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Sustainability of the Indian Railways Turnaround: A Stage Theory Perspective

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SUSTAINABILITY OF THE INDIAN RAILWAYS TURNAROUND: A STAGE THEORY PERSPECTIVE

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Abstract

Turnarounds are like exciting thrillers which describe dramatic recovery of declining organizations. Since such recoveries have great relevance for the economic development particularly of developing countries facing resource scarcity, researchers with increasing interest have enriched the turnaround literature, especially in the last four decades. Research has highlighted many facets of turnaround. These include turnaround actions, strategies, types, elements, stages etc. Though the research covers largely the private sector entities, but effort, though little, is not non-existent for the public sector. The paper examines a large complex departmental commercial organization of the Government of India and its much-talked about turnaround in the theoretical perspective of stage theory. The paper not only fills up the gap of research in public sector but also uses the established stage theory model to answer the question of sustainability of the Indian Railways turnaround. The analysis goes back to the theoretical propositions which are by and large supported by the analysis of the turnaround of the Indian Railways.

Key Words

Turnaround, Stage Theory, Indian Railways, Declining Organizations, Sickness, Sustainability, Innovation and Entrepreneurship

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1. INTRODUCTION AND NEED FOR THE RESEARCH

Research on turnaround management, like most of the studies in management, has its origin in the United States, focusing mainly on the practices of the private sector. Given the motivations and the nature of turnaround action, it is not surprising that the early initiatives happened in the private sector. Unlike in the public sector, the financial loss for the stakeholders in the private sector, in case of enterprise sickness, is direct and immediate. Similarly, while most public organizations have a chance to survive on budget support, at least in the short term, there is hardly any such chance for the private sector organizations. Hence it is natural that the need for turnaround. action is felt more urgently in the private sector than in the public sector. Besides, the motivations of the stakeholders in the private sector are such that they are inclined to taking quick actions. Naturally, research has followed corporate actions, and hence turnaround research tended to focus on the private sector, particularly those in the Western world, where management practice as well as research are in a relatively more advanced stage than in developing countries..

Industrial sickness, however, is not a problem that is to be dealt with only by the private sector. In fact, sickness is equally or more rampant in the public sector. While there is indeed a tendency in the public sector to postpone turnaround actions because of the stakeholder apathy or budgetary support, such apathetic wait cannot go on for ever. The down-trend has to be reversed, or else the enterprise will have to meet its inevitable extinction. The realization of the need for turnaround action in the public sector has been hastened by the new economic ideology of market orientation and the consequent reduction or elimination of budgetary support for the public sector. It is, therefore, obvious that industrial sickness is a serious problem, whether it occurs in the private or the public sector in a developed or a developing country. Cost effective turnaround actions are the need of the hour especially in developing countries where resources are scarce. It is against this background that we propose to study the much talked-about

turnaround of the departmental venture of the Government of India – the Indian Railways.

The turnaround of the Indian Railways is of special interest to researchers. as it defies in many ways the conventional notions on the difficulties of achieving turnaround in large organizations especially in the public sector operating in developing countries. The Indian railways combine all these difficulties in their complexity, size and structure. It is a very large organization with an employee strength of more than 14,00,000; it operates in a developing country and serves mostly the low-income customer segment; it is more susceptible to political and bureaucratic interference than even the public sector corporations, as it is a departmental undertaking of the Government of India. Turnaround of such an organization is often perceived as next to impossible! For this reason alone the turnaround of the Indian Railways deserves the special attention not only of researchers but also of practitioners and policy makers. The objectives of the study are as under –

(i) To analyze Indian Railways turnaround in a relevant theoretical perspective

(ii) To make reasonable assessment as to the sustainability of the turnaround of Indian Railways

(iii) To validate some of the propositions made available by the prior research.

The paper has been structured as follows:

1. Definitions of turnaround situation and the turnaround.
2. The theoretical perspectives and propositions
3. Turnaround of Indian Railways
4. Analysis of Indian Railways Turnaround
5. Conclusion

2. TURNAROUND – DEFINITIONAL ISSUES

For a proper understanding of the turnaround as accomplished in any organization, there has to be a precise definition of what is meant by industrial sickness as well as turnaround. Depending on the definition of sickness, which is also called the turnaround situation, there could be differences of views about the extent of accomplishment or even the existence of turnaround. In other words, there has to be some way of determining turnarounds. Some of the definitions given by well-known institutions and researchers are as follows:

"A unit may be considered sick if it has incurred cash loss for one year and, in the judgment of the bank (RBI), it is likely to continue to incur cash loss for the current year as well as the following year and a unit has an imbalance in its financial structure, such as current ratio of less than 1:1 and worsening debt equity ratio" (RBI, 1978).

Some lending institutions identified sickness on the following criteria:

- Continuous default in making four consecutive half yearly installment of interest or principal of institutional loans;
- Continuous cash loss for a period of two years or continued erosion in the net worth by 50% or more;
- Mounting arrears on account of the statutory or other liability for a period of one year or two (Bidani and Mitra, 1983).

The most stringent definition is given in the Sick Industrial Companies (Special Provisions) Act of 1985, which defined a sick unit as "an industrial company (being a company registered for not less than seven years) which has at the end of any financial year accumulated losses equal to or exceeding its entire net worth and also suffers cash loss in such financial year and the financial year immediately preceding such financial year" (Government of India, 1985).

All these definitions emphasize sickness in terms of financial health, which is in the state of extreme deterioration. The criteria do not give enough advance warning for the corrective action(s) to be taken. Besides cash loss criteria does not make any attempt to ascertain and evaluate the normal profitability of a representative or a comparable unit in the industry. Khandwalla's (1989) definition takes care of these deficiencies. Sickness has been defined as the loss of the organization's capacity for normal growth and profitability. This definition provides a measure of loss of capacity in terms of return on sales and return on capital employed which can be compared with any other representative unit in the industry.

Earlier research studies defined turnaround as efficient and effective use of retrenchment strategies to arrest the decline in financial performance. Retrenchment strategies aimed at deliberate reduction in costs, products, product lines, assets and overhead (Pearce and Robbins, 1993). These definitions had a very restrictive view of the term turnaround. It becomes more evident as we examine some other definitions in the following paragraphs. Further, the retrenchment strategies may not be sustainable in the long run as these may encounter resistance from within and outside the organization.

Choudhury (2002) has defined turn around as: "[Turnaround] occurs when a firm perseveres through an existence-threatening performance decline; ends the threat with a combination of strategies, systems, skills, and capabilities, and achieves sustainable performance recovery" (p 250). Choudhury's (2002) definition has four key attributes. Firstly, stimuli for the turnaround actions stems from a protracted performance decline that the firm has been experiencing. Second, turnaround constitutes a series of activities involving exogenous and endogenous contexts. Third, the activities are undertaken and executed decisively and purposively. Fourth, the combination of first three attributes typically spans a period of years (p.250). Choudhury's definition is distinct as it stresses sickness as an integral part of the process of turnaround and extends to a combination of strategies etc. But the assumption in the definition regarding protracted performance decline to be threatening the existence of the organization may not be applicable in all

the cases. Thus, the definition may not describe the cases of turnaround comprehensively.

We now turn to the definition of Khandwalla (1989) where turnaround is defined as regaining organization's capacity for normal growth and profitability. The financial ratios of return on sales and return on capital employed can be used to measure the capacity regained. It is noteworthy that the loss in the capacity may be caused by a combination of the factors, which may be external as well as internal, financial as well as non-financial. The loss of the capacity of the organization for sustained growth and regaining of it may show up through financial as well as other non-financial indicators such as strategic management practices, human resource management practices, organizational culture and so on (Manimala,1991). As the definition is not confined to cash loss but relates the turnaround to the regaining of the capacity for normal growth and profitability, which can be measured, we consider this to be more appropriate definition in the context of Indian Railways.

3. THE PERSPECTIVES

As stated in Rigveda, 'Ekam sada vipra bahudha vadanti' (Rigveda, 1-164-46) meaning thereby, one phenomenon or truth is described by the scholars in many different ways researchers have approached the phenomenon of turnaround from various perspectives, and different scholars have classified the research studies differently. For example, Khandwalla (2001) has classified the studies of turnaround into five categories based on the issues being addressed by them viz., turnaround elements, turnaround process/models, turnaround strategies, turnaround types and turnaround performance. Boyne (2006) has categorized most of these studies under 'turnaround strategies', including Shendel and Patton's study of 36 matched pairs of US firms, which Khandwalla has categorized under 'turnaround performance'.

For the purpose of our analysis all these studies may be categorized into two broad groups as studies of turnaround actions and turnaround processes. A large number of

strategic moves and turnaround actions were identified in the studies done by Hambrick and Schecter (1983), Khandawalla (1981 and 1989), and Schendel, Patton and Riggs (1976). Similarly in the study by Hofer (1980), a distinction is made between operational and strategic actions. While Robbins and Pearce (1992) contrasted efficiency-recovery strategies with entrepreneurial-growth strategies, Boyne (2006) has categorized effective strategies into three, namely, retrenchment, repositioning and reorganization. The latter study was done with reference to the turnaround accomplished by public service organizations, and therefore is of special interest for the present analysis. However, in term of a systematic analysis the major actions involved in the turnaround process, Khandwalla (1981) provides the most comprehensive listing, which is reproduced below.

1. A dynamic change-agent with a strong sense of mission, preferably from outside the organization.

2. Credibility building through some outstanding performance and/or through 'quick-pay-off' strategies.

3. Mobilization of the rank-and-file by getting them involved in the organization's goals and activities.

4. Quick pay-off projects for some immediate relief.

5. Reprieve from serious external pressures, especially those relating to industrial relations, finance, key inputs, stakeholders, etc.

6. Mobilization of external resources and utilization of environmental opportunities.

7. Strengthening of mechanisms to influence the environment, such as marketing and public relations.

8. Selective changes in the product-mix, concentrating on high pay-off products.

9. Selective strengthening of management functions and systems, especially the financial control system.

10. Motivating managers through participation, autonomy, challenging tasks, accountability, example setting, etc.

11. Co-ordination through regular review meetings and face-to-face interaction.

12. Performance control through goal-setting and fixing of responsibility, often creating profit and cost centers.

In other group of studies which approached turnaround as a process and attempted developing process models, the prominent ones are by Donald Bibeault (1982), Manimala (1991) and Choudhury (2002). The five stages of turnaround identified by Bibeault (1982) are change at the top, evaluation, emergency, stabilization and re-posturing. Manimala (1991) identified four stages viz., arresting sickness, reorienting, institutionalization and growth. Choudhury (2002) classified turnaround processes into four stages namely, decline, response initiation, transition and outcome. While the processes and stages identified by Bibeault (1982) and Manimala (1991) are focused on a set of actions within each stage, Choudhury's stages are primarily developmental. At a higher level of analysis, it becomes obvious that the distinction between type theories and stage theories vanishes. The types of actions are not implemented at one go, but in a sequence which is suggestive of a process. Similarly, since the stages are characterized by certain types of actions, one cannot appreciate the significance of a particular stage independent of the actions needed for supporting it. From the list of actions provided in Khandwalla (1981), we could see how these actions are linked into a process. In order to illustrate how the stages are linked to specific types of actions, we provide a brief description of the stage theories proposed by Bibeault (1982) and Manimala (1991).

Bibeault's first stage of turnaround starts when there is realization by the top management that something needs to be done and the existing management many not be able to do it. A new leader, who is likely to be the outsider, may have greater credibility and can be more objective and ruthless, if required. The evaluation stage consists of identifying and prioritizing short-term and long-term severe and marginal problems which may arise in the course of the turnaround process. In the initial period the target may be to solve 80 percent of the relatively solvable problems rather get bogged down with the 20 percent of hard problems. Effective communication and consensus building are likely to be the principal means of carrying out the 'evaluation' in an acceptable manner.

The next stage is the stage of emergency where strict cash controls are imposed, long term expenditure are postponed, downsizing and borrowing resorted to and selling off unprofitable businesses are attempted. In the stage of stabilization, profitability overrides cash flows. Focus shifts to improving operations with core businesses getting greater attention and management systems, especially control systems, getting renovated. Finally, in the 'reposturing' stage the organization makes an exit from unprofitable businesses and enters into high potential businesses. This may mean acquisition and diversification. The emphasis is laid on growth and development rather than retrenchment, and a stronger financial evaluation system is put in place. When the organization starts generating profits, builds its position in the market place with the right strategic moves and motivates its staff, Bibeault says, the organization has completed the turnaround cycle.

Manimala draws his insights from 28 Western and Indian cases and identified four stages in the process of turnaround, which are arresting the sickness, reorienting, institutionalization and growth. These stages are only conceptually separate stages and may not be chronologically distinct. In sickness arresting stages the focus of action is on cutting costs, reducing inventory and assets, launching quick-pay-off projects and getting reprieve from external pressures. In order to accomplish these effectively, the management will have to take all the stakeholders including the employees into

confidence. Some of the employees, communication and discussion sessions, control mechanisms, right sizing of the human resources etc have implications for culture-building which we shall be discussing as part of the third stage. This is an example of how the stages might have chronological overlaps.

The reorienting stage has wide variety of refocusing actions such as redefining the business, change in corporate identity, greater market orientation, greater quality orientation, organizational restructuring, capital and debt restructuring, changes in managerial cadre, training and retraining, use of incentives, improvement in information dissemination and public relations and so on. Here too one could observe that many of these actions have the potential of changing the prevalent culture in the organization. However, when we say culture building is the core of the institutionalization stage, we are referring to the deliberate efforts in institutionalizing a specific culture and value systems for the entire organization. This is done through human resource development, reorganization of roles, functions, procedures as well as coordination and communication systems. More importantly, there is a constant and deliberate effort in reinforcing a commonly accepted value system through periodic meetings, discussions, seminars, training programmes, slogans, rituals, celebrations and community exercises.

The fourth and final stage focuses as the further growth of the business involving introduction of new products, entry into new markets including international markets, diversification, strengthening and refocusing of R&D as well as acquisition and mergers. It should be noted that unlike other stage theories, Manimala's (1991) model goes beyond the immediate requirements of arresting sickness and improving the financial performance to address the issues relating to its sustainability, which can be ensured, on the one hand, by identifying viable and compatible lines of businesses and, on the other hand, building an appropriate culture and value system that could support businesses as well as the people.

The table below (Table 1) presents the stages and the set of actions associated with each stage, as identified by the analysis of cases by Manimala (1991).

Table 1 – A model of turnaround stages and strategies

No.	Stages	Strategies
1	Arresting sickness	• Credibility building by the turnaround agent • Mobilization of the organization • Reprieve from external pressures • Cost cutting/cost controls • Staff reduction, especially in non-productive areas • Quick pay-off projects and actions • Asset reduction • Inventory reduction
2	Reorienting	• Redefining the business • Changes in corporate identity/image Rationalization of product-mix to eliminate loss-making ones and to focus on core business • Modernization of plant and machinery • Shift from production orientation to market orientation • Tie-ups with reputed companies for marketing • Focus on quality and customer service • Debt/capital restructuring • Organizational restructuring • Changes in the managerial cadre • Financial incentives for managers/staff • Training/retraining of employees • Information dissemination • Public relations and liaison
3	Institutionalization and culture building	• Culture building through continued training, seminars, focused programmes, slogans, rituals, etc • Introduction of new structures, systems, and procedures including communication and coordination mechanisms
4	Growth and diversification	• Introduction of new products • Entry into new markets, especially international markets • Related unrelated diversification • Focusing and strengthening R&D • Mergers and acquisitions

Source: Manimala (1991)

Khandwalla (2001) observed that it is much more difficult to achieve turnarounds in organizations which are big in size (p 233), or operating in the service sector (p 272). Further, public sector organizations prefer "humane" rather than "harsh" turnaround

which involve staff reduction and retrenchment. Boyne (2006) agrees with Khandwalla (2001) in his proposition that public sector organizations prefer reorganization strategies over the retrenchment or repositioning strategies. While Choudhury (2002) considers that turnaround must be sustainable, Manimala (1991) propounds that `culture' and `growth' are key to such sustainability.

4. TURNAROUND OF THE INDIAN RAILWAYS (IR)

Railways is a rising industry not just in India but in many parts of the world. Railways went out of business in the West from the 1960s to 1990s due to its inability to respond to competition from road and air traffic systems. Since railways are large entities serving vast and expansive areas it is often believed that they are unable to adapt to changes in the environment. For decades the only news about rail systems was about their decline. This decline has been halted and reversed in many parts of the world. Railways are resurging based on new ideas (e.g. high speed trains), environmental friendliness, new customer oriented services and new attitudes all over the world.

Indian Railways (IR) is the largest railway network in the world operating under a single management. It is often called the `lifeline of India'. Indian Railways is the largest employer in the world, directly employing about 1.4 million people. It is also providing indirect employment to over seven million people. One survey in the early-2000s revealed that one in every ten Indians depended on Indian Railways for his livelihood, directly or indirectly (Expert Group on Indian Railways, 2001). Fifteen million people across the country travel by Indian Railways everyday on average. IR operates as a department under the Government of India. It is the only department which presents its budget separately from the annual budget, presented by the Ministry of Finance.

In the late 90s IR found itself in a grave situation. A number of studies pointed towards the poor performance indicated by the declining revenues and shrinking market share as well as the declining capacity of the IR for financing its expansion and growth. Excerpts

from two studies – Kundu (1995) and Expert Group on IR (2001) reproduced below, are apt to illustrate the inevitable plight of Indian Railways during the late 1990s.

> "it is unlikely that Railways would resort to any major reduction in staff strength, given the strength of their labour unions. The possibility of increasing the fares is very limited due to extreme sensitivity of the issue and the political repercussions. As far as freight traffic is concerned, it contributes a much smaller proportion to the total traffic revenue than say before 20 years. It is important that the increase in earnings from commodity movement should come not necessarily through increase in rates but through growth in traffic. The rates for several commodities are already quite high and with any further increase in these, Railways run the risk of losing the traffic to road transport... Bringing out all these changes would require an innovative and enterprising management policy. In view of all these, IR maintaining a high growth in traffic revenue, generating a large part of the investible resources internally and, thereby, saving IR from the debt trap, without hampering the growth in different sectors of the economy, would be difficult and challenging task" (Kundu, 1995).

A similar forecast was made by the Expert Group on IR (2001) headed by Dr. Rakesh Mohan.

> "Indian Railways is today on the verge of a financial crisis. To put it bluntly, the Business As Usual Low Growth will rapidly drive IR to fatal bankruptcy, and in sixteen years Govt. of India will be saddled with an additional financial liability of over Rs. 61,000 crores (US $ 15.06 billion). On a pure operating level, IR is in a terminal debt trap." (Expert Group on IR, 2001 p-43).

The Expert Group on IR also recommended a set of changes to be implemented in IR. Two important ones among them were the following (a) IR's manpower of 1.5 million

should be downsized by 2.5 per cent over the next five years; and (b) second class fares should be increased by 8 to10 percent every year over the next eight years.

4.1 Causes for decline in performance

There were external as well as internal causes for the declining performance of Indian Railways. Due to opening of the Indian economy following the economic liberalization, there was increasing pressure for reducing cost and improving quality. The budgetary support from the Central Government was dwindling and its financial situation did not allow higher budgetary support to the Ministry of Railways. Besides the competition from road and air was increasing.

Among the internal factors, the major ones were operational inefficiency, lack of market focus, politically driven pricing policy, lack of competitiveness, denominator based cost reduction policy, low employee productivity, uncoordinated investment decisions, investment in unremunerative projects, social obligations and the like.

4.2 Diagnosis, recommendations and initiatives taken by IR

The continuous decline in performance seized the attention of the top leadership and the need for diagnosing the sickness was felt. This resulted into the constitution of Expert Group on Indian Railways, also known as Rakesh Mohan Committee which delivered its report in the year 2001. This Committee among other things also recommended certain operational strategies to be adopted by Indian Railways, which are reproduced below -

> "A railway traffic strategy aiming to boost current prevailing growth rates under freight and passenger would be built around the following:
>
> (a) Increased average goods train speeds: Reduction in speed differentials between freight and passenger trains will be the best

and most economical strategy for expanding the freight haulage capacity of the system.

(b) High speed, modern passenger services

(c) Commodity-specific freight strategies

(d) Introduction of new technology: Experts estimate that a gap of nearly 20 years now separates the technology in use in Indian Railways and that of advanced systems. Inadequate attention has been paid to R&D and technology investments in IR. Being one of the largest rail systems in the world, IR must have access to R&D facilities that can be counted among the best in the world.

(e) Harnessing Information Technology for freight operations and

(f) Increase in capacity through advanced signaling and communication systems: Owing to the characteristics of freight and passenger movement in India, most of the potential traffic that will contribute to a high growth rate will move on the major trunk routes. Route-wise studies need to be undertaken and investment programmes drawn up on the basis of full analysis of costs and expected benefits.

Introduction of private management for commercial operations of specialized services is an option that also needs serious consideration." (Expert Group on IR 2001, p 31)

Some of the initiatives taken by Indian Railways 2001 onwards are mentioned hereunder.

- Consequent upon the recommendation of the Railway Safety Review Committee (1998) also known as Khanna Committee, non-lapsable fund of Rs.17, 000 crores (4.25 billion US $) was created in 2001. This fund was named as Special

Railway Safety Fund and aimed at replacement and renewal of vital safety equipments.

- Restructuring of zonal and divisional organization was completed in the year 2003, which also marks completion of 150 years of existence on April 15th . Indian Railways have 16 (earlier 9) zones and 67 (earlier 59) divisions with effect from April 1, 2003.
- Regular double-stacked container service (on BLCA/BLCB flat wagons) began on the Pipavav-Jaipur route during March 2006.
- First private container train, owned by Boxtrans Logistics, started from Cossipore to Loni, April 2007.
- Maersk Line launched dedicated block train operation between Bangalore and Chennai in collaboration with the Container Corporation of India, connecting to the freight ship service from the US east coast to Chennai.
- Private container train by APL (formerly American President Lines) started from Loni to Jawaharlal Nehru Port, Mumbai.
- Enhancement of carrying capacity of wagons to increase throughput: Carrying capacity of goods trains has been raised from 3,200 tonnes to 4.000 tonnes. This was achieved due to introduction of the 22.9 tonne axle load freight trains, as compared to the previous 20 tonne axle load trains. Loading capacity was enhanced to the extent of 16 percent.
- Targeting 50% reduction in unit costs over a period of 5 years because of axle load increase.
- Reduction in turnaround time of wagons (7 to 5 days) with additional loading of 4 to 8 tonnes per wagon which has resulted in the loading capacity increase significantly.
- Long term initiatives – such as construction of Dedicated Freight Corridors to provide additional capacity for fast movement of freight traffic.
- Creation of rail linked container depots and integrated logistics parks, for non-bulk freight business.
- Use of data from Freight Operation Information System to make freight discount policies like empty flow direction discount schemes.

- Simplification of rules in key areas like free acceptance of indents for the supply of wagons, single window booking system and faxing of invoices to the destination.
- First long-distance train named after a corporate brand launched. South West Railway granted PepsiCo the right to run three summer trains (Bangalore-Nagarkole, Bangalore- Chennai, and Bangalore-Hubli) under the name 'Kurkure Express' with branding by PepsiCo for its lines of snacks of that name.
- CNG based Diesel Electrical Multiple units have been developed to reduce running cost.
- Speed of passenger train enhanced to 150 kmph on Delhi-Agra section in February 2006.
- Productivity Linked Bonus (PLB), equivalent to 65 days pay was declared by Ministry of Railways in 2006. This was further enhanced to 70 days in the year 2007.
- Scheme of training for officers at reputed institutes abroad, every 10 years and reputed institutes in the country, every 5 years was announced.
- Wheel Impact Load Dictator (WILD) has been developed to provide audio-visual signal to the train operating staff in the event of passing a wheel having higher impact load due to wheel defects.
- Reduction of the AC first class fares, AC second class fares, and second class fares.
- The Scheme of Frequent Travelers (SOFT) has been launched, which is applicable to I AC, 2 AC and AC Chair Car classes. A frequent traveler will get a complimentary train trip after certain numbers of reward points are accumulated.
- Fully air-conditioned Garib Rath (chariot of the poor) trains having fares about 25 per cent lower than the present AC 3 Tier fares to run on the Delhi-Patna, Delhi-Mumbai, Delhi-Chennai and Saharsa-Amritsar sectors.
- Scheme for up-gradation of confirmed passengers in a lower class to vacant seats in a higher class without any extra charge with effect from January 26, 2006.
- The suburban trains in Mumbai were attacked by the terrorist's bomb blasts on July 11, 2006. The restoration was done within 12 hours of blasts.

- To popularize booking through the Internet, the delivery of tickets has been extended to more than 181 cities: Payment options have been liberalized by introducing the facility of direct Debit through the Internet and Prepaid Cash Cards in addition to Credit Cards.
- Integrated Train Enquiry System has been launched for ascertaining Train Running Status, PNR Status and availability of accommodation through "Interactive Voice Recording System".

(Kothari, Mehta, Sharma (2007); www.indianrailways.gov.in, Annual Reports 2004, 2005, 2006 and interviews with Ministry of Railway Officers.)

Box 1 - Strategies Adopted by IR

It is not about big ticket reforms but a refreshingly new approach to business model of railways. Earlier it was thought that IR is '**in the business of railways**' and hence a natural monopoly. The new perspective is that it is '**in the business of transportation operating in a fiercely competitive market place**'. The only way to revive and regenerate the competitiveness of railways in the market place is by offering superior and compelling value to the customers. Hence, tariff focused and denominator centric strategy has been discarded in favour of numerator focused, unit cost based, customer centric and market driven strategy.

Given the fact that marginal cost of operations is substantially lower than the average cost of operations of railways, the strategy is to *"play on volumes, reduce unit cost, reduce tariff, improve market share and margins and earn record profits"*. In view of the sensitivity of cost to train kilometers rather than passenger kilometers or tonnes kilometers, the focus is '*to improve yield per train as against the earlier obsession with tariff – yield per passenger or tonne*'. Tariff policy formulated on the basis of '*affordability*' principle has been creatively modified based on deep insight into the political economy of railways and a sharp understanding of the transportation business – price elasticity of demand and its sensitivity to non-price factors. While politically sensitive second class passenger segment is still charged based on the *'affordability'* principle; freight, air-conditioned segment of passenger business and parcel tariff policies are now completely market driven. Uniform tariff policy has been replaced by dynamic and differential pricing. While freight rates for finished products where railways competitive position is weak on account of being '*station-to-station*' transporters have been reduced, those for commodities in which

railways are *'door-to-door'* transporters have been increased. Similarly, while customers are offered hefty discount during lean season and for loading in the empty flow direction, surcharge is being levied during peak season and for loading on congested routes. Several commercial and operating initiatives compliment the tariff rationalization. Innovative cargo aggregation products, mini rakes and two point rakes are being offered to woo extra traffic.

Resource leveraging, synergy and optimization are the key drivers of the demand and supply side management. Lalu Prasad's witty one liner aptly sums up the strategy *'instead of sweating the customers harder, milk the cow fully'*. By following twin strategy of reducing the turn around time of wagons from seven to five days and by increasing load per wagon by six to eight tonnes, railways earned additional surplus of over Rs.12,000 crores (3 billion US $). Similarly, by increasing the length, seating capacity, occupancy and speed of passenger trains, passenger losses have been brought down by nearly Rs.1,000 crores (0.25 billion US $) despite reduction in passenger fares. Initiatives like decision to run popular trains with 22-24 coaches, free upgrades for waitlisted passengers of lower class to vacant seats of higher class, provision of tatkal tickets for passengers traveling in emergency, e-ticketing, increasing the number of seats in a coach by layout optimization have benefited the railways and customers alike. Low cost, short gestation, rapid pay back and high return projects have been taken up to reduce network bottlenecks, improve utilization of rolling stock, reduce transit time and optimize throughput. To bring about maximum synergy, investment decisions have been supported by pricing, operating and commercial decisions. IR's value preposition is being strengthened by forging formidable alliances. For example, IR has aligned with the competition by allowing private shipping lines and road lines to run container trains. Similarly, by leasing out catering and parcel services railways have succeeded in reducing catering and parcel losses by more than a thousands crores. (0.25 billion US $)

(Source: *Mr. Sudhir Kumar, Officer-on-Special Duty to Minister of Railways, Handouts of presentation made on Sep 06, 2007 at Indian Institute of Management, Bangalore, India. He took over the post in September 2004)*

4.3 **Outcome**

Various steps have been taken since 2001. Consequent to these actions, the performance of Indian Railways started showing an upward trend, as can be seen from the tables of growth in physical performance (measured in terms of growth in freight and passenger traffic) and the financial performance (measured in terms of operating ratio, net revenue

as a percentage of capital at charge * and capital fund**). These are shown as Table 2 and Graphs 1 and 2.

Table 2 - Physical Performance

(Growth in freight and passenger traffic)

[This table indicates the physical performance in terms of Freight (Net Tone Kilometers) and Passengers (Passenger kilometers). It also shows the performance of the economy measured in terms of percentage growth of Gross Domestic Product at factor cost in 1999-2000 prices]

Year / March	Freight (NTKM in billion)	Freight (% Growth)	Passenger (PKMs in billion)	Passenger (% Growth)	GDP growth rate at factor cost (1999-2000 prices)
1998	284.25	0.00	380.53	0.00%	0.00%
1999	281.51	-0.96%	404.60	6.33%	0.00%
2000	305.20	8.42%	431.39	6.62%	0.00%
2001	311.00	1.90%	458.50	6.28%	4.40%
2002	323.00	3.86%	473.50	3.27%	5.80%
2003	353.19	9.35%	516.00	8.98%	3.80%
2004	381.24	7.94%	542.00	5.04%	8.50%
2005	407.40	6.86%	576.00	6.27%	7.50%
2006	439.60	7.90%	617.00	7.12%	8.40%
2007	476.77	8.46%	700.00	13.45%	9.30%

Source: (1) Ministry of Railways, Annual Reports (1998-2006, Railway Budget 2007)
(2) Reserve Bank of India, website www.rbi.org

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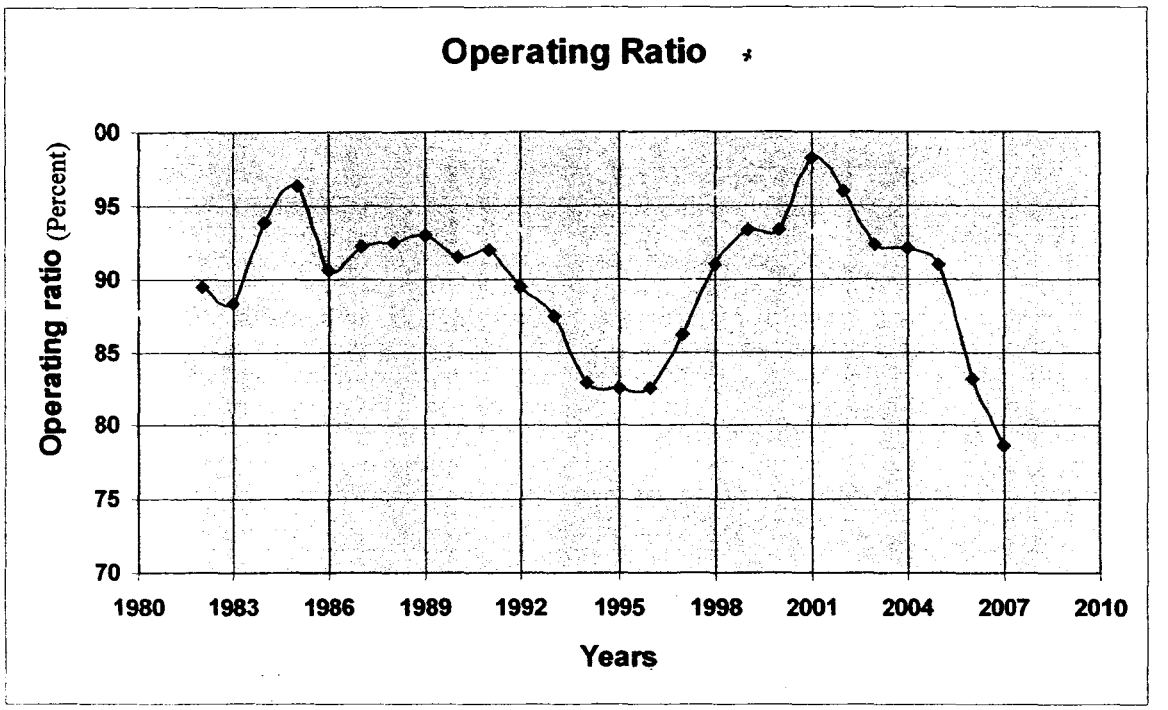
* *Capital at charge* is the capital received from central government through budgetary support, for the capital investment.

* *Capital fund* is created from the internally generated resources, for the capital investment

Graph 1 – Operating Ratio (percentage)

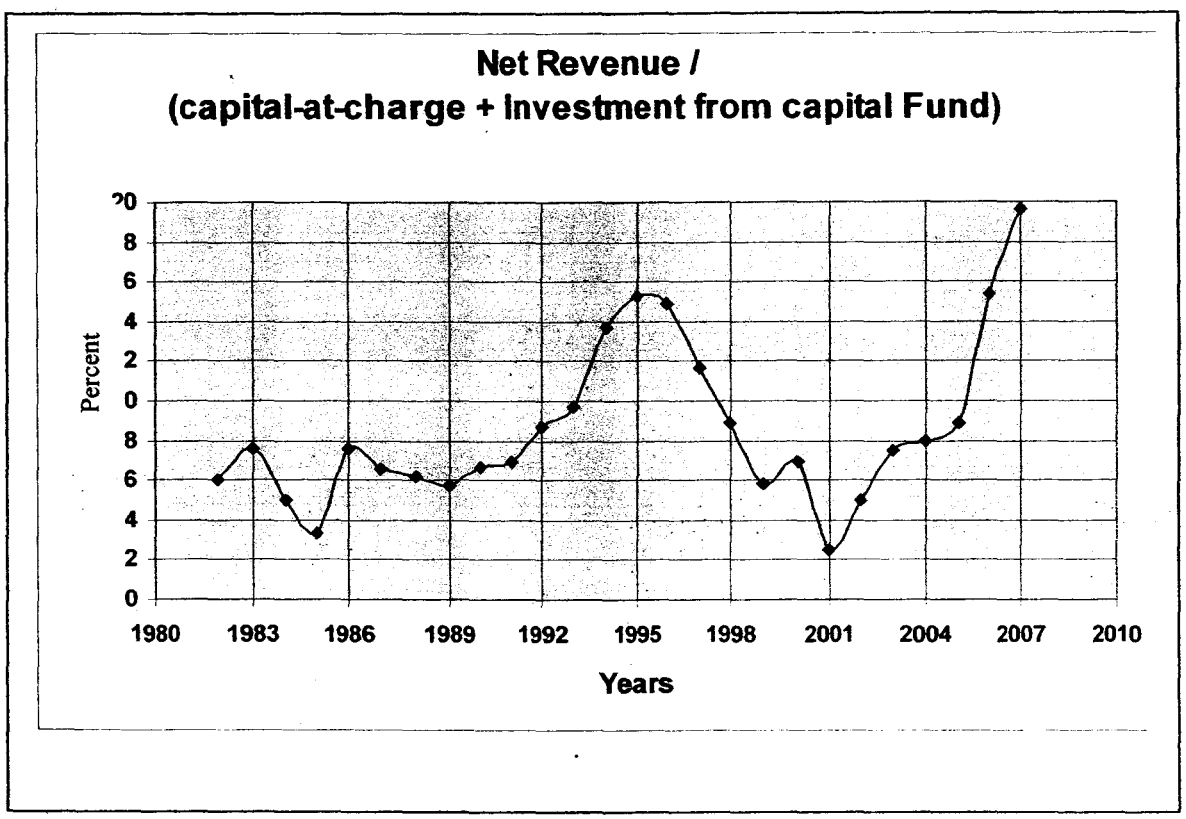


Source: Ministry of Railways, Annual Reports (1981-2006), Railway Budget, 2007)

(*) Operating ratio is the ratio of working expenses (including depreciation and pension) to the gross earnings/revenue.

Graph 2 – Net Revenue on Investment

(Capital-at-charge + Investment from Capital Fund)



Source: Ministry of Railways, Annual Reports (1981-2006), Railway Budget, 2007

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* *Capital at charge* is the capital received from central government through budgetary support, for the capital investment.

* *Capital fund* is created from the internally generated resources, for the capital investment

The Railway Budget presented in the Parliament in February 2007 announced a cash surplus of Rs 20,000 Crores (US $5 billion). This includes adding back the non-cash expenditure on depreciation. Dividend to Government was paid at the rate of 7 percent leaving no liability for unpaid dividends for the previous years. The financial performance was all the more impressive, as the fares were not increased despite hike in the cost of diesel and other input costs; rather there was decline in passenger fares and in the freight charges for select commodities, which give a message that the increased revenues are the result of operational efficiency and productivity and not due to price rise. Operating ratio was at an all time low at 78.7 percent. There was spectacular growth in total revenues and modest decrease in the number of staff, as can be seen from Tables 3 and 4. These figures are often treated as unequivocal indicators and of financial performance and unmistaken signals of IR's turnaround.

Table 3 -Total Revenue (in INR and US Dollars)

YEAR (year ending March)	Rs. (10 million)	Billion (US Dollar)
2001	36,001	*9.00*
2002	39,358	*9.83*
2003	41,856	*10.46*
2004	43,961	*10.99*
2005	47,320	*11.83*
2006	54.491	*13.62*
2007	*63,220*	*15.86*

Table 4 - Number of Staff (in 000)

2001	*1,545*
2002	*1,511*
2003	*1,472*
2004	*1,442*
2005	*1424*
2006	*1,412*
2007	*NA*

5. ANALYSIS OF INDIAN RAILWAYS (IR) TURNAROUND

Turnaround involves many processes and interplay of several levels of human-organizational interface. We will make an attempt to analyze some key strategies and the forces or factors which made these effective in the context of huge, complex, but monolithic organization of a developing country.

One of the key drivers of the IR turnaround phenomenon is the enhancement of the carrying capacity of the freight cars (wagons). Change in loadability of truck appears to be a simplistic decision and is doable subject to the enhancement falling within the limits laid down by law. But in case of freight cars, it had to go through several stages involving concurrence, reconciliation, clearances and sanctions from departments and agencies within and outside the organization before it could be formally initiated and implemented. The idea which was mooted by the General Manger of one of the constituent Railway (Zonal Railway) after the observation made by the Minister of Railways, took about a year and half to get it formally implemented. It was clarified by this zonal railway that higher loading was an ongoing practice for some other types of wagons (e.g. BOY, BOBS). The process involved convincing various departments within the organization, (transportation, mechanical, civil and finance), and addressing the concerns of safety by reconciliation meetings with safety regulator (Commissioner of Railway Safety) operating within the control of another Ministry (Ministry of Civil Aviation). The regulator took a very restricted view of the move to introduce increased loadability in existing stock as equivalent to the introduction of new stock, which required a series of fresh approvals. Though this view was dropped later, the requirement of revised speed certificates was made essential. These certificates were to be issued by the Research and Design Organization (RDSO) operating within the Ministry of Railways. The trial runs provided the data for discussion and inputs from heavy haul experts, study by CAN RAIL and discussions during workshop helped in building the consensus through participation and communication. There was no resistance to this from organized unions, as reported by the official handling industrials relations at the ministry level even though the unions maintained the view that overloading is not

desirable in the long run. The increased productivity is an incentive for the labour, as they receive higher bonus which is linked to productivity.

The above strategy ensured carrying of more load per train, which was supported by a strategy for doing it more frequently by reducing wagon turnaround, that is the number of days between two successive loadings. The set of actions involved in reducing the wagon turnaround were: better loading/unloading facilities at the terminals, introduction of round the clock working at major terminals, extended hours of working of goods shed/sidings from 0600 hrs to 2200 hrs., mechanized loading and unloading, reduction in detention time at the terminals, and de-bottlenecking infrastructural constraints. The investment decisions were based on the loading requirements and coordinated with the need to enhance the capacity on busy traffic routes. In an interview with the Ministry of Railways, it was mentioned that such decisions were taken at the Railway Board level even when there were no proposal received from the zonal railways. This was a significant departure from the practice in past when the proposals were required to originate from the Zonal Railways. The constraints were identified and investments needed to de-bottleneck them were provided proactively by the top management, as there was visible alignment between the end (capacity augmentation) and means (quick pay-off, short gestation de-bottlenecking projects).

Changes in the working hours was not resisted by the employees because of the opportunity to earn night allowance, as was disclosed by the Railway Ministry official . He further clarified that the unions showed the maturity to support the moves for enhancing productivity.

Several marketing initiatives such as offering discounts for the empty wagons, exploring the levy of higher charges for the door to door traffic in comparison to station to station traffic (i.e. segmentation of markets), etc. were result of better understanding of the basics of economics such as elasticity of demand, the economies of scale and cost behavior (marginal cost being lower than average cost). One can notice the role of entrepreneurship in the strategy implemented for the capacity enhancement. General

Manager of South Eastern Zonal Railway saw an opportunity, quickly evaluated the opportunity and attempted to leverage the available resources to create value by meeting the excess demand which was reflected in the piling indents for the freight cars.

The idea was worth many million dollars. It got the support of the top management and finally got implemented. There may be such ideas generated at the lower level, but may not reach the decision making level, as the lower levels may not have the confidence and will to put them up to the higher/top level. We will see similar process in case of some innovative idea which generated at a level lower than zonal railway- the divisional level which is basic managerial level supervising, monitoring and facilitating the operating performance of the stations falling within its jurisdictions.

The initiatives taken to improve the passenger services included quantitative (new trains, extended runs of existing trains, additional unreserved coaches, etc.) and qualitative measures (cleanliness, lighting, better signage, information availability through call-centres, SMS, advance availability of unreserved tickets, e-ticketing, timely grievance redressal, etc.) and introduction of new products . Customers' expectations were met by not increasing the fares. In fact, they were delighted by the cut in fares in some categories. This carried the message that the turnaround would not hurt the masses. The introduction of new products such as the new air-conditioned trains (Garib Raths - poor man's chariot) with fares lower by 25 percent than similar services in other trains is based on achieving cost advantage through optimization of the layout of coaches and composition of passenger trains.

An innovative idea of one divisional officer was not only appreciated at the next level (Zonal office) but was approved at the top level (Railway Board) and was implemented within a record time of four months after following all the procedures. A long distance train was named after a corporate brand name. Pepsico was granted the right to run three summer trains from Bangalore under the name 'Kurkure Express' with branding by Pepsico for its lines of snacks of that name.

Subsequently this scheme was formalized by the issue of a policy circular from the top management (i.e. Railway Board). The idea of brand trains has shown potential of earning additional revenue through ads and has inspired other initiatives like printing ads on the back of passenger tickets, extension of the concept to regular long distance trains etc. Encouragement to new ideas and ready acceptance from higher level provides a new dimension to the culture of the organization.

Restoration of facilities after disruptions and exceptionally good operating capability in adverse and crisis situations (such as floods, cyclones and even bomb blasts by terrorists) speaks volumes about the depth of talent and commitment of the manpower of IR. When bombs ripped apart seven trains between 6.28 and 6.35 pm on July 11, 2006, the entire city of Mumbai was in chaos, as suburban train services are the main transport artery of the metropolitan city. The damaged coaches were cut, debris were removed, (for this the Ministers approval was obtained at 3.00 am), overhead wires were repaired and the running of trains was restored at 6.00 am next morning. The terrorists couldn't stop the life in Mumbai from going on. What could have taken days in clearing that endless mass of steel was done by IR men in 12 hours (*Times of India*, Mumbai, Jan 7, 2007). A similar situation was there when a Super Cyclone in the eastern part of the country (coasts of Orissa) took place, and the only communication network which could give information about cyclone to the Capital was the Railways network as the cellular and landline network had collapsed. The well-established and mature systems of the organization with a committed workforce provide a great opportunity to leverage the resources, for the thoughtful and well-meaning leadership.

Concern is raised in several quarters that a large number of innovations arising from the lower levels and implemented in a hurry could lead to safety problems. In any case, there is a general impression especially in the Western media that IR does not care for the safety of its operations. Empirical data on accidents from different countries do not support this. The numbers of accidents measured in terms of accident per million train kilometers for the year ending March 2005 was 1.8 for EU 25, whereas the corresponding figure for India was 0.29. The figures for the year 2003 for Japan, Germany, France, Italy

and India were 0.63, 0.82, 0.87, 0.65 and 0.44 respectively. (*Sources:* East Japan Railway Annual Report, 2002, 2003, www.engineersaustralia.org.au, www.eoo.eurustat.ec. www.europa.ev www.unce.org/trans/doc/2003. Accidents have not been defined in same manner by different sources). Perhaps it may be too soon to evaluate the safety records, as there could be a time-lag between the changes and their impact on safety. It may, however, be noted that before implementing major changes, IR has been undertaking the mandatory safety and testing procedures.

Changes do require support and commitment throughout the organization at all levels. Financial and other incentives may also be required. The productivity linked bonus is a uniformly given monetary incentive for all the workers below a cut-off level. This may not be a motivator as there is no direct and visible linkage with the individual performance. The other motivating factors as per the Ministry of Railways official are the appreciation by the Railway Minister of all the railway men during the budget speech in the Parliament and other public forums, and the liberal awards given away by the Minister from time to time. The gesture shown by the Minister in increasing the contribution to staff welfare fund by seven times has been instrumental in winning the goodwill of the unions, which are among the oldest and most organized ones in India. The Minister's advocacy to the Ministry of Finance for getting the higher bonus equivalent to 65 days' pay for the previous year has also helped in winning the loyalty of the workforce and the unions.

For the officers who are not the beneficiaries of increased bonus or other financial rewards, the incentive is provided in the form of nomination to world class training institutions abroad once in 10 years and nomination for training to the best institutions in India, every 5 years. Laptops have been made available to all officers of middle level and above and vehicles have been provided to all senior officers (Joint Secretary and above) in the field.

Private companies have been allowed to own and operate container trains. wagon design in future will also be done by private manufacturers. Private capital will be brought in

through various projects such as construction of new dedicated freight corridor, redevelopment of stations, development of logistic parks, manufacturing of rolling stock etc. Growth of IR is proposed to be financed through the higher internal generation, incremental Budgetary support from the central government, and hyper growth in the participation of the private capital.

Catering has been outsourced to a subsidiary corporation, separately created for this purpose. Losses have been contained in passenger and catering services. All these measures suggest that the emphasis is on cost cutting, spinning off the non-core activities and focusing on the core business of IR. Many of the initiatives taken to improve the quality of service and to improve operational efficiency have application of IT at the core of these initiatives. IR has started computerized passenger reservation in the 80s and it is a great success story of a major IT application to reach the masses in the country. This has had a long term impact on the way of working of people as well as the culture of the organization. Though it is generally believed that the former Minister of Railways, Mr Madhav Rao Sindhia is the initiator of computerization in IR, the earliest initiatives in this regard were actually taken much before by another Minister, Mr. Madhu Dantvate. Notwithstanding who introduced computerization in IR, the organization as of now has a tradition of working in an IT environment for more than two decades. However, if one were to consider the history of electronic data processing in IR, it dates back to the year 1963-64 when IBM Unit Record Equipments were installed on all the zonal railways.

5.1 Turnaround strategies of IR: A classified analysis

In order to understand the directions of IR turnaround, a classified analysis of IR's turnaround strategies will be useful. Accordingly, we discuss them under a few categories identified as important by prior literature.

Operational and Financial Strategies

Cost control through intensive utilization of assets and enhancement of the capacity was an important strategy of IR turnaround. Intensive utilization has been achieved by reduction in the wagon turnaround from 7 to 5 days and capacity enhancement has been achieved through increase in the axle load from 20.3 to 22.9 tonnes. The approach has been volume-centric as marginal cost is substantially lower than the average cost of rail transportation.

Cost cutting through retrenchment, most commonly adopted in the West particularly in the US, has not found favour with IR. However, a reduction in manpower has been achieved from 1.65 million in 1991 to 1.41 million in 2006 through not filling the vacancies (arising out of retirements, resignation, etc.) which amounted to about 2% per year. Use of IT in Freight Operating Information System has also helped in reducing costs.

Product Market Strategies

Focusing on the core business of earning through freight revenue, market segmentation based on the elasticity of demand (higher charges for 'door to door service', 'tatkal' reservations (reservation 5 days before the date of journey), dynamic pricing (differential off-season fares), product differentiation based on the need to provide better and comfortable service at lower prices, 3 tier air-conditioned trains (Garib Rath) and the Jan Shatabdi Expresses are examples of the market sensitivity of IR Other examples of customer friendly actions of IR are: the online reservation system, e-ticketing and the use of ATMs, Post offices, etc, to reach the customers, improvement in cleanliness, lighting and signage, information availability through call centers and mobile phones etc., increasing use of IT for the passenger reservation and special services like SOFT to incentivise the frequent travelers.

Human Resource Strategies

Unions' cooperation was earned by not following the recommendation of the Expert Group on IR, (2001) for staff reduction by retrenchment. However, reduction in staff was achieved by not filling up the vacancies created by retirement and resignation of the employees. The increase in productivity-linked bonus (PLB) acted as incentive to the work force, the expectation for the current year is higher than the last years bonus equivalent to 65 days pay which was considered too high by the Ministry of Finance. (PLB for the current year has since been announced. It is equivalent to 70 days pay). There was an increasing emphasis on the quality of officers' training and the need to expose them to international environments. The training abroad once in 10 years to every officer acts as a great incentive. A major achievement of IR in its relationship with the unions is the gaining of their support for the Public Private Partnerships for the future expansion programme.

Growth Strategies

Leveraging on the opportunity made available by the boom in the economy has been important strategy of IR. Private investment is mobilized through wagon investment scheme, making IR resources available for other investments. In financing the massive expansion plan, a large chunk is expected to be financed through PPP (70,000 out of 250,000 crores of rupees, equivalent to 17.5 out 0f 62.5 billion US Dollars) over the five year period of 2007-2012. These include capacity enhancement through construction of Dedicated Freight Corridor. Increasing use of IT for freight operations, marketing initiatives, introduction of new products such as Jan Shatabdi, Garib Rath and customer orientation have also helped in accelerating revenue growth.

5.2 **Is Turnaround sustainable?**

According to Desh Gupta and Sathye (2007), it is difficult to be convinced about the sustainability of the financial turnaround of Indian Railways, as the impact of the technical and financial changes ebb away in due course and the cyclical trends put off the gains from macroeconomic growth. However, a perspective of turnaround as a

process, developing through various stages, may help us differentiate between sustainable and non-sustainable turnaround. This is basically by observing whether the processes that ensure sustainability are in place or not. Manimala's (1991) analysis of 28 cases of turnaround suggests that the financial/operational turnaround is only the early stage of the turnaround process. Turnaround may begin with improvements in the financial/operational performance, but it should not end there. Manimala has identified four stages in a complete turnaround, and sustainability is determined on the basis of the stage the organization has reached. It is, therefore, useful to classify the strategies (set of actions) adopted by IR into stages and then attempt a theoretically convincing answer to the question of sustainability.

Credibility building and mobilization of the organization for the turnaround through a participative process of decision-making, soliciting support for the plan from various stakeholders including labour unions, cost cutting through asset utilization and capacity creation, (reduced wagon turnaround and higher axle load), quick pay-off projects and similar other actions fall within the first stage of arresting sickness. Financial turnaround becomes visible when the organizations attain the first stage (arresting the sickness). However, as we have mentioned above, Manimala (1991) has pointed out that the stages need not be chronological, and that some actions in stage 1 (such as the participatory process, mobilizing the unions' support, etc) would have implications for the culture building phase and thus lay the foundations for stage 3.

It is also obvious that IR has transcended stage 1 and gone into the reorientation stage, as evidenced by their actions such as spinning off non-core activities like catering, creating greater market orientation, focusing on freight revenue, greater use of incentives, information dissemination and better public relations etc. Capital and debt restructuring, organizational restructuring (Expert Group on IR, 2001) and changes in the managerial cadre etc., although are part of this stage, have not been adopted by IR.
The institutionalization stage involves the IR initiatives for culture building through human resource development, particularly through training, introduction of communication and coordination mechanisms, etc. The Expert Group on Indian

Railways (Rakesh Mohan Committee) had identified participation and communication as one of the key features of any change programme in Indian Railways. The Expert Group observed, "the wealth of IR lies in the hearts and heads of its people. We have been impressed by the loyalty and devotion to the organization of IR personnel at all levels. This value must not be lost and must be capitalized in the change process. Our experience in conducting an international workshop at Vadodara Staff College was a positive one. We found the Railways personnel to be receptive to change but they do have to be convinced. The Expert Group, therefore, recommends a widespread consultation process at all levels including labour" (p 74).

This dimension of culture is visible in the consultative process which preceeded the introduction of heavy axle loading and also in discussions with unions for this change as well as the expansion through Public Private Initiatives. We have also observed the great sense of devotion and sincerity of railway men, when they restored the suburban services in Mumbai after the blast by terrorists in July , 2006. The initiatives of the General Manager of South Eastern Railway and the Divisional Officer of the Bangalore Division, whose ideas were not only well received but became the policy letters for implementation for whole of IR are indicative of a new culture, where participation and communication, and receptivity become an integral part of management style and ethos.

The other significant observable change in the culture is seen in the way IR has introduced market orientation and customer focus. The approach is more business like rather than bureaucratic and is a strong pointer that commercialization has gone deep into the thinking behaviour of the management. It has substantially met the expectation of the Expert Group, who observed, "one of the key recommendations of the Expert Group is to commercialize IR. One of the major challenges of the modernization of IR is to shift the culture and mindset from that of a government bureaucracy into a market savyy, customer-oriented, profit driven business" (p 74).

Finally, the movement into the growth stage is indicated by the introduction of new products such as Garib Rath, initiatives to mobilize resources through PPP for future

expansion, ambitious expansion programme for the next five years and harnessing information technology for performance improvement. Diversification, discovery of new markets and mergers and acquisitions which fall in this stage, as observed by Manimala (1991) are not prominently visible in IR growth strategies, perhaps due to peculiar nature of the business of IR.

The Expert Group on IR had identified four key areas where IR can maximize the gains through IT. These areas are freight revenue enhancement, passenger revenue enhancement, operational cost reduction and investment optimization. In freight revenue enhancement, the Freight Operation Information System (FOIS) containing Rake and Terminal management modules has already been implemented. The Expert Group had recommended that FOIS should be implemented completely in all locations and to ensure that FOIS information is fully accessible to all key customers and helps them improve their inventory and production management, leading to higher customer satisfaction and revenue. Regarding the use of IT for passenger revenue enhancement, the Expert Group recommended extending Passenger Reservation System (PRS) to unreserved accommodation, integrating passenger information with other internal systems and setting up reservation facilities close to customers. For operational cost reduction, the direction given was introduction of wagon, crew, parcel and inland traffic management systems and to integrate these systems. It was suggested to integrate the internally developed Long Range Decision Support System (LRDSS) with the investment decision making process as well as the planning of IR.

Significant improvements have been made in all these directions except perhaps in the use of IT for investment optimization. The strategies and various sets of actions which have been described in the earlier portion of this article (notable among them are the use of FOIS for crew and wagon management, popularizing the use of the internet and other IT based sources for reservation and access to information, reaching customers through post offices, ATMs, mobile phones, encouraging frequent travelers through schemes like SOFT etc. have contributed significantly to customer satisfaction and revenue growth.

These initiatives per se may be important, but what is more pertinent is the culture which supports the growth of the organization by harnessing the potential of latest technology. This dimension, as part of the culture of IR has far reaching growth implications for the future of IR. Besides, the optimism and hope brought in by the turnaround, not only within the organization and the country but outside the country as well, is likely to make the task of funding the future of IR expansion easier.

"Under Mr. Yadav, the Railways have boosted profitability by lengthening and speeding up the trains, rather than taking the more obvious steps of raising ticket prices or freight fees. The improvements have, according to Railways, impenetrable accounts, pushed the system's return above its cost of capital. As a result, investments should be far easier to finance" (Wright, 2007).

In order to sustain the turnaround, it is essential that the organization exhibits a set of actions to confirm that it has attained the stage of institutionalization and growth. In our stage theory based analysis and assessment made in the preceding paragraphs, it can be concluded that IR turnaround is sustainable.

One may argue that IR is a distinct organization which is not comparable with the 28 Western and Indian cases studied by Manimala (1991). Essentially there is no difference between IR and the 28 companies studied by Manimala (1991). Even though there are structural and operational differences, we maintain our conclusion that IR turnaround is sustainable even in the situations of slowing down of economy, change of leadership and in the event of partial going back of axle load increase on safety or any other consideration. Let us take them one by one in reverse order.

The operational changes brought out by the turnaround are likely to stay. The organizational culture of the IR shows that operational changes made in the past by one chairman, Mr. M.S. Gujral in the early 1980s are continuing till date, though the decision to introduce bulk train movement, doing away with marshalling and preventive maintenance en route was considered risky and had its own share of resistance. In an

interview several years after his initiating these changes Mr. Gujral told one of the authors that there are few people in government who bring change, there are fewer people who interfere with these changes once introduced.

Further, we don't consider that it is the only method by which capacity can be enhanced. It is possible to improve the carrying capacity by designing light weight wagons which will substantially improve the net to tare ratio (i.e., ratio of goods carried to weight of wagon). Similar results can be obtained by exploring improvements in dimensions on the line of Railways of Europe and the US, where dimensions of freight cars are bigger than that of IR despite narrower gauge. Enhancing carrying capacity and intensive utilization is the direction and is not constrained or confined to one or few ideas. This direction will shape the future growth of IR. For example, the axle load contemplated for the Dedicated Freight Corridor is 30, comparing well with international practice.

Change of leadership affects turnaround adversely only when the culture of institutionalization is non-existent., which, in our assessment, is not the case with IR. It is noteworthy that bringing change in a government-run commercial complex organization of 1.41 million people is not an easy task, for which the legitimate credit must be given to the leadership. Though accelerated improvement in financial performance is more pronounced in the last two years, the improvement in operating ratio began in the year 2002 after having the worst ever operating ratio in the year 2001. But the genesis of turnaround may date back to the time when a need was felt for the diagnosis of the disease and an Expert Group was constituted to submit the diagnosis and the prescription. As the will and determination to improve IR performance is evident in both the leaderships, past and present, future leadership is likely to continue with these measures.

Economic growth has been a great enabler, facilitator and mover of the turnaround; it is unlikely that the economy will slow down as per the recent estimates of IMF and OECD. With greater and deeper understanding of market and basics of economics, appropriate strategies are expected to be developed and implemented in a situation of slow down of economy. IR appears to be better equipped than before to face the adverse situations.

Further, unlike advanced countries, IR has a large and growing segment of passenger and freight traffic which is unlikely to go to air or road.

The lesson that working the assets hard , harder and hardest is the most effective route to productivity enhancement (which perhaps has genesis in Peter Drucker's statement of 1970s)* is too valuable and important to be forgotten by an organization which has an elephant -like memory. IR celebrated its 150th anniversary with appu (baby elephant mascot) carrying the green light. That appu is dancing and we hope it will continue to do so (We presume that with newly found optimism and confidence , IR will be able to mobilize resources required to finance the future growth as contemplated in Eleventh Five Year Plan and the `culture' and `growth' will be allowed to flourish by the future leadership).

** Working on the productivity of capital is the easiest and usually the quickest way to improve the profitability of the business, and the one with the greatest impact"- Drucker, (1977)*

6. CONCLUSION

Turnaround is too big a phenomenon to be described, understood and analysed in terms of financial performance. Improvement in financial performance, if not accompanied with improvement in orientation, culture, human resource development and growth, is likely to be temporary and organizations may slip back to the greater decline. Turnarounds have to take the organization to the stage of reorientation, institutionalization and growth to ensure that the turnaround is sustainable i.e., capacity regained is permanent and not temporary (Manimala 1991). Analysis of the turnaround of IR shows that it is not confined to the stage of arresting sickness, but has traveled, though not completely, to other stages of reorienting, institutionalization and growth.

One more aspect which strengthens the conclusion of the IR being in higher than initial stage of financial turnaround, is the alignment of the strategies with the diagnosis of

sickness (operational inefficiency, lack of market orientation, lack of focus on core, lack of resources for growth). It is striking coincidence that many of the strategies suggested by Rakish Mohan Committee(p.31) have largely been adopted, though certain set of actions suggested by the Committee such as reduction in manpower, hike in freight and fares, and corporatization have been shelved. 'Humane' turnaround has been preferred over the 'harsh' turnaround. Reorientation stage has also been witnessed with culture stage confirming Manimala's (1991) proposition that these stages are indistinct and unchronological. However, the theoretical model may be matter of great deal of interesting empirical research. Replicability of the turnaround of Indian Railways may be another area for future research.

Khandawalla's analysis had identified 12 elements of turnaround, almost all the elements of turnaround are visible in case of IR's turnaround. Theoretical proposition (Khandawalla) that turnaround is much more difficult in public sector organizations, big organizations and service organizations make the turnaround of IR uniquely distinct and remarkable.

Choundury's proposition (2002) is also upheld as the threat of extinction has been successfully averted by IR by following effective strategies and the improvement brought out by these strategies appears sustainable. It also upholds the finding of Boyne (2006), that reorganization is preferred over retrenchment and repositioning and it is most effective strategy of turnaround in the context of the public sector organizations.

Indian Railways turnaround challenges a widely held untested belief that private sector is synonym of efficiency and public sector by its very nature cannot be efficient and productive. Research study of Khandwalla (2001) supports our conclusion that these believes are unfounded when put to empirical tests.

The distinct contribution of this paper is two fold. Firstly, it provides practicing turnaround managers a model to help them making strategic decisions, Preoccupation or over-occupation with strategies resulting into financial recovery may be fatal. Adequate

emphasis on institutionalizing and growth strategies is called for to sustain the performance recovery. Secondly, it applies the stage theory model to analyze the turnaround of the Indian Railways and provides an answer to a difficult question, whether the turnaround is sustainable. Thus, this paper should enrich the practitioners and theoreticians understanding of the phenomenon of the turnaround of the Indian Railways.

Notes and References

1. IR, in the year 2005, changed its accounting policy for the lease charges. The lease charges have been broken into two parts - capital and revenue. While revenue has been charged to working expenses, capital portion is separately provided for in the capital budget. This has resulted in the reduction of working expenses and the operating ratio. The operating ratios without taking into account this change, would be approximately 3 percent higher in the year 2005, 2006 and 2007. Even with this adjustment, the operating ratio of 2007 remains one of the lowest operating ratio (81.7%) in nearly 50 years. The change in accounting policy was disclosed in the budget documents.

2. There is a concern regarding the safety of operations due to enhancement in the loading capacity of wagons. This has been matter of discussions within Indian Railways, with safety adviser and regulator (CCRS) and in Audit Reports. The Comptroller and Auditor General of India (CAG, 2007) observed as under:

   > "Railways have permitted the running of trains loaded with enhanced quantity without complying with the conditions laid down for protecting track and rolling stock. Even after permitting loading of wagons with enhanced quantity, the trend of overloading continued. Increased incidence of rail fractures, weld fractures and defects in wagon and locomotives was seen".

   The Report insists that the required safety measure should be in place and overloading beyond the enhanced limits should be checked. Railway Board has maintained that there has been a paradigm shift in the approach of IR from being probabilistic to deterministic.

3. Chief Commissioner of Railway Safety (CCRS), though not statutorily designated as safety regulator operates under Ministry of Civil Aviation and acts as advisor and regulator on safety matters.

4. Conversion of Rupees to US Dollars has been done at one US Dollar equal to INR 40.

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