

Insights of a catalyst from innovation programs

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1. Introduction

Systematic innovation in an organizational context is over a century old [1]. Even in India the simplest form of idea management system called Employee Suggestion Scheme was implemented by Telco (now Tata Motors) way back in 1959 [2]. However, innovation programs – initiatives that improve innovation management in the organizations, have gained currency in India in the last 4-5 years [3]. I have been involved in several innovation programs for the past seven years. For the first three of the seven years I lead a team involved in developing a new technology platform through its R&D and market launch phase. For the past four years, as a founder of Catalign Innovation Consulting, I have been an execution partner in at least half a dozen innovation programs. I have seen both successes and failures. In this article I present some of the insights I gathered during this journey as a catalyst of innovation.

2. What is an innovation program? Why do companies start them?

All organizations are innovative. In fact, I haven't come across any organization that hadn't implemented any new idea in the recent past. Sometimes the innovation involves improvement in a process resulting in cost saving, at other times the innovation involves launching of a new product or a service. For example, when Indian Railways introduced a universal number 139 for train enquiries, it was exhibiting innovativeness. However, organizations differ in the way they manage innovation. In some organizations innovation is managed in an ad-hoc manner – sometimes called *jugaad*. Innovation program is an initiative organizations start in order to improve the way it manages innovation – to move from *jugaad* to systematic innovation.

An India centre of a global technology company started innovation program because it aspired to become a Centre of Excellence (CoE) in cloud computing. For an apparel company with a leading national brand, the objective was to take the brand to countries outside India. For a hospital, the objective was to improve overall patient experience.

Who leads innovation programs? We have seen various types of people leading innovation program in India e.g. CEO, Chief Technology Officer (CTO), Chief Marketing Officer (CMO), Head New Product Development (NPD). Sometimes organizations have a separate department e.g. New Business Development (NBD) that manages developing or acquiring new businesses.

Organizations set two types of goals for the innovation programs: (1) Aspirational or sometimes called strategic goals and (2) Time bound and measurable goals. An example of an aspirational goal is to create a culture of innovation in the organization. An example of time bound and measurable goal is to increase the participation of employees who contribute at least one idea or more from 5% to 30%. Following table gives some examples of each type of goals.

Aspirational goals	Time bound, measurable goals
Become a Centre of Excellence (CoE)	Improve the idea pipeline (proxy: idea per person per year)
Go from national brand to global brand	Improve participation from employees, customers, partners and Internet (typically measured in %)
Go from service provider to solution provider	Improve idea velocity (speed of experimentation, number of prototypes, speed of business model exploration)
Go from products to solutions	Batting average (Total business impact of the implemented ideas)
Foster a culture of innovation	Develop a pipeline of innovation leaders

3. Where does an innovation program begin?

3.1 Bright spot analysis

Conventional wisdom says that before starting an innovation program, we should study the best practices from the industry. Depending upon your favorite innovative companies it may involve studying practices from Google [4], Apple, 3M [5], P&G [6], Toyota [7], Tata Motors [8] etc. However, study shows that best practices don't work well in practice. Every company has a unique strategy, capability, structure and culture and taking a best practice from outside and making it work in your company is difficult. After all it has been more than half a century since Telco rolled out its suggestion box. Then why is it that the suggestion boxes in most of the organizations are still empty while Tata Motors clocks 25 ideas per person per year? [9]

Psychologists studying behaviour changes at individual and at organization level have realized that the best place to start is by looking inward than looking outward. And what do we look for? We need to look for the bright spots where things are working well within an organization [10].

A leading apparel company launched its innovation program with fanfare. CEO unveiled the logo in a Town Hall meeting. Within the next two weeks 40 ideas came from 30 employees. However, the pipeline dried as fast as it had filled. At this point the innovation program committee had three options: One, look at outside best practices and implement one; two, talk to a sample of the 700 employees to understand why they didn't give any ideas; and three, talk to the 30 bright spots to understand what prompted them to give ideas. The team chose the third option and met the 30 idea authors in one-on-one meetings. The team discovered that the campaign, innovation workshop, manager's encouragement are some of the triggers that had prompted the idea authors to submit their ideas. More importantly, the exercise made the team aware of their strengths and gave direction about what could easily be done next to get the idea pipeline continuously filled with ideas.

"Changing Tracks: Reinventing the spirit of Indian Railways" by Nilakant and Ramnarayan [11] narrates an excellent example of bright spot analysis performed by Sudhir Kumar, advisor to the then Railway minister Lalu Prasad. By 2004, most of the rail tracks had lost market share to other competing modes of transport such as road, coastal shipping, pipelines and budget airlines. Sudhir Kumar asked a question, "Why haven't some tracks *not* lost market share?" That led him to recognize the value being created by door-to-door service railway was providing for commodities like iron ore.

"Switch: How to change things when change is hard" by Chip & Dan Heath [10] is the best source for further information on bright spot analysis.

3.2 Designing a good campaign

Two organizational campaign taglines - "Innovate or die!" and "Unleash the power of idea" – may be trying to achieve the same objective. However, the emotions they evoke are very different. "Innovate or die!" evokes fear which is a negative emotion while "Unleash the power of ideas" evokes pride which is a positive emotion. Is there any difference in the effectiveness of the two taglines? Psychologists have found out that there is indeed a difference [12][13].

Negative emotions such as fear have a tunneling effect. It narrows down the vision and is really helpful when the action to be performed is very specific e.g. wearing safety goggles. If the objective is to inculcate a culture of safety then invoking fear would be useful. Anti-smoking

campaigns as well as safety belt campaigns have made use of this principle by showcasing the detrimental effects of smoking and not wearing safety belt. However, when it comes to creative problem solving, negative emotions aren't helpful. Fredrickson, in her widely acclaimed paper "What good are positive emotions?" [13], argues that positive emotions are designed to "broaden and build" our repertoire of thought and actions. We become more open to new ideas and we are more likely to fool around and experiment.

Is any campaign that invokes positive emotion equally good? Short answer is "No". Innovation programs invariably advocate responding to changes occurring internally and externally and changes bring anxiety in the minds of people. This happens in spite of the positive emotions created by cheery campaigns. Hence, we need campaigns that focus the creative energies on a few key challenges. "Heavier, faster and longer trains" campaign designed by Sudhir Kumar and his team in the Railways is a case in point [11]. It brings out three key challenges in turning around the organization: (1) How do we enable wagons to carry more load (people & freight)? (2) How do we make trains turn around faster with minimal loading-unloading time? (3) How do we make trains longer by increasing the number of wagons or coaches?

In an R&D unit the innovation program committee sent out the message to all managers, "Be a strategic thinker. Write a strat-plan". For the managers whose focus was on short-term deliveries, "Thinking strategically" was aspirational. The team provided them with a "strat-plan" template and helped them create a one year roadmap. For most managers it turned out to be a capability roadmap for their teams. However, it helped at least some of them come out of a short-term thinking mode.

4. How do we sustain an innovation program?

4.1 Building innovation catalysts

Whether it is suggesting a new idea or carrying out an experiment, innovation activity brings anxiety of rejection or failure. Not everybody is Thomas Edison who prides himself in learning from failures and says, "I have not failed. I just found 10,000 ways that won't work". Employees who have ideas need a sounding board they can go to and articulate their idea. The last thing an idea author needs is a judgment about how risky or bad the idea is. Instead, what they need is (1) a listening ear (2) encouragement – pat on the back (3) questions that will help them clarify the idea (4) connect one idea author to another one from a different team with a related idea (5) suggestions on how the idea can be communicated better (6) help define quick and low-cost pilots the idea authors can perform (7) access to tools, information and other resources.

Organizations need to create a pool of innovation catalysts that perform one or more of the activities mentioned above.

An organization introduced 20 such innovation catalysts – one or two per team of 40-50 people. Some of them were managers, others were not. Over a one year period it was found out that the teams in which the catalysts worked effectively generated and implemented more ideas consistently.

4.2 Creating role models

Whether it is Sachin Tendulkar or Narayan Murthy or Amir Khan or A P J Abdul Kalam, most of us learn by imitating and identifying with our role models. Kishore Biyani used to visit Samarkand restaurant in Hotel Oberoi just to get a glimpse of his hero Dhirubhai Ambani who used to visit the health club there [14]. Question is: How do organizations create role models? One common way is to celebrate their contributions. However, we have found out that inspiration is important but not sufficient. Psychologists have learnt that people learn more through stories which bring out the emotional drama behind the decision making process [15]. For example, it helps to know that Sachin practiced several hours hitting the ball between two players on the ground with his eyes closed. Or it helps to learn that Abdul Kalam and his team spent a year building their first prototype, a hovercraft named Nandi and that it wasn't a success but it helped him learn a lot and more importantly secure his next assignment at Indian Committee for Space Research (INCOSPAR) a precursor to ISRO [16].

In one of the organizations we started a monthly news digest where we published stories behind successes and failures. For example, through this digest a product architect narrated the story of how she first thought of, experimented, proposed, got buy-in and eventually improved the product architecture. An engineer with just one year in the organization narrated why he liked to use the innovation lab and what kind of experiments he performed. Over a period the organization created a blogging forum where employees posted experiences related to both work and life. And identifying the bright spot stories became even easier.

5. What are the signs of maturity?

5.1 Building innovation sandboxes

When Nano project was first initiated with a small team of four people in 2003, the mandate was to work on a 4 wheel low-cost transportation which is much safer than a two-wheeler [8]. With the three primary constraints (1) 4 wheel transportation (2) low-cost (3) safe, the team generated several hundred ideas on paper, on computer and in the lab. Ideas varied from using plastic body to paper honeycomb for exterior panel to internal panel of soya. Nano project was like building a sandbox with three to four walls (constraints), creating a sand-like environment for rapid

prototyping, providing the tools and most importantly having a team of passionate kids playing within the sandbox and building castles.

Innovation sandbox is a generative metaphor [17] advocated by C K Prahalad [18]. GE's nano-technology, Galaxy Surfactant's platform for UV protection and Infosys's e-commerce platform are example of sandboxes. When an organization makes clear strategic choices it becomes easier to justify investment for building innovation sandboxes. Thus innovation sandbox is a tool through strategic focus takes real shape.

5.2 Find a rhythm & rigor for the innovation program review

CEO of GE Jeff Immelt mentions in the book Game Changer, "You know innovation is taking root when there is rhythm to the review of projects and rigor in the milestones they must meet" [19]. Any organization that is committed to systematic innovation performs rigorous and regular review of its innovation activity. The first thing to happen is to get a rhythm to the review process – ideas getting responded to regularly, selection happening within a committed time, resources being put behind the ideas etc.

6. Conclusion

In this article we looked at a few insights we had in the process of working in innovation programs. Bright spot analysis and campaigns are important during the early phase of the initiative. Innovation catalysts and role models help sustain the initiative. Building innovation sandboxes and finding a rhythm and rigor for innovation program review shows the maturity of the program.

7. References

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