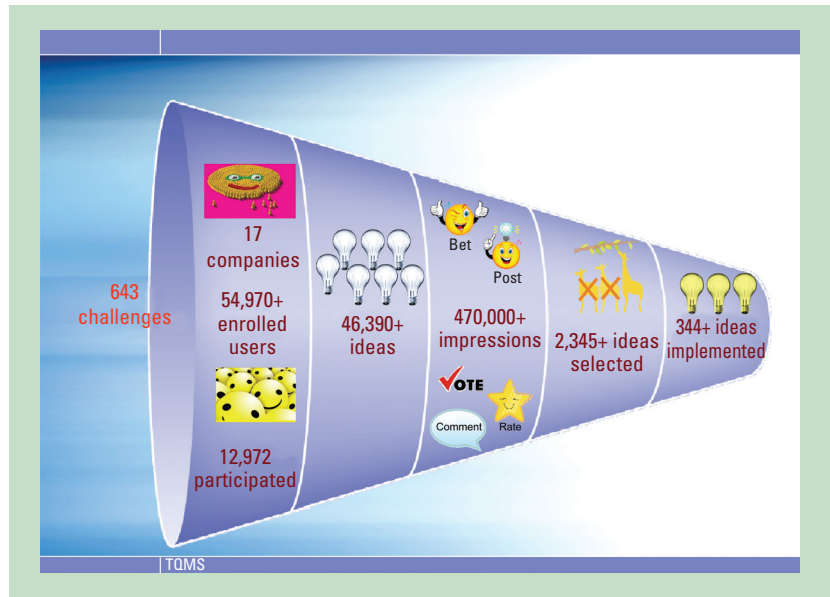
some leading firms outside India to understand their innovation processes. These visits included US companies such as 3M, Microsoft, Intel, HP, and Raytheon; Japanese companies such as Ito En, Fuji, Olympus, Nissan, Toshiba, and Hitachi; and a visit to Israel with a focus on agriculture, chemicals, and water management. Finally, dissemination efforts—facilitated by the Tata Management Training Centre (TMTC) through research and training—focus on innovation culture and tools in executive programs, and on publications that trace the history of innovations in Tata Group and review best practices from elsewhere.

### Measuring Innovation

Tata Group uses a questionnaire called InnoMeter to measure the “as-is” state of innovation. Broadly, it covers three areas: the innovation process, innovation culture, and the strategic focus on innovation. It asks respondents to indicate their assessment of strategic clarity, resource availability, the extent of empowerment, expectations, and processes for tracking and rewarding innovation efforts. It also has some perceptual measures for the success of innovation efforts, such as how quickly innovations could be rolled out or the extent to which they lead the industry. The outcome of the InnoMeter generates creative tension and lets the company identify areas it must address to make its innovation funnel and processes more robust. Tata Group has conducted InnoMeter assessments in more than two dozen companies or business units so far, providing opportunities for reflection and for improving the innovation climate.

### Facilitating Innovation

Tata Group uses IT to fuel its innovation efforts and improve idea generation and selection.



**Figure 1. Tata InnoVerse participation. This figure illustrates facilitating the innovation value chain from idea generation to idea selection and implementation.**

Tata InnoVerse is an in-house social networking platform with Facebook-like features as well as features similar to prediction markets to augment the innovation life cycle that starts from idea generation. Figure 1 shows the InnoVerse funnel, features, and performance. Some companies have used this platform to pose vexing problems coming from CEOs as part of a “Challenges Worth Solving” (CWS) program. In 2015, 17 Tata companies were using this system with promising results in engaging employees in creative problem solving and idea evaluation. InnoVerse had more than 54,000 enrolled users who generated more than 46,000 ideas and 470,000 impressions either organically or through more than 640 challenges; the platform helped to select more than 2,340 ideas. More than 40 percent of these ideas came from employees of other Tata companies. The group is working toward enhancing this platform to track and develop selected ideas for subsequent commercialization.

### Recognizing and Rewarding Innovation

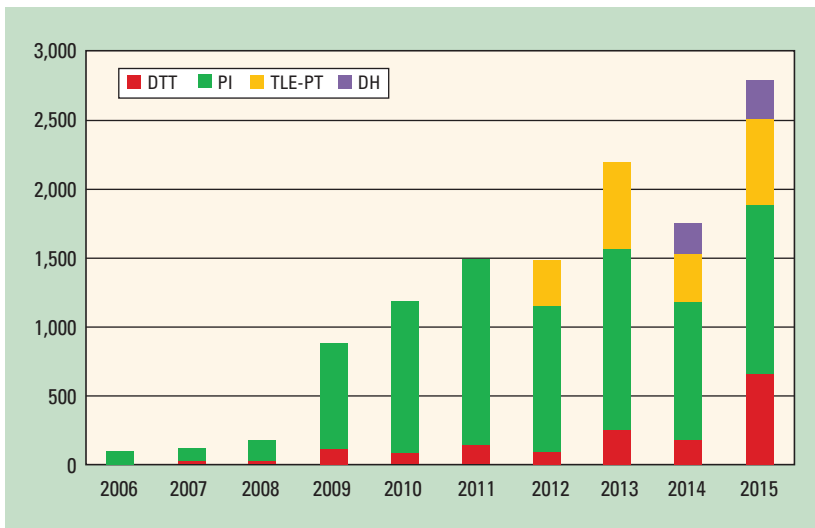
In 2006, Tata Group initiated the process of celebrating innovations in Tata Group through a program called Tata InnoVista. The goal was to recognize innovators and encourage innovations in companies, share the levers companies use to identify and execute innovation projects, and create a culture of risk taking. Tata InnoVista currently has four award categories: Promising Innovations (successfully implemented innovations that have provided benefits); Dare to Try (serious and audacious attempts to innovate that couldn’t be completed successfully, to encourage the culture of risk taking); The Leading-Edge Proven Technologies (for new technologies that have yet to be commercialized); and Design Honor to highlight the importance of design in all products and services. This popular program has been adopted by companies such as TCS, Jaguar Land Rover, TACO, Tata projects, Tata Consulting Engineers, and CMC,

## ADROIT Framework to Assess the Value of Innovations

The ADROIT framework aligns closely with what can be called the fundamental equation for economic value:

$$(EV) = \text{volume (A)} \times \text{margin (differentiate, reduce costs)} \\ + \text{optimize risk} + \text{innovate/improve industry structure} \\ + \text{transform}$$

A	Add volume or growth
D	Differentiate or increase willingness to pay (WTP)
R	Reduce costs (operating costs, post-merger integration costs, capital costs, and so on)
O	Optimize risk (systematic, idiosyncratic, downside): reduce volatility of cash flows and reduce competitive risk
I	Innovate by generating knowledge and other resources and capabilities, and improve industry attractiveness
T	Transform industry, products, services, or business models



**Figure 2. Trends in Tata InnoVista participation. DTT: Dare to Try, PI: Promising Innovations, TLE-PT: The Leading Edge-Proven Technologies, DH: Design Honor.**

which have started conducting internal InnoVista-like programs.

Figure 2 shows trends in InnoVista participation. The 2014 Promising Innovations awards went to Jaguar Land Rover for new product innovations, Tata Consultancy Services and Tata Steel for new service innovations, Tata Steel Europe and Tata Consulting

Engineers for core process innovations, and Tata Power Delhi Distribution for support process innovations.

### Impact of the Strategy

In terms of economic value, the estimated potential benefit of 43 finalist InnoVista entries in 2014 is approximately US\$1

billion annually, according to Mukund Rajan, brand custodian and chief ethics officer at Tata Sons. Although the methodology for calculating economic value is in a nascent stage, roughly 20 percent of the benefits relate to revenue gains, whereas 80 percent relate to cost reduction innovations.

Among noneconomic parameters, the group has achieved some success in creating a culture of risk taking with its Dare to Try category: it received only 12 entries from six companies in this category in 2007, but participation increased to more than 240 entries by 2015. Another important benefit is the development of a commonly understood language; moreover, every employee knows how and when to contribute to their company's or group's innovation efforts. Innovation is no longer seen as a job only for R&D, and employees across all functional areas participate in innovation projects, as we found in our analysis of InnoVista team entries in 2015. In addition, innovation programs have made the group more cohesive by bringing together employees across multiple levels from different organizations serving as another welding mechanism. Some within the group argue that innovation's true value should be judged not only by how much visibility it has but also by the fraction of the world's population it touches and the difference it makes in the quality of life for people at the base of the pyramid. Many of the innovations in Tata Group (such as Tata Swach and Ace) had perhaps lower visibility or hype but a significantly large potential impact in terms of their footprint (the population they were intended to touch, as with i-Shakti or Power of 49). In contrast, some other innovations (such as Apple's products)

had higher perceived impact, even though they touched mostly top-of-the-pyramid consumers in most markets.

The group has made progress in the last few years to improve its culture of innovation. By removing the stigma associated with failure and bringing salience to innovation efforts to bring similar attention as that given to economic measures, it's now moving toward addressing the "process" part of innovation through better tracking and measurement. Some of these refinements could address both effectiveness and efficiency considerations by approaching the discussion of innovation performance using six pathways to value, captured with the ADROIT framework: *adding volume and growth, differentiating, reducing costs, optimizing risks, improving industry structure (also innovating with products and services), and transforming business models and processes for continued relevance.*<sup>8,9</sup> This framework has been applied in other contexts—for instance, to understand the true economic value of IT or other transformation initiatives. The ADROIT sidebar breaks down the framework in greater detail.

### Embracing IT to Drive Innovation

Tata Group uses IT for innovation in the following ways: learning (by disseminating other companies' innovation approaches), measuring (deploying the InnoMeter tool), facilitation (through Tata InnoVerse to build a community of innovation evangelists and facilitate the discovery and development of new ideas), and recognition (through InnoVista competitions that are managed using an IT platform). The group realizes the critical role IT professionals play in creating flexible and robust IT systems, increasingly

by using agile approaches to assist with discovery, development, diffusion, and the impact of IT-embodied and IT-enabled innovations. Although much has been learned about how to drive innovation programs, we must further research the types of managerial and IT interventions that can help achieve desirable innovation outcomes (for example, amount, speed, quality, inimitability, business model changes, and industry leadership).<sup>10</sup> Likewise, understanding how to benefit from open innovations and supplier and customer involvement with appropriate use of IT applications can help craft effective innovation programs for transformations and economic success.<sup>11</sup>

**T**ata Group's corporate innovation program is a manifestation of "disciplined autonomy" that also informs its overall transformation efforts, which include business excellence and globalization.<sup>3,7</sup> The use of IT to sustain corporate innovation programs suggests that an enterprise's digital, innovation, and global strategies should be viewed as part of its broader portfolio of interdependent strategic choices to transform itself and to meet the product, process, and business model innovation needs of its customers across the globe.<sup>7,12-15</sup> The group-level innovation programs are best viewed as a complement to firm-level or within-firm functional innovation strategies. For example, Titan's "innovation bazaar" and Interweave programs create collaboration across its business units; Jaguar Land Rover uses Tata InnoVerse to develop ideas and prototypes; and TCS uses an internal social platform called KNOME to manage knowledge and innovation within TCS. Other companies such as Tata

Steel, Tata Power, Tata Chemicals, and Indian Hotels also design and pursue product, process, and service innovations that leverage group innovation programs. Tata Group's innovation approach can be a useful starting point for many organizations worldwide to craft their innovation programs. ■

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