Long term plans by inclusive thinking



IR was mostly built in the second half of the 19th and early part of the 20th centuries. Most of the present business model and institutional structure were put in place in the 1930s. Transforming IR and its strong 19th century legacy into a dynamic 21st century organization to serve the economic, industrial, social, political and military needs of India is a challenge on the table.

Under its current model, IR is unable to provide what the market needs. This mismatch cannot be corrected by minor tinkering with the existing model. IR is at, what Intel co-founder Andy Grove calls, a strategic inflection point-where fundamentals of a business must change to stop the business from withering away. Hard rethinking and decisions are essential for putting it on a more promising trajectory. India had its strategic inflection point in 1991, but IR has not yet recognized that it must move fast to remodel itself into an engine of growth.

The inevitable Chinese comparison

China is very different from India, and solutions that work for China need not be the right ones for India. However, some indication of the extent of the magnitude of policy, institutional and investment change needed for this transformation can be gained from the Chinese experience. China's massive expansion programme has made it the second largest railway network pushing India into the third place. More importantly, China has spent vast sums in modernisation and upgrading of the existing system: nearly \$450b since 1990 in comparison to India's \$40b. They have recently tested the fastest bullet train in the world from Wuhan to Guangzhou and nearly finished the construction of a high speed rail route from Beijing to Shanghai (cost \$23.5b)

On the other hand, India is still thinking about building a high speed rail pilot project and the work on the



dedicated freight corridors is yet to take off. One of the reasons for India's inability to build is its lack of capacity to plan and execute large projects in a time bound manner. A crowded shelf of sanctioned rail projects, that are languishing for lack of funds and poor spending capacity, is receiving little attention. China addressed this problem by reorganising their railways, separating planning and construction of new lines from train operation. Similarly they reorganised rolling stock manufacture into two entities that were free to source technology globally. These new entities obtained technologies from major global technology leaders and adapted them to their needs making them cheaper. They are not content with getting technologies and adapting them; they want to be part of the effort to build future technologies; they are preparing themselves for the future by studying and building demonstration projects like the Shanghai airport magnetic levitation rail-link.

The Indian perspective

India will have to develop its own strategy to make its railways into a 21st century network, which while being a commercial enterprise harmonises economic, industrial and technological capacity and social, political, and strategic needs of the country. Some questions that India has to find answers to, are:

- A master plan for India's system of transportation and the roles of various modes.
- Contours of the role of railways in this master plan.
- The size and coverage of the high-speed passenger rail network.
- The size and coverage of dedicated freight corridors.
- Role of rail in intra and inter-city passenger transportation in high density regions.
- Fresh organizational structures for railway units that include operations, marketing, maintenance, capacity building, manufacturing, technology development, ancilliary industries and services.
- Roles and mutual linkages of the ministries, government and privately owned corporations in each of these aspects.
- · Methods of funding the operation, building, and development of various elements.
- Legal, regulatory, organizational, governance, administrative and institutional changes for efficient operations and for attracting government, multilateral and private funding.
- Creation of a self-sustaining and export-oriented modern rolling stock industry in partnership with global technology leaders.
- Internal re-organization of IR: examine the efficacy of various departments that often seem to be in perennial conflict.
- Redefinition of the political role of the government in operation of various units of the redesigned IR network.
- Partnership for research and development.



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- Venture investing and servicing of new technologies.
- Reducing costs by specialising in mass production of appropriate products.
- Development of Academic Institutions for skill and knowledge formation.

"Perfuming the pig" will not work The above questions need to involve all stake holders and those who can help, using their special knowledge or experience, in finding solutions. While IR management has intimate knowledge solving short term problems, it has proved itself incapable of getting away from historical doctrines and bringing in a fresh perspective to address strategic and long term questions. An independent external perspective is valuable when long term questions are involved because such questions normally require multifunctional thinking free of constraints. As the saying goes, "perfuming the pig" is not the long term solution.

This will involve linking the user environment with scientific and management disciplines, other railway systems and technology leaders. Problems in creating a 21st century railway will come from the field and will become challenges/problems for research leading to development of the disciplines and new solutions, which can be proposed to stakeholders and those who have power to invest and implement change. The social systems across domains of various rail systems-the users, businessmen, politicians, professors and scientists rarely interact. However, for birthing new ideas they must mix, which can only happen when they are brought together in a forum like a think tank.

The defence sector example

Armed forces, the world over, face a very similar problem and India is no exception. For developing strategic thinking they need expertise from across the intellectual spectrum and they obtain this by supporting thinktanks and other discussion forums. The USI (United Services Institute founded in 1870) has been in existence for over a century and recently Ministry of Defence (MoD) has contributed seed money for another four think-tanks for developing cutting edge thinking in land, air and sea warfare and integrated defence. IR could do no better than

emulate MoD's example and create think-tanks and discussion groups for matching the requirements of 21st Century India.

Why Re-think Rail?

The rail sector needs similar institutional support for long term churning of alternatives and generate support. One such option is Re-think Rail: the aim of 'Re-Think Rail' is to identify, discuss and develop solutions in facilitating the rebirth of the Indian Railway. One main task for Re-Think Rail would be to understand the expectation of users, businesses, politicians and the social and military needs from a modern railway system. It will generate knowledge of what is feasible, in light of what has been done elsewhere and what new knowledge makes possible.

Re-Think Rail will offer a platform where different knowledge streams can meet to develop a new vision for the future of rail in India's transport, industrial research and economic systems. Such a platform is necessary for assisting policy makers both within IR and outside in taking long term decisions based on latest global thinking and knowledge.