



Even the big can innovate fast – 5 steps worth learning

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Incredible!

I am so moved with the progress report from the LARGEST employer on the planet with **1.3 million government employees**, serving 23 million people every day, generating an annual revenue of \$25B operating at about 10% profit, in an emerging nation.

The leadership has managed to break away from tradition and convention and abandoned the business as usual approach. To some, the action at the core might appear to be an aggressive 5-year investment plan. That however is only a resource. The secret sauce is the Leadership commitment to innovation in

every aspect - technology, processes, service, business model, customer experience ... you name it; although they just did not use the term innovation. They are focused on results - (1) increase the average speed of the trains, (2) reduce accidents to zero, (3) improve procurement and consumption efficiency, (4) increase capacity utilization, (5) upgrade infrastructure to handle larger load, and (6) implement accounting reforms.

Morgan Stanley remarks - "The current Railway Minister Dr. Suresh Prabhu, is in the process of bringing change to a relatively moribund ministry" I expect many case studies in change management to come out in a few years on this emerging success story.

Let's look at a few innovative actions as seen from the eye of an innovation coach.

Technological Innovations and Adaption

Eco-Adaption of Talgo trains adds speed, comfort, energy savings, without having to upgrade the tracks. New locomotive factories, and redevelopment of stations is underway. Mobile charging on all coaches, destination alert and wake up alarm system, paperless tickets, new plant for packaged drinking water, are among many initiatives. Going big on green includes, 10 MW Solar, 26 MW wind power, ~27000 Bio-toilets, Rain water harvesting, million LED bulbs, and much more are in place today.

Indian Space Research Organization is ready to provide navigational support to the Railways through 'GAGAN' (GPS-aided geo-augmented navigation) system integrated by Raytheon.

Customer Experience

The so called Passenger Amenities and Digital India is a package of 50 initiatives. Social media is being used to resolve customer issues in real time, and increase sense of security for women, handicapped and senior citizens. Innovative coach design is improving passenger comfort. Sophisticated base kitchen and e-catering proving more choices for the consumer. Numerous reservation and refund system reforms continue to make life easier. Significant effort is evident towards clean coaches through technology and service offerings. Not to forget Free Wi-Fi from google at over 400 stations.

Business Model Innovation

Leadership has figured out novel ways for commercial exploitation of assets. Apart from advertising and station redevelopment, opportunities include monetizing the land along the tracks, monetize data, and encourage production units to manufacture for third party use. Serious commitment to containing expenses has led to \$200 million in saving last year, bigger portion coming from fuel expenditure through power purchase agreements. Their network of excellence spreads to Japan, China, South Korea, France, Spain and Germany in areas such as high speed, station redevelopment, heavy haul, logistic terminals, etc. To increase modal share and to make freight operations competitive, it has rolled back the port congestion surcharge, appointed account managers for freight customers, and are exploring time-tabled freight trains this year.

Process Innovation

Organizational structure is evolving to suit the changing times. New organizations are being incubated to address specific mission objectives and increase efficiency, accountability, and transparency. Such as: Railway Planning and Investment Organization, Special Unit for Transportation Research and Analytics for data analytics and Special Railway Establishment for Strategic Technology & Holistic Advancement for R&D.

They executed the world's largest ever online recruitment, cut the project approval duration and tender processing times by 4X.

In Summary

Such a story comes by once in a while. It is a result of robust leadership, and combination of many things, in my interpretation. I would put it in these 5 steps:

1. Create a vision built on customer demand interpretation and anticipation, bring up human face of the organization for the human customer.
2. Look at the system holistically - innovative sources of revenue, creative cost optimization, exploit technology convergence, and bring-on green initiatives.
3. Restructure the organization to think, operate, and deliver in new ways.
4. Win the investor confidence to make large scale changes, and build a global network of excellence - partnerships with local governments, and businesses around the world.
5. Finally invest in Infrastructure, R&D, Manufacturing, Customer experience, safety, and renewable energy sources.

As you can see, I am fascinated by all this rapid positive change and driving mechanism behind it.

Growing up in India, I logged over 6 months in slow trains, always wondering how this can get better.

Now as an innovation coach, I feel really good watching it happen, more so because it substantiates the +4π holistic approach to organization transformation, that I use to inspire my clients.

I hope to learn more as the Indian Railways continues to evolve.

Reference: For those interested in more details, please read "Transforming Railways Transforming India"

(http://www.indianrailways.gov.in/railwayboard/uploads/directorate/prd/downloads/Two_Years_Performance_Report.pdf)

About Ripi Singh

With 25 years in technology development, management, and leadership; Dr. Ripi Singh has learnt that Innovation, Productivity and Quality can be concurrently improved to reduce operational stress. He is now on an advisory and coaching mission to help businesses around the world, with his proprietary Innovation Framework called +4π. It goes above and beyond the traditional initiatives such as six-sigma and lean.

He is natural at Strategic thinking, Innovative problem solving, Technology Commercialization, University-Industry relationships, and high performance team building. His people, process and technology leadership skills span across multiple domains -

aerospace, defense, healthcare, energy, manufacturing, and IT. He holds a PhD in Engineering and Masters in Strategy and Innovation.

Feel free to connect / follow him on LinkedIn.