SCMS Journal of Indian Management

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Successful Business Planning: Energizing Your Company's Potential Prof.K.J.Paulose



The Chairman speaks ...

Our editor is keen to innovate every issue of the Journal. Previous issue focused on a different aspect of management as it is applied globally.

Risk management in banks in an era of technological revolution is a matter to be

analysed in depth by modern managers, particularly managers who deal with funds all the time. Prof.Sudhindra Bhatt analyses the issue in detail in this issue.

Another major contribution in this issue includes strategies for radical growth, a critical analysis of the application of SMS technology in investment, in business and in trade union movement. An analytical study of the management issues confronted by the Chief Executive of the Cochin International Airport (CIAL) also is there in this issue. The present CEO was at the helm of CIAL right from the beginning and has passed through several managerial, social and political problems and issues. He successfully resolved them to the dismay of many including the Government. He made the project a reality and Cochin has an internationally accepted state-of-the-art airport. The story of CIAL is a saga of trial, tribulations and confrontations at social, political and economic levels. How he succeeded is a classical story worth recording for the benefit of future generations.

Our editor, with the help of Prof.K.J.Paulose, Dean at SCMS, tells us this exciting story through the current issue of 'SCMS Journal of Indian Management.'

Our venerable readers can look forward to more and more such exciting and successful managerial experiments in our coming issues.

Dr.G.P.C.NAYAR

Chairman, SCMS Group of Educational Institutions

SCMS Journal of Indian Management A Quarterly Publication of SCMS

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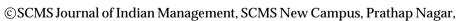
Mr.Sabu M.Nair

Editorial

The Journal deems it a privilege of including a live "Manager's narrative:" a "Man Becomes Manager." It tells how a man in district administration discovers a master politician, receiving the shock of a remark and turning it into a stroke of a soothing solace. It explicates how the 'man' strokes the labour force of Kerala, known for its violence and defiance, and taps out of them sap of co-operation to share with them the toil of nation building. It also suggests how the 'man' succeeds to cool down the tempestuous violent rebellion of the landowners of the Airport site and to reduce it to a tempest in a teapot. It describes how the 'man' convinces eleven thousand non-resident- Keralites in thirty different countries to take out their patriotic fervour to contribute and co-operate with this project. In the process it unravels to the readers how the "man" becomes "manager."

The authors demonstrate how the potential of a manager in a man manifests itself as propriety demands it. We wish if the readers could give us the feed back on this. We will be running this feature will depend on the readers' last word.

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Technology and Risk Management in Banks

by Prof.Sudhindra Bhatt

1.1 The Indian Banking Scene

Indian banking scene is a complex one. The Indian financial system, particularly the banking system, is very diverse. The State Bank of India occupies the top slot, which has been in existence since 1806. It has 9038 fully computerized branches, in India and abroad, 3814 ATMs and has deposits to the tune of Rs.3,18,619 crores. Then, there are seven subsidiary banks of SBI, the State Bank of Mysore, being one. These seven subsidiaries have a branch-network of 4596 branches, with a deposit base of Rs.1,14,272 crores. There are large banks known as the 'nationalised banks,' which have huge government ownership along with significant private shareholders. There are relatively new private sector banks, most of which are multi-nationals. All over India, there are numerous co-operative banks and the Regional Rural Banks. And, there are some highly profitable foreign banks. There are many odd entities known as NBFCs-Non-Banking Finance Companies. The regulatory authority for all these, except for the cooperative banks, is the RBI-Reserve Bank of India.

India still does not have world-class banks. However, the huge size of the State Bank of India, coupled with the strength of several subsidiaries, is an indication that the Indian banks can go global. No less is the strength of the share of the nationalized banks. Some banks already have overseas presence and many more are in the process of breaking the national barriers.

2.1 The Era of Mergers and Acquisitions

All this has led the Indian banking industry towards the next logical step of M&As, mergers and acquisitions. State Bank of India and its subsidiaries are in the process of forming themselves into a giant entity, huge enough to ensure a place in the Guinness Book of World Records.

Two big nationalized banks, Bank of India and Union Bank of India, have announced their plans to merge into one entity. Sometime back, Reserve Bank of India ensured a supervised merger of the beleaguered GTB-Global Trust Bank with the OBC-Oriental Bank of Commerce. That the exercise succeeded without creating a commotion among the GTB clientele speaks of the maturity of the Indian banking industry and the deftness with which the Reserve Bank of India handled the issue.

So, mergers and acquisitions are here to stay! The banking circle is agog with rumours of which big fish is going to swallow which small fish. Many foreign banks are known to have been on these 'fishing expeditions.' The bankers are still on the high seas and the size of their catch is still not known! The year 2005 promises a lot of action. A lot of bank logos are bound to go into the oblivion, but only after ensuring a more-than-fair return to their stakeholders. Interestingly, the so-called 'small fishes' have demonstrated amazing dexterity and presence of

mind and have modernized themselves beyond belief. This transformation, on the one hand, will help these banks to stay afloat on their own and in the eventuality of a takeover, hostile or otherwise, will make the buyers to pay for all the value-additions that they would have made.

3.1 The Entry of Technology in Indian Banking

Technology caught the fancy of the Indian banking czars in the '80s. The main hurdle, in a country known for its socialistic leanings and democracy, came from the trade unionists. In a country struggling to implement employment generation oriented plans. Ideas of mechanization and consequent, and inevitable, loss of jobs did not get well. They tried to stall the idea until the market forces overtook the scene. Once the bankers tasted blood there was no let-go of the situation. Today, technology has made fair inroads into the domain of banking in India.

Basic computerization has been achieved in the entire banking industry. So much so, that a good number of 'co-operative banks' spread all over India have also been computerized. In short, in the banking industry in India today, a bank, which is not computerised, stands out for its non-compliance!

Not only the entry-level technology but, the corebanking technology or the networked banking technology has also gained a lot of ground. The 'private banks' like the HDFC Bank and ICICI Bank, are in the forefront having implemented technology to the level, which is comparable to the best, from world standards.

4.1 The Quantum of Global Investment in Technology

There's no doubt that it's big business. A report by the Tower Group states that banks will allocate over one-fourth of their technology budgets, approximately \$37.5 billion on a global basis, on core banking software, hardware and services.

A recent Nasscom-McKinsey study on the global software business revealed that the Banking, Financial Services and Insurance (BFSI) segment would continue to be the largest vertical and drive software revenues. According to this study, the BFSI segment contributed \$68.3 billion out of a total market size of \$326.8 billion in the year 1997, a 21 per cent contribution. By the year 2008, the BFSI segment contribution is expected to grow to \$261.7 billion out of a total market size of \$1010.4 billion, a 26 per cent contribution. These figures highlight the importance of BFSI to the software industry.

A Gartner report says that banking software will grow at a CAGR of 13.5 per cent from 2000 to 2005. The total revenue from packaged software was \$22 billion in 2002 and is expected to grow at 8 per cent to reach \$38 billion in 2005.

Industry pundits estimate that Indian banks spend Rs.150 crore and above on software and hardware for core and Internet banking on an average. When the investments are in this range, it calls for a deeper analysis of the subject.

5.1 The Banker's Interpretation of Technology

Technology is a less understood but much hyped concept in the Indian banking industry. The general perception is that it is the panacea for all human inefficiencies. In a positive way, it is said to be the vehicle, which can translate your wishful thinking into realities. Here, the technology drives the people or the people drive technology is not known. Sadly,

technology is becoming a sort of cat and mouse story. Here, the mouse refers to the mouse as well as the "mouse," cat refers to the human endeavour to make technology equal to human intelligence, if not overtake it.

Technology is becoming a more and more deep-rooted mechanism. The initial euphoria when computer technology was born was that it is going to be the 'be-all' aid to the banker. So much so that, in the 70's somebody wrote that, in future, a billionaire can float a bank single handedly, of course, aided by the computers. Therefore, the common belief among the bankers in India is that the technology is not only a substitute for human drudgery but also the panacea for all kinds risks, including those caused by their own lack of supervision!

But, technology, as it is evolving day by day, is unwittingly throwing up its many inadequacies and the techies are scurrying around to find newer and newer patches to plug those gaping holes.

I shall enumerate my statement with some simple examples.

Technology started as a cost cutting, time-saving and man power-saving device. But, present day technology is not like that. Actually, it is demanding a lot of investments, time and manpower, may be in another form.

- * Enormous investments have been made in buying technology, adding to the costs.
- * A lot of time-investment has gone into imbibing the technology and,
- * A new breed and creed of manpower has entered the banking portals in the garb of 'computer techies'!

DR - Disaster Recovery was not a concept ever thought of by the pioneers of computer technology. They

always looked at the brighter side of technology and never assumed that it can cause a disaster also! The terms like Hot Site evolved only to give meaning to the concepts like the Disaster Recovery, which itself was a new kind of expression.

Human mind is trying to delegate more and more of its chores to technology. While human mind is a superb, unbeatable super-computer, technology is only a poor cousin of that. The stronger the machine, the more inadequacies fall out.

Human mind is an amalgam of all the technological phrases that have evolved so far - you built a Hard Disk and the race for hard disk capacity started in no time. Today, some people talk of the Hard Disk capacity of their computers, as if it were a status symbol. No sooner you find a bigger hard disk, human ingenuity finds newer stuff to load on to it, be it text, be it sound, be it graphics or a combo of all like the streaming video. The hard disk capacity of the human mind is infinite.

A bigger Hard Disk did not necessarily mean big relief; it became a cause of concern. What if my hard disk crashes was the nagging question. Thus evolved the concept of "Backup." Multifarious solutions were invented to tackle this issue, like the floppies, the CDs and the Tapes. So far so good.

What if my database refuses to open up? So, the concept of BCP - Business Continuity Plan evolved. The more you store, the more is the risk and this risk is potent enough to cause a disaster. And, the DRP - Disaster Recovery Plan was conceived.

I am crammed with data; can I store some of my less needed data elsewhere? Yeah, sure, and, that was the starting point of Data Warehousing and Data Purging concepts. Thus, the levels of sophistication being achieved by us are giving way to newer demands on the technology. And enormous time, energy and resources are being expended to devise newer controls. All this could have been okay but for the speed of technology obsolescence. By the time we are comfortable with one level of technology that level goes for a toss and a more sophisticated technology takes over. And, it is not easy for an industry like Banking to switch gears at that speed.

6.1 Risk in Banking Industry

Risk and Reward go hand in hand. This wisdom is best understood by the banking fraternity. But, the million-dollar question is how much risk is enough? Where to draw the line? When does risk go out of hands? The subquestions arising out of this are complex enough. Therefore, the answers are not going to come by easily.

Bankers have been awakened to this reality and in the recent past a lot of effort has been made to go into the genesis of this concept called risk. Efforts are made by your friendly local banker and efforts are made at the multi-national level under the aegis of Basle II.

Risks reside in business processes and so business process mapping is a pre-requisite for risk identification. But, how many banks have documented the processes? Not many. This will not make risk assessment comprehensive. The result can be detrimental to the interests of banks as a low risk can be put to costly mitigation processes, leaving a higher risk being unattended.

Bankers have identified three basic risks:

Credit Risks

Market Risks

Operational Risks

Many more risks are being unearthed like,

Reputation Risks

Information Risks

Exchange Rate Risks

7.1 Risk Management

Risk Management is not new to banking industry. The concept of risk evolved from the day the concept of banking evolved. From that day onwards bankers have been managing risks in their own way. Now, the induction of technology is calling for an effective framework to tackle risks. Earlier, the processes of control, audit and supervision were all guided by the transactions. Now, the industry has seen the need for shift from transaction-based supervision to risk-based supervision.

Accordingly, Reserve Bank of India has taken the lead in inculcating the need for RBS - Risk Based Supervision of banks in India, with the objectives of allocating supervisory resources and paying supervisory attention in accordance with the risk profile of each bank. The RBS process essentially involves continuous monitoring and evaluation of the risk profiles of the banks in relation to their business strategy and exposures. This would be done with the construction of a Risk Matrix for each bank. Reserve Bank has proposed:

- * Risk Profiling of the Banks.
- * Setting up of a Supervisory Programme
- * Drawing up of a Monitorable Action Plan.
- Introduction of Enforcement Process and Incentive framework
- ★ Induction of External Auditors in Banking Supervision
- * Imparting Change Management Implications for the banks.

However, the success of this depends on the following:

- 01. Quality and Reliability of Data
- 02. Soundness of Systems and Technology
- 03. Appropriateness of Risk Control Mechanism developed and adopted by the banks
- 04. Supporting corporate, HR and organizational back up.
- a) The quality and reliability of the data remains a suspect. It is not because of the inaccuracy in accounting nor because of any fraudulent activities. It is due to the poor quality of "migration" to computerized environment without cleansing the data. Data cleansing and data enrichment efforts on an on-going basis go a long way in ensuring smooth transition to computerized environment. Complacency and misplaced faith seem to be the causative factors of these lacunae.
- b) Soundness of Systems and Technology is of course there. Here the trouble seems to be of a peculiar nature. Initially, bankers were reluctant to embrace technology, courtesy the belligerent attitude of the trade unions. When they did make a move to adopt it, technology had moved a notch upwards and most of the banks were saddled with the outdated technology. Private banks entered the field at this stage and flaunted the state of the art tech savvyness. For a while it looked as if the Indian banking is about to be taken over by the private banks. Once the euphoria subsided, the fence jumpers came back to the nationalized banks' fold. Then, the nationalized banks flexed their muscles and went shopping for the in-things in technological gizmos. Today, the level playing field is in place. Major nationalized banks, even some

- Co-operative banks, are offering what the Blueeyed Boys were boasting of all along. The days to come, in this sense, will be interesting to watch.
- c) Then, let us look at the appropriateness of Risk Control Mechanism developed and adopted by the banks. This is also the focus of my Paper being presented to you now. On paper, yes, most of the banks claim to be having their RCM in place. Practically speaking the answer is NO. The reasons are multifarious.
- d) Inadequate description of the term RISK - Risk is a very complex expression to quantify. A sensible way of describing risk is by listing what it is NOT! The real risk cannot be seen. A foreseen risk is not a risk at all. In accepting the expression that the RISK and REWARD complement each other, we unknowingly imply and involve the human wisdom. A human mind takes a calculated risk, a computer merely calculates. But, it calculates it so fast that the human being's ability to take a decision is vastly facilitated by that. A banker earns his profit not by listing all these risks. He earns his profits by accepting the possibility of occurrence of some risks not listed in that compendium of risks. The logic is, if those risks materialize the reward will vanish. If not, it is a tribute to the bankers' maturity and the cause for swelling profits. The element of profit is loaded into the interest as an essential component. A banker arrives at a credit decision by the inter-play of his professional expertise, mental assessment of the borrower, aided by the diverse data - statements, statistics, ratios, percentages et al - complemented by his READING of the borrower/situation. Provided the data placed before him is accurate, his reading

of the customer/situation, becomes **the** deciding factor in extending the credit line. A winning banker reads **between** the lines, others just read! I am not talking of this invisible element in this context when I say, "inadequate description of the term RISK." I am talking of the inadequacies of the bankers in deciding upon their requirements. I call these risks as quantifiable risks. Many bankers base their judgment relying on the adequacy of the data placed before them and not by calling for the missing links. This is what I call as the inadequate description of risk.

- e) Lacunae existing in migration stage are not remedied. This is a simple problem but with a potential to cause damage. Data cleansing and data enrichment should be the preconditions to migrate to the new level of computerization. Many banks have overlooked this area and are content with the safe migration. This is a one-time exercise, which should be undertaken by the banks.
- f) There is a lack of understanding of technology among the senior bankers. Age does prove to be a barrier in assimilating technology faster. Today's generation adapts and adopts the current level of technology in real time. But, the older generation takes its time to comprehend technology.
- g) Increasing demands of technology are very expensive - Technology in itself is never secure or so it seems. The framework of technology is so fragile that it needs the support of so many security measures. The hallmark of human brain is that, unlike technology, it is totally secure. But technology keeps discovering the need for many modes of security. The vocabulary of technology keeps expanding with newer terminologies like

- DRP-Disaster Recovery Plans, Hot Sites, Networked environment, Data Storing and retrieval, Firewalls etc. Every new development assures enhanced safety and security of data, but with a hefty price tag attached to it.
- h) There is the threat of technology obsolescence. The banks are physically disappearing and banking is flourishing! The concepts like Internet banking, Phone banking and Mobile banking coupled with the mobile work-force like the Relationship Managers and marketers-on-foot, who can sell you anything from a Credit Card to a Housing Loan, have broken down the physical walls of bank branches. Today it appears as if we have reached the zenith of technology. But, tomorrow is another day! Wifi and Bluetooth, emboldened by the broadband seem to be the goodies of tomorrow. The assimilation of these technologies themselves will be an expensive proposition. Then comes the attendant risk. As of now wireless technology is not considered to be very safe and secure. That itself makes us pay for the security infra-structure. Thus, one level of technology becoming obsolete and the dawn of a new level of technology place a heavy monetary burden on the end users, apart from causing the logistic gaps.
- I) Lack of bankers with dual talent hands-on experience of banking and the capacity to understand the current level of technology makes a good bank executive. The slow-intake of technology by the senior bankers has created a piquant situation where by the time and energy spent on technology assimilation is much more than the time devoted to their core-competence namely banking. Any executive who has this dual talent demonstrates a migratory trend.

- j) Misplaced total faith in technology is another factor. Technology is what technology does and NOTHING more! Bankers get confused between their thinking faculties and the computing capabilities of the technology. One is not the substitute for the other! Technology is good when it is viewed from the angle of its limitations. The moment you assume it to be anything more than a catalyst, the problems start. The speed, the accuracy, the analytical strength and its multi dimensional, multimedia presentation are no substitute for the capacity to think.
- k) Capital Adequacy Ratio merely specifies the benchmarks of capital requirements, for indulging in every kind of banking activity. Adequate capital does not mean adequate cover towards risk management. Adequate capital only empowers a bank to indulge in specified banking activity and it provides no cover from the inherent risks. One should not hope to live longer merely by increasing the life insurance cover obtained by him! Still, should you choose to die, the stipulated insurance cover is certainly available for the asking.
- Basle II places considerable responsibility on the shoulders of the bankers. Basle II calls for a complete overhaul of banking and pinpoints the possible pit-falls. Again, the preparedness to adopt Basle II is misunderstood by the bankers as their umbrella to shield against the Risk management.
- m) Bankers assume three types of traditional risks viz
 Credit, Market, Operations to be the only risks.
 The other types of risks viz Reputational and Exchange Rate Risks are also equally potent ones.

- n) A new kind of risk is added to the list Information Risk. Today, the 'Branch' barriers are broken and networked single entity is in place. This itself happens to be a great risk for the uninitiated. Further, there is no geographical boundary for the banks, which is penetrated by a small gizmo called the mobile phone. Believe me, today a mobile phone is indeed capable of wreaking havoc in a technologically unprepared and unsafeguarded bank.
- There is no substitute to hard work, particularly 0) among the banking fraternity. The CONTROL duties allocated to them, to be performed by them and them alone, cannot be delegated to machines. Machines do not CONTROL anything. They merely translate your instructions into processes and actions. Human brain works on intuitions, a machine doesn't. Therefore, you have to instruct your machine in unambiguous terms. Computer is said to be a slave in the hands of its master and where the master falters, the roles get inter-changed! Some one has beautifully coined a joke that, a computer is just like your wife; it remembers every small mistake committed by you and pops it up at the least expected time.

8.1 RMA-Risk Management Architecture

Banks have realized that there is a lot at stake and have woken up to the realities of Risk Based Supervision. The stringent provisions of Basle II norms have given them an opportunity to clean up their stables. Compliance with CAR -Capital Adequacy Ratio, not an easy task, has added to the confidence level of the banks. Reserve Bank of India has also made it mandatory for all banks to fall in line with Basle II accord.

Thus, the banks have taken the Risk Based approach in their stride and have initiated many measures, such as,

- a. Setting up of an RMA Risk Management

 Architecture.
- b. Adoption of Risk-focused Internal Audit.
- Strengthening of MIS Management Information
 System and Information Technology.
- d. Addressing of HRD issues
- e. Setting up of Compliance Units.

Reserve Bank has drawn up a schedule for implementation of this transitional task.

CRISIL, the leading credit rating institution of India has drawn a road map for the implementation of IRM - Integrated Risk Management by Banks by March 2005.

CRISIL has drawn up another chart defining the datelines for IRM implementation. Most of the Indian banking industry has fallen in line and are geared up to perform in the IRM - Integrated Risk Management era.

9.1 Conclusion

As far as the structured Risk Management mechanism is concerned, we seem to be on course. Reserve Bank of India has also been relentlessly following up with the banks. As a result, the RMA-Risk management Architecture, is in place at most of the banks.

Compliance with Basle II norms is giving a common identity to Indian banks and also ensuring a level playing field to enter the international banking arena.

With the WTO provisions coming into being in a big way, Basle II norms being applied, core banking

solutions in place, at major banks, Risk Management Architecture having been built and Reserve Bank of India continuing to play the role of a friend, philosopher and guide, Indian banking, in 2005, is poised for a lot of action coupled with safety and security.

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Strategies for Radical Growth by Unleashing the Power of Disruptive Innovations

by Mr.Syham Ganesh S. & Prof.U.S.Rao

Essentially, innovations can be classified into two typessustaining innovations, aimed at improving the
performance of established products along dimensions
and valued by the mainstream customers; and disruptive
innovations initially under-performed compared to the
products in the mainstream markets, offering cheaper,
smaller or more convenient solutions to people,
traditionally locked out of the existing market due to
lack of money or skill.

Definition of Disruptive Innovation

- According to P.Thomond & F.Lettice (2002)
 "disruptive innovation is a successfully exploited
 product, service or business model that significantly
 transforms the demands and needs of a mainstream
 market and disrupts its former key players."
- To Joseph L.Bower & Clayton M.Christensen (1995),
 "Disruptive innovations often sacrifices performance along dimensions that are important to current customers and offers a very different package of attributes that are not (yet) valued by those customers. At the same time, the new attributes can open up entirely new markets."

In a nutshell, the idea of a disruptive innovation is that a new low-quality and inexpensive product enters a niche market, increases sales and eventually improves to the point that it displaces an existing high-quality product in the mainstream market.

Characteristics of Disruptive Innovations

The common characteristics of disruptive innovations are:

- * Disruptive innovations reshape the prevailing business model to earn profits in a new way.
- * They enable customers to do things that only experts could do before.
- * They find their first commercial footing in new, simple, undemanding applications.
- * They tend to gradually move up-market.
- * They change the basis of competition as they gradually take over a major share of the market.

Literature Review

Rob Landley (1999) says that disruptive innovations are new ways of doing things that initially don't meet the needs of the existing customers. To sell the new product, the company must find new customers in new markets who value what the new technology can do.

Clark Gilbert (2003) states that disruption actually develops in three distinct phases:

(1) In the first, the innovation creates a new, noncompetitive market independent of the established business. (2) In the second, the new market expands

and slows the growth of the established business. (3) In the third phase, the disruptive innovation, having improved greatly over time, significantly reduces the size of the old market.

Clayton M. Christensen (1997) opines that innovation is either sustaining or disruptive. Sustaining innovations are typically seen as improved performance of existing products. They are incremental and safe. Disruptive innovations, on the other hand, create new and conflicting value propositions at all levels and forces competitors and consumers to make reactive decisions.

Clayton M.Christensen, Mark W. Johnson & Darrell K.Rigby (2002) identify two strategies for creating new disruptive growth business: (1) Creating a new market as a base for disruption. (2) Disrupting the business model from the low-end.

Clayton M. Christensen & Michael Overdorf (2000) state that when thinking about how to respond to disruptive innovations, managers must take into account the unique resources-processes-value framework that defines a company and shapes its capacity to change.

Joseph L. Bower & Clayton M. Christensen (1995) state that the very processes that successful, well managed companies use to serve the rapidly growing needs of their current customers can leave them highly vulnerable when market-changing technologies appear.

Clark Gilbert & Joseph L. Bower (2002) argue that our responses to changes are often determined by how we perceive them. If we perceive a change as a threat, we tend to react defensively, taking immediate, aggressive action to protect ourselves. If we see the change as an opportunity, we tend to be more deliberate and reasoned in our response.

According to Constantinos Markides (1997), all companies have to decide three things at the strategic level - who is going to be our customer? What product/ services should we offer him? How should we offer these cost-effectively? The answers to these 'whowhat-how questions' form the strategy of any company and depends on what the company thinks its business is.

Rita Gunther McGrath & Ian C. MacMillian (1995) introduce us to a very important concept of 'discovery-driven planning'. Discovery-driven planning is a practical tool that acknowledges the difference between planning for a new venture and planning for a more conventional line of business.

Clark Gilbert and Joseph L. Bower (2002) provide certain strategies for pursuing disruptive innovations: (1) Separate the new venture for better performance; (2) Fund in stages; (3) Cultivate outside perspective; (4) Appoint an active integrator; (5) Modularize integration; (6) Consider acquisitions.

Methodology of the Study

This study is primarily qualitative in nature and is limited to the data obtained from the secondary sources like published articles in journals and magazines and company web sites. For the purpose of this study, twelve companies were selected from diverse industries. These companies are renowned for their innovation and have had an excellent track record over the past decade. The companies and their divisions chosen for the analysis include: Dell Computer Corporation, Canon photocopiers, Nucor Steel Corporation, Teradyne Inc., Wal-Mart Stores Inc., Intel Corporation, Bert Claey's Kinepolis, Accor's Formule 1 Hotels, Southwest Airlines, Honda, Nirma's soaps and detergents division and Arvind Mills. The

companies are chosen so as to ensure that as far as possible, the entire range of strategies employed by different companies for different products could be brought under the purview of the study.

Characteristics of Disruptive Organizations

The study reveals the following unique attributes of organizations that have successfully exploited disruptive innovations.

1. Small Size

Almost all companies which have adopted disruptive innovation have been small companies to start with. Large companies are essentially incapable of pursuing disruptive innovations because they target either new markets or the low end of existing markets, that are initially quite small and don't solve the growth needs of large companies. Even the profit margins in these markets are not attractive to large companies which require higher margins to absorb their high fixed costs. Example – Nirma was a local firm when it introduced its detergents which later stole away a significant market share of HLL. *Dell* was a small time player when it introduced its concept of selling directly to the customer.

2. Decentralized Decision Making

Disruptive opportunities are highly unpredictable and require dynamic decision-making. The organizations which have adopted disruptive innovation have encouraged decentralized decision-making. All sourcing, operating, marketing and pricing decisions are taken by the project manager responsible for commercializing the disruptive venture. Only the financing decisions and staff support such as accounting, human relations etc are provided by the top management. *Example – Teradyne's* Chairman, Alex d' Arbeloff created a new subsidiary called Aurora,

whose sole mission was to commercialize a low-cost CMOS/NT circuit tester. Its general manager was granted autonomy, capital and freedom to recruit star engineers from other divisions. Thus, freed from the decision-making processes of the mainstream organization, the Aurora team was able to find entirely a new market for test equipment, namely, microcontrollers, which proved to be a perfect beachhead from which to expand into markets with higher performance requirements.

3. Speed

Speed refers to the swiftness with which an organization responds to unexpected threats and opportunities. First-mover advantages are very important in case of disruptive innovations. It helps in building competitive advantage. Customer expectations in high technology markets change very frequently and the firms in the industry have to be extremely quick in responding to these changes. Example – Dell Computers provides a classic example of speed of response to change in technologies. Because Dell builds only to order, it does not have to dispose of its earlier versions of computers before coming out with the new variations. Hence, it enjoyed a first-mover advantage in bringing leading-edge component technology to the marketplace and could introduce new products faster than its competitors such as IBM and Compaq.

4. Flexibility of Operations

Flexibility refers to the ability of an organization to change, reconfigure and scale up its resources on demand in an uncertain environment. In order to respond quickly to the uncertainties associated with disruptive ventures, the organizations had to possess flexibility in operations, particularly in product

development. In order to counter the difficulties of forecasting demand for disruptive products and the rapid technological changes, an organization not only requires speed and efficiency of operations but also requires the ability to transform its business model to the changing needs and expectations of the customers. Example – The story of Honda's invasion of the North American motorcycle industry clearly indicates the need for flexibility; to learn from mistakes and quickly change the strategy. Honda initially forayed into the U.S. Market with its own versions of large bikes competing head-on with BMW and Harley-Davidson. The venture resulted in failure. However, the Honda team in U.S. was able to take advantage of an unexpected opportunity to sell its smaller bikes which were known as "Supercubs." They were able to take the low-end of the motorbike market in the U.S., from where they gradually moved up-market into larger and more powerful bikes until they were able to carve out a large share of the market.

5. Innovative Culture

The companies under the study had innovation deeply embedded in their culture. Corporate culture is the unique atmosphere or flavour radiated by the company as a whole. It also includes the organization's values, beliefs and norms of behaviour. Creating the right culture is the key to innovation. The companies which were successful in adopting disruptive innovations encouraged their employees to think out-of-the-box, encouraged risk-taking and also encouraged crossfunctional, cross-divisional interaction among employees. An innovative culture assists the organization in closing perception gaps between management and employees; nurture employee commitment to the work, strengthen leadership and maintain and build motivation for individuals and teams.

Example – Wal-Mart Store Inc. was founded on the principles developed by Sam Walton. These principles carried out everyday by hard-working and friendly associates have created a unique corporate culture that is the key to Wal-Mart's competitive edge. The basic beliefs guiding Wal-Mart Stores Inc. are: Respect for the Individual, Service to the Customer and Strive for Excellence.

6. Learning Organization

The organizations which were analyzed under this study were characterized by organizational learning, where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. The most important components of a learning culture are communication and openness; inquiry and feedback; adequate time; and mutual respect and support.

7. Ambidextrous Organization

Disruptive innovations are fundamentally different from traditional ways of competing in the industry and require very different strategies, structure, processes and culture. However in order to be successful, an organization needs to carry on traditional business as well as develop the disruptive venture simultaneously. This entails the ability to play two games at the same time and requires the company to create an ambidextrous organization. Ambidextrous organizations encompass two profoundly different types of businesses - those focused on exploiting existing capabilities for profit and those focused on exploring new opportunities for growth. The structure of ambidextrous organizations allows cross-fertilization among units while preventing cross-contamination.

Tight coordination at the managerial level enables the fledgling units to share important resources from the traditional units-cash, talent, expertise, customers and so on-but the organizational separation ensures that the new units' distinctive processes, cultures, and structures are not overwhelmed by the forces of business as usual. At the same time, the established units are shielded from the distractions of launching new businesses; they can continue to focus all their attention and energy on refining their operations, improving their products and serving their customers. Example-CDC which was a dominant supplier of 14inch disk drive, failed to take advantage of the opportunity when the 8-inch disk drive emerged. However, when the 5.25-inch generation arrived, CDC decided that it would face the new challenge more strategically by creating an ambidextrous organization. The company assigned a small group of engineers and marketers in Oklahoma City, Oklahoma, far from the mainstream organization's customers, the task of developing and commercializing a competitive 5.25inch product. And although, CDC never regained its original market share of 70 per cent, its Oklahoma City operation secured a profitable 20 per cent of the highperformance 5.25-inch drive market.

8. Risk-Taking

Companies adopting disruptive innovations, actively encourage risk-taking among its employees and management. Since new markets can not be discovered without taking a certain amount of risk, and since it is not possible to know in advance where the innovations may find application, these companies encouraged their managers to experiment with different markets and applications until the right one is discovered. *Example - At Intel*, the engineers are encouraged to experiment and mistakes are tolerated.

The company recognizes that entrepreneurs rarely get their strategies exactly right the first time. At Intel, learning from mistakes is an important element of innovation. When Intel developed its '286-microprocessor,' very little was known of the microprocessor market and Intel's internal forecast of the potential applications for its next-generation 286 chip did not include personal computers in its list of the fifty highest-volume applications! However, Intel experimented with various applications for its microprocessor and survived many false starts in its search for the major market for microprocessors.

9. Proactive

More often than not, in case of emergent technologies, the established firms wait until the application for these technologies become clear and markets become big enough to be attractive. However, in case of disruptive technologies, first-mover advantages are enormous and the firms which have been successful, have always taken the initiative to discover the markets for these technologies. Example - In the 1970s, Xerox was the market leader in the photocopier industry. Canon, realizing that competing head-on with Xerox could be fatal, decided to create a completely new market at the low-end of the photocopier industry-a market for the small, compact, personal copiers. This was a proactive strategy since no market existed at that time for such machines. Xerox did not respond to Canon's attack as it did not perceive Canon as a serious threat and did not expect low-end copiers to become such a huge market.

10. Technological Capabilities

Although service innovations and business model innovations are not uncommon, most of the innovations have been made on the strength of new

technology. The innovators have possessed unique technological capabilities that have allowed them to create new applications and develop new markets. However, possessing this technology alone does not guarantee success for the firm. The technology can be adopted either to make radical improvements along the dimensions which are currently valued by mainstream customers or it can be adopted to develop completely new products that provide product attributes different from existing products. The former is known as a sustaining innovation while the latter is known as disruptive innovation. Riding on their technological strengths, the innovators have been able to create competitive advantage by framing these technologies as a disruptive rather than sustaining innovation. Examples - Nucor disrupted the steel industry in U.S. by adopting a technology known as 'continuous thin-slab casting' technology - a way for steel to be continuously cast from its molten state into long, thin slabs that could be transported directly, without cooling, into a rolling mill. Rolling the white-hot, already thin slab of steel to the final thickness of coiled sheet steel was much simpler than the traditional task mastered by the integrated mills of reheating and rolling steel from thick ingots or slabs.

11. Committed and Supportive Leadership

The senior executives of the companies that have aspired to repeatedly create new waves of disruptive growth, have three major responsibilities: The first is to make a clear distinction between disruptive growth business and the mainstream businesses and determine through judgment which of the corporation's resources and processes should be imposed on the new business and which should not. The second responsibility is to create a disruptive growth engine that is capable of repeatedly launching successful

growth businesses. And the third responsibility is to sense when the circumstances are changing and to keep teaching others to recognize these signals. Examples - There are numerous examples that indicate the importance of the CEO in building an innovative organization. Jack Welch at GE was instrumental in the launch of the disruptive growth business called GE Capital that created several years of profitable growth for GE. The role of Sam Walton at Wal-Mart Stores Inc., that of Michael Dell at Dell Computers, Andrew Grove at Intel, Alex d' Arbeloff at Teradyne, Akio Morita at Sony and Bill Gates at Microsoft are only too well-known to require any explanation.

12. Empowered Employees

In almost all innovative organizations, we find that all the employees are empowered to take part in and develop the strategy. This speeds up the decision making process and ensures quick response. The employees could choose their own challenges and work strategically. Such employees work with a lot of passion in a corporate culture that includes effective internal communication which respects debates and stimulates challenges. Example- *Dell* has instituted a successful workplace program based on the following guidelines:

Explain the big picture of the company and how this influences their employment and growth, provide feedback on the employee's performance, make sure they understand the company's expectations, involve the employee in the decision-making process whenever possible, listen to their ideas and suggestions, pay for employees to attend workshops and seminars, offer on-site classes where employees can learn new skills or improve upon old ones, and assign them a coach or mentor to help them with development.

13. Customer Participation in Innovation Process

Customers are an important element in the innovation process. They provide valuable feedback to the innovators during the new product development process that is crucial not only to develop applications that would satisfy customer needs but also for forecasting future demand for a particular technology. Example-Dell starts its innovation process by asking its customers, "What would you really want this thing to do? Is there a different way to accomplish that?" Then it meets with its suppliers and asks, "Can we do this in a different way?" Then it tries to come up with a totally different approach that exceeds the original objectives.

14. Superior Customer Knowledge

Most of the innovating companies recognize that customers are the most important source of information and a key component of the innovation process. Hence they maintain large databases of customers and make detailed analysis of their purchasing patterns, demands, needs etc. Example-Direct contact with customers helped *Dell* gain a superior understanding of specific customer needs. Each of its several market segments had unique computing needs and different buying processes. By organising its marketing and sales functions around distinct customer groups, Dell was able to address customer needs with greater precision and speed.

15. Teamwork

When new challenges require different people or groups to interact differently than they have habitually done, managers need to pull the relevant people out of the existing organisation and draw a new boundary around a new group. New team boundaries enable or facilitate new patterns of working together that ultimately can coalesce as new processes-new

capabilities for transforming inputs into outputs. When an organization wants to create new capabilities for exploiting new technologies, they organize what is known as 'heavyweight teams,' which are tools to create new processes-new ways of working together that constitute new capabilities. Businesses have found that teams improve productivity, increase morale, and empower employees.

Strategic Framework for Launching Disruptive Innovations

An attempt is made to provide a strategic framework for identifying and exploiting disruptive opportunities. However, it needs to be mentioned that adopting these strategies does not guarantee success. They act only as general guidelines to help develop a systematic approach to decision-making in the face of disruptive challenges and improve the probability of success in launching disruptive ventures. Each organization needs to develop its own strategy based on these guidelines, taking into consideration its unique strengths and weaknesses and also the unique challenges faced by it.

1. General Strategies

a) Define the Strategic Significance of Innovation

The organization needs to recognize innovation as an important element of corporate strategy. The involvement of the top management is critical to success with new technologies. In order to successfully exploit new technologies, the management needs to lay much emphasis on Research and Development. A top management team needs to be made responsible for innovation and new product development. Example - Intel has always emphasized on innovation as an important element of their business plan. According to an Intel executive, "We have been

asking 'what's next' since the very beginning. Looking at a better way, developing a new approach, because at Intel, our pursuit of innovation never ends."

b) Establish A Common Definition for Innovation

The top management needs to establish a common definition for innovation in the organization and articulate it to all employees. The distinction between sustaining and disruptive innovations needs to be made and clearly communicated to all employees, because most companies have well-conceived processes for identifying and pursuing sustaining innovations, but few have systematic processes in place to identify and track potentially disruptive technologies. The management needs to develop separate processes to tackle the two kinds of innovation. Example - At *Intel*, innovation means, "continually advancing silicon technology and moving the industry forward in order to empower people to do more, to enhance their knowledge, to strengthen their connections, to change the world."

c) Build an Early Monitoring System

Emerging technologies signal their arrival long before they bloom into full-fledged commercial success. However, these signals are generally weak and not easily detectable. These weak signals usually come from the periphery where new competitors are making inroads, unfamiliar customers are participating in early applications and unfamiliar technology or business paradigms are used. The organization needs to build an early monitoring system to track the changes on the basis of competition and to recognize early whether a new strategic position is emerging in the industry that is likely to radically change the way business is done. Example-Dell has instituted systematic processes to recognize emerging technologies. It also has an enormous amount of business and market intelligence available within the

corporation because of its direct marketing channel. All employees are trained to take comments from customers and organize these comments. They also use programs such as their Platinum Councils held with corporate clients twice a year to understand customer and market needs.

d) Build a Learning Capacity

The varied sources of information flowing from the periphery create a lot of noise. This information must be absorbed, communicated widely and discussed intensively so as to understand its full implications. For this, the organization needs to build a learning capacity by adopting the following steps:

- 1. Encouraging openness to diverse viewpoints.
- 2. Challenging the prevailing mindsets.
- 3. Experimenting continually.

Example-Intel strives to provide an environment in which people of diverse backgrounds are valued and rewarded, encouraging innovation and high levels of fulfilment and productivity. A world-wide emphasis on open communication, intelligent risk-taking and learning from failures has allowed Intel to come up with successful innovations.

e) Framing the Challenge as Threat or Opportunity

Having identified an emerging strategic position, the firm needs to address it in an appropriate manner in order to ensure commitment to the disruptive technology and at the same time provide for flexibility to evolve a creative response to such technology. Framing a new phenomenon as a threat elicits a far more intense and energetic response. However, if something is perceived as a threat, then people tend to become rigid in their response-they tend to focus

everything on countering the threat in order to survive. This makes them inflexible. If a phenomenon is perceived to be an opportunity, then people tend to craft a more creative response to it. Thus when faced with a disruptive technology, the management of an established firm needs to initially frame it as a threat in order to ensure resource commitment to address the new technology. Later they must shift the responsibility for the project to an autonomous organization that can frame it as an opportunity. In case of start-up firms, the disruption represents a pure opportunity. Example -When Nirma attacked the low-end of HLL's detergent business, HLL initially ignored Nirma's strategy. However, when Nirma's sales steadily grew, it began to perceive a threat to its detergent business. This forced HLL to act quickly. Gradually, HLL began to realize that there was an enormous opportunity to make money at the lowend of the market. In 1995, HLL responded with its own offering for this market. HLL's new detergent was called Wheel, which became an enormous success with the Indian masses.

f) Manage the Process of Strategy Formulation

In managing the strategy development process, managers must attempt to match the process to the circumstance. Essentially, there are two distinct processes of strategy formulation-deliberate and emergent. The deliberate strategy formulation process is conscious and analytical. It is often based on meticulous analysis of data on market growth, size of market segment, customer needs, competitors' strengths and weaknesses, technology trajectories etc. In contrast, emergent strategy formulation process bubbles up from within the organization and is the cumulative effect of day-to-day prioritisation and investment decisions made by middle managers, engineers, salespeople and financial staff. Emergent strategies result from

managers' responses to unforeseen problems or opportunities. Emergent strategy processes should be allowed to operate in circumstances in which the future is hard to forecast and in which it is not clear what the right strategy should be. On the other hand, the deliberate strategy processes should dominate in circumstances where a winning strategy has become clear, because in those circumstances effective implementation often spells the difference between success and failure. Example - In 1971, when Intel developed the microprocessor, a large part of its revenues were coming from its DRAM (Dynamic Random Access Memory) business. However when Japanese attacked this market with low cost versions, the profit margins on DRAMs began to fall. Although the managers at Intel were concentrating on salvaging the DRAM business, Intel's resource allocation process, which is based on profit margins on different products, systematically diverted manufacturing capacity away from DRAMs and into microprocessors. This occurred without any explicit management decision. Finally, Intel dropped DRAMs from its product line and became a microprocessor company.

2. Organization and HR Strategies

a) Create a New Organizational Space for Disruptive Ventures

When a company needs different resources, processes and values in order to respond to a disruptive innovation, it must create a new organizational space where those capabilities can be developed. Organizational separation helps in creating flexibility. The company has three options:

Develop capabilities internally: In order to create
the unique capabilities internally, the management
needs to create a heavyweight team to pursue
the innovation.

II. Spin-off an organization: When a disruptive innovation requires a different cost structure in order to be profitable and competitive or when the current size of the opportunity is insignificant relative to the growth needs of the mainstream organization, then, a spinout organization may be required.

III. Create capabilities through acquisition: You can purchase capabilities by acquiring a company that possesses the required capabilities. If the capabilities of the acquired firm reside in the processes and values, then the acquiring company should not integrate the acquisition into the parent organization. Integration will vaporize the processes and values of the acquired firm. It would be better to let the business stand alone and to infuse the parent's resources into the acquired company's processes and values.

b) Start with a Small Organization

Projects aimed at commercializing disruptive technologies should be implanted in organizations small enough to get excited about small-market opportunities.

c) Appoint an Integrator

Creating a separate organization for a disruptive project and providing autonomy to the project manager is not enough for success. The CEO or one of the top executives in the mainstream organization should be the integrator between the mainstream organization and the disruptive venture. Although adequate autonomy is provided to the project manager, a senior officer's involvement is always necessary for setting the financial expectations, for releasing funds from the parent organization and to monitor the progress of the disruptive venture. Example-When *Teradyne's*

chairman, Alex d'Arbeloff, created a new subsidiary called Aurora in order to commercialize the low-cost CMOS-NT circuit tester, its general manager was granted autonomy, capital and freedom to recruit star engineers from other divisions. However, Alex d'Arbeloff himself presided as Chairman of Aurora's board of directors, because he believed that with things customers weren't asking for and in markets that are too small to be interesting, without the backing of the CEO, nothing was ever going to happen.

d) Recruit managers based on their learning and experience

The management skills and intuition that enable people to succeed in new assignments are shaped through their experiences in earlier assignments. Hence it is necessary for the candidate to have had experience with starting a new business.

e) Spell out expectations regarding innovative behaviour

The challenge to the HR executive is to continually find new ways to spur the employees at every level and in every part of the organization to think boldly and creatively about what such thinking might produce. The role of HR executives is to push people to see beyond their narrow job functions.

f) Publicize Innovative Behaviour

When any employee comes up with a brilliant suggestion or an idea, then the news about it must be spread throughout the organization. This encourages innovative behaviour.

g) Share Information and Knowledge with Employees

Employees and managers alike don't understand enough about the way the organization works, the

needs of the customers, what the goals of the company are, and what the numbers mean etc to know how to meaningfully contribute to the company's strategic success. Knowledge of the company's financial and growth objectives makes employees feel that their work and their ideas are part of a larger whole. By showing the employees where and how they can impact the numbers, they get ideas on how they can personally contribute.

h) Provide Basic Training in Creativity

Teaching the basics of innovation literacy gives people the tools and the training to sort through their own ideas and better gauge the potential of the idea before going further. Then, if it meets the criteria, they themselves can champion the idea more effectively, and if it is a simple idea, affecting their own work or department, they are empowered to simply go ahead and do it.

i) Provide Advanced Innovation Training to Select Groups

Select employees must be introduced to new approaches to innovation. Pursuing new markets, latest techniques in seeking customer feedback, idea management, strategies, rapid prototyping and new venture nurturing etc, as practiced by the leading firms must be taught. These programs help employees to think like entrepreneurs and take bold steps towards change.

i) Establish Innovation Metrics

You cannot manage what you don't measure. Innovation metrics motivates managers and leaders across your organization to embrace innovation broadly and give it ongoing priority. The adage "that which gets measured gets done" is no less true of the

innovation process than any other. Once innovation goals are broadly communicated and rewards for achieving milestones are established, the pace of ideas to implementation accelerates. Innovation metrics need to be leading indicators. The most popular form of measuring innovation progress is to plot percentage of this year's sales revenues that come from new products and services. Another measure is the number of new and promising ideas in your new product pipeline.

k) Reward Innovation

What gets rewarded gets done. This is true even in the case of innovation. Innovations need to be rewarded both intrinsically and extrinsically. However, in innovation circles, it is a widely accepted notion that what motivates people to innovate is not extrinsic rewards but intrinsic. Sometimes, simply being invited to participate in the new project is a reward in itself. Innovation can also be rewarded through recognition. When a senior person publicly lauds the accomplishments of an individual or a team, it motivates people to innovate.

3. Product Planning and Development Strategies

a) Identify Product/Service Attributes Valued most by Mainstream Customers

Having laid the foundation for an innovative organization that distinguishes disruptive from sustaining innovations and having identified a new technology, the firm then has to develop a disruptive product or a service. The first step is to identify the attributes that are currently valued most by the mainstream customers. A disruptive products or service should not try to compete in these dimensions. Example-When *Canon* disrupted Xerox with its personal photocopiers, the mainstream customers valued product attributes such as faster photocopying and ability to make multiple copies. Had

Canon tried to compete against Xerox on these product attributes, it would surely have perished just as IBM had failed when it tried to introduce its own version of photocopying machines. This is because Xerox had developed tremendous expertise and competitive advantage in that area.

b) Identify Performance Oversupply

The firm needs to understand that the pace of technological progress in any industry frequently exceeds the rate of performance improvement that mainstream customers demand or can absorb. Hence products or services whose features and functionality closely match market needs today often follow a trajectory of improvement by which they overshoot the needs of the mainstream market tomorrow. This is known as 'performance oversupply.' When this happens, the basis of competition undergoes a change and this represents an opportunity for the disruption. Example - In the 1960s, discount retailers such as Wal-Mart attacked the low end of the department stores' market - nationally branded hard goods such as paint, hardware, kitchen utensils, toys and sporting goods - that were so familiar in use that they could sell themselves. Customers in this tier of the market were over-served by department stores, in that they did not need well-trained floor salesmen to help them get what they needed. This provided an opportunity for Wal-Mart to disrupt the Department Stores by attacking the low-end of their market.

c) Change the Basis of Competition

When there is performance oversupply in terms of one particular aspect of product attribute, then the emphasis gradually starts shifting towards the next important attribute in the 'buying hierarchy' of the mainstream customers. The buying hierarchy consists of four components or aspects of product

attributes - functionality, reliability, convenience and price. Where there is performance oversupply in terms of functionality offered by the mainstream products, the disruptive product or service, rather than trying to outdo the performance of the existing products should focus on providing the other three attributes. The product/service must be simple, reliable and convenient to use. Example - there was a time when IBM was the unchallenged market leader in desktop computers. Computer technology was improving at a rapid pace to the extent that the customer expectations did not keep up with them. Hence a gap was created in the performance demanded and performance provided. There was performance oversupply in terms of product functionality. It was also a time when the computer hardware components had become modularized and all competing products were equally reliable. The emphasis was slowly shifting towards the lower aspects of product attributes, namely, convenience and price. It was then the Dell computers came up with its unique, on-line business model of selling build-to-order computer systems offering these products at much lower prices than the existing competition. It was also increasingly convenient for the customers who could now sit at home and order products on-line and get them home delivered. Dell's strategy proved to be a runaway success.

d) Provide for Developmental Flexibility

Since we do not know the ultimate market for the product or how it will be ultimately used, we must design a product platform in which feature, function and styling changes can be made quickly and at low cost. The need for such changes may arise because of the inherent difficulty for the customers in specifying their needs at the outset of the product development process and also because customer needs evolve rapidly. Example - Dell'uses this strategy to great effect. It has a set of basic components that are standardized. The remaining

hardware is divided into several key modules, allowing a wide choice of customer specification. This strategy allows Dell to enjoy first-mover advantages in bringing leading-edge component technology to the marketplace and introduce new products faster than its competitors such as IBM and Compag.

e) Emphasize on Low-Cost

It is important to hit a low price point in order to penetrate new markets or to take the low end of existing markets. Minimizing the major cost commitments allows a venture to pursue the small orders that form the initial lifeblood of disruptive businesses in their emergent years. Example - Dell'derives cost advantage in three areas: component purchasing, inventory and working capital; and selling and administration. First, since the cost of computer components kept declining, and because Dell purchased its components on a JIT basis, it enjoyed a lower component cost-nearly six per cent lower than that of its competitors. Second, by holding minimal inventory, Dell was able to save on the interest of financing the inventory as well as warehousing and storage costs. Dell was also able to minimize the cost of product obsolescence, as it did not hold inventory of finished goods. Since Dell also insisted on upfront payment by customers, its investment in accounts receivable was also minimal. Third, bypassing the retailer and establishing a direct interface with customers via phone and/or the Internet eliminated the typical markup and extra sales force of the middlemen, as well as the need for physical space at distributor's showrooms.

4. Marketing and Distribution Strategies

a) Emphasis on Learning and Discovery

Managers need a very different approach towards marketing of disruptive technology because failure is intrinsic to the search for initial market application for the technology. The emphasis should be on learning rather than on implementation. It is not possible to forecast or predict with any degree of accuracy, the size of the markets for disruptive innovations. Example-When Intel developed its microprocessors; it was only through trial and error that it was able to discover the personal computer as its major market.

b) Observe Customers Rather Than Listen to Them

In case of disruptive innovation that target new markets, the marketing strategy must be based on observing customers and not listening to them. This is because the customers themselves do not know the potential of the technology and the application for which it can be used. Through successive introduction of prototypes and seeking customer feedback, the organization and the customers, together must discover applications for the disruptive technology. Example-Honda's experience in the North American motorcycle market illustrates, markets for disruptive technologies often emerge from unanticipated discoveries. Such discoveries often come by watching how people use products rather than by listening to what they say.

c) Circumstance-based Market Segmentation

Efforts to commercialise new products and technologies often fail because managers make mistakes in the very first step-market segmentation. They often fail because managers segment markets by product type, by price point, or the demographics or psychographics of their customers. Most of the failures can be avoided if the managers get the market segmentation right. Managers seeking to forecast the demand of disruptive products/service need to make 'circumstance-based' market segmentation in order to assert what features, functions and positioning will cause customers to buy the product/service.

Example - Honda's strategy to invade the North American motorcycle industry initially failed because Honda failed to understand for what the Americans use their bike for. In Japan bikes are used mainly by distributors and retailers in congested urban areas to make small deliveries to local customers. However, in U.S., people used motorbikes primarily for long distance riding over the highways. Thus the bikes were driven at high speeds for extended periods. Hence, Honda's understanding of engine design turned out to be incorrect and the engine sprung oil leaks and clutches wore out very quickly. Later, when Honda made a circumstance-based segmentation of the American market, they were able to recognize that the small bikes that Honda sold in Japan were being used by the Americans for fun and sports-particularly for dirt biking. Thus they were able to formulate a winning strategy.

d) Redefine Distribution Channel

Choosing the correct distribution channel is extremely critical to success in commercialising disruptive innovations. This is because distributors and retailers also need to grow through the innovation. It must help them move up-market into higher-margin tiers. Distributors who are currently handling the company's mainstream markets may be unwilling to take up the disruptive product, as the product is a threat to their own business. As the product does not match with their business model and profit formula, and also because the new product may cannibalise their existing business, the company will face stiff resistance from its dealers when it tries to introduce a disruptive product. Hence the company cannot rely upon its traditional distribution channel to market its disruptive products and needs to redefine its distribution channel. Example-When Honda began its disruption of the North American motorcycle market with its small, cheap Super cub bike, the traditional motorcycle dealers who handled Harley-Davidson motorbikes refused to carry the

Honda product. Honda's business took off when it began to distribute through sporting goods retailers, because it gave those retailers a chance to migrate toward higher-margin product lines.

e) Advertising and Branding

Having done circumstance-based market segmentation and also developed products appropriate to address the circumstance, the management needs to formulate its advertising and branding strategy also based on circumstance. The company needs to communicate to the circumstance and not necessarily to the customer. It can communicate to the circumstance with a brand, if it develops the right branding strategy. Thus, when customers find themselves in a particular circumstance, they will think of the brand instinctively and know what product to purchase in order to get that job done. Example - When the marketing managers at Intel were faced with the question about what branding strategy to adopt for their microprocessors, they asked themselves the critical question, "What is it that the customers want from a PC?" The obvious answer was that they wanted higher and higher processing speeds. However, until that time the customers were not well aware about the importance of what was "inside" their computer. Few mainstream consumers knew anything about the processor, even though it was the "brain" that powered the computer. Hence, the advertising efforts had to be focused towards creating awareness about what is inside the computer and make them realize that the speed of the microprocessor chip is the most important criteria for the performance of any PC. That is when they decided to launch the "Intel Inside" branding campaign. Today, PC users can recite the specification and speed of a microprocessor like experts and the awareness of "Intel" has grown along with the awareness of the chip. Today people are able to associate the name "Intel" with technology leadership, quality and reliability. The credit for this should be given to the Intel Inside® Program, which was launched in 1991.

5. Financing Strategies

a) Categorize the Sources of Funding

It is important to make the correct categorization of the sources of funding. The traditional methods of categorization such as venture capital or corporate capital, public or private capital, equity or debt etc are irrelevant for our purpose. Instead, the managers have to make a circumstance-based categorisation, which is based on the investor expectations that accompany the funding. Based on investor expectations, the various sources of funding can be classified into: patient for growth but impatient for profit; impatient for growth and profit; and, patient for growth and profit; and, patient for growth and profit. Making such a classification can assist the management to select the appropriate source of funding according to the circumstances.

b) Select the Appropriate Source to Match the Strategy Development Process

The type of capital that the corporate executives provide to fund new growth businesses represent the fundamental early choices when launching these businesses because the type and amount of money that managers accept define the investor expectations that they will have to meet. These expectations heavily influence the types of markets and channels that the disruptive venture can target. The best type of capital during the early years of a disruptive business is "patient for growth but impatient for profit." Disruptive ventures start small and cannot be expected to grow quickly, however they need to generate quick profits so that managers do not commit too much into lossmaking projects. Expectations of early profit also help a venture's managers to keep the fixed costs low. It is

important for a disruptive product to have a low fixed cost as it has to compete against non-consumption or compete in the low-end of an existing market, where prices have to be low.

c) Make Investment Commitments in Stages

The top executives should control the flow of investment into the disruptive venture in order to ensure that the project does not get deviated at any point of time. In the initial stages of a disruptive venture, when things are not very clear, we need to maintain flexibility by keeping our options open and changing directions boldly and quickly when needed. Hence, it is desirable in the early stages of exploration, to keep a number of options open by only committing investment in stages. Additional resources must be committed only as the business model gets sharpened and the market is better understood and as the management team identifies and begins to develop new markets.

6. I.T. Strategies

Information Technology is a vital component of any organization and is a very powerful innovation tool. Organizations must use Information technology to perceive, interpret, decide and act swiftly on the incessant irregularities in their business environment. Information technology helps the organization to speed up the whole cycle of detecting and responding to both internal and external changes. It enables the organization to make the information available at the right places at right time and facilitate real-time decisionmaking. The organization should ensure that its information system preserves the data quality and is able to generate information required by decision makers by integrating data from various sources. The people in the organization should be provided adequate training to operate the system so that they may generate the required information from the system.

Conclusions

Managers seeking to exploit disruptive technologies can improve their odds of success by crafting their strategies in a systematic manner, keeping in mind the organizational attributes that are incidental to success and following the guidelines that have been elucidated in this article. It must also be noted that strategy is not a set of isolated tactics but a closely linked network of activities that is aimed at building a sustained competitive advantage for the organization. The guidelines that have been suggested are not something to pick and choose from. They are a chain of linked activities that form a strategic fit. In order to achieve such a strategic fit, the activities need to be consistent between each other and also with the overall strategy.

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SMS Technology Adds New Dimension to Investment and Business

(An Analysis and Overview)

by Prof.S.N.Roy

Customer Usage and Market Growth

There is no doubting the success of the short message service; the market in Europe alone has reached over one billion messages despite little proactive marketing by network operators and phone manufacturers. Key market drives over the next two years such as the Wireless Application Protocol (WAP) will continue this growth path.

The article covers how SMS can be used as a tool to investment management. The issues are analyzed as:

- 1) Customer usage and Market Growth
- 2) SMS Messaging Milestones
- 3) Computer Application using SMS
- 4) Corporate Application using SMS
 - CORPORATE EMAIL
 - AFFINITY PROGRAMS
 - MOBILE BANKING
 - ELECTRONIC COMMERCE
 - VEHICLE POSITIONING
 - JOB DISPATCH
 - OVER-THE-AIR
 - REMOTE MONITORING
- 5) SMS Roaming
- 6) The Future of SMS—Introducing the long message service and SMS Centers Comparison.

SMS Messaging Milestone

So how have these network operators developed their messaging volumes to such a high degree? How can we develop our own messaging market? What the factors that are driving the continue growth in the SMS market and to what degree?

1. First Generation SMS Centre

The network operator needs to purchase its first generation SMS Centre as part of the network-commissioning plan. The initial SMS Centre may be simply a voice mail platform module or alternatively a stand-alone SMS Centre. It is not possible to make the Short Message Service available without an SMS Centre since all short messages pass through the SMS Centre.

Voice Mail Notifications and SMS Mobile Terminate

The network operator sees SMS as a "talk box option"something to say that it does have on its network.

Often SMS Mobile Terminate Services are offered along
with voice mail notifications, which account for the
vast majority of SMS traffic on the network-typically
over three-quarters.

3. SMS Mobile Originate

The network operator launches SMS Mobile Originate to give customer true two-way SMS capability.

Customers experiment with the service and work out new uses for it. Addition of SMS Mobile Originate typically leads to 25 per cent increase in overall SMS volumes being handled.

4. Email

Additional of a wireless internet/mobile email service often follows, typically with the customer's mobile number becoming part of the email address they are allocated as part of the service. Emails sent to that address is forwarded as a short message to their wireless phone. Such a service tends to be popular with customers, especially in markets where Internet penetration is low and people don't already have an email address. This typically leads to 20 per cent increase in overall SMS volumes being handled.

5. Information Services

These services typically start with mainstream content such as news, travel, weather and sports and over time, new information providers are sourced that offer lifestyle services such as horoscope and jokes. Because there is typically a lot of work involved in sourcing and setting up content, these services tend to build up slowly, typically accounting for about a 10 per cent increase in SMS volumes being handled.

6. Business Partners Program

The network operator starts to see independent companies experimenting with SMS – based applications and offering these on a regional or company – specific basis. To encourage these developments and assist in their widespread deployment, the network operator hires a person whose sole responsibility is to manage relations with these business partners and help them to get any technical or commercial support they need. The aim is to try to get the business partners to deploy their

applications using their network's SMS services rather than those of their competitors. Because vertical market applications can account for high messaging volumes, the introduction of a business partner's program can soon lead to a further 20 per cent increase in overall SMS message volumes being handled by the network.

7. Second Generation SMS Center

The network operators have seen gradual but significant increases in SMS traffic volumes as these initiatives have been taken and awareness of SMS builds.

Then they often find that their SMS Centre capacity is starting to be challenged and need to expand the existing platform or purchase an industrial strength SMS Centre from another supplier. This then removes any constraints in handling messages, and may lead to corporate customer complaints about reliability at peak times falling, typically leading to a 10 per cent increase in overall SMS message volumes.

8. National SMS Interworking

The additional of interworking between network operators who are competing in the same geographical market gives customers to both networks the opportunity to use SMS in the same way as they do voice. Just as they can make a voice call to each other's phones, so too can they send short messages to each other. Enabling this capability can rapidly increase the number of available messaging destinations, thereby increasing the value and use of SMS. As such, adding national SMS interworking can lead to an uplift of 50 per cent in SMS message volumes.

By this time, the total use of SMS on the network has reached "Critical Mass." There are sufficient regular users and awareness of and momentum behind the services.

SMS has become an integral and important part of many customers' everyday business and personal lives. Facilitating international SMS roaming is also important, particularly in land–locked countries where border crossing is frequent.

9. SMS for Prepayment

The next quantum leap in SMS traffic volumes is caused by the introduction of SMS for prepayment customers. These customers pay for their cellular airtime as they go rather than having contracts. Enabling the prepay customers to send short messages causes large traffic uplifts because the typical young person who is the main user of prepaid services is also ready, willing and able to manipulate the phone keypad and originate short massages. When customers are cost conscious, they tend to use SMS to let their friends know about changes in meeting arrangement and so on, calculating that this is less expensive than making a voice call to communicate the same information. An increase in SMS traffic of 100 per cent (sometimes more) is not unusual when SMS for prepay is introduced.

For example, as we saw at the start of the guide, whilst Vodafone in the UK had more postpaid customers than prepay (three million postpaid, two million prepaid), the prepay customers sent more than twice as many short messages as the postpaid users.

10. Predictive Text Input Phones

Because simple person-to-person messaging is such an important component of total SMS traffic volumes, anything that simplifies message generation is an important enabler of SMS. Predictive text input algorithms such as T9 from Tegic that anticipate which word the user is trying to generate significantly reduce the number of key strokes that need to be made to input a will typically lead to an average uplift in SMS

traffic of 25 per cent per enabled user. These predictive text algorithms support multiple languages.

11. Standardized Protocols e.g. WAP

The introduction of standardized such as SIM Application Toolkit and the Wireless Application Protocol (WAP) contributes to an increase in messaging usage by providing a standard service development and deployment environment for application developers and business partners. These protocols also make it easier for users to reply to and otherwise access messaging services through the provision of custom menus on the phone. As such, whilst these protocols are only a means to an end and not new messaging destinations or services in their own right, they are likely to lead to a 10–15 per cent uplift in total SMS volumes.

Terminal Developments e.g. Smart, Handheld Computers

The introduction of more friendly and easy to use terminals contributes to increases in messaging usage by providing simpler access to messaging services. Terminals such as smart phones make it easier for users to originate, reply to and otherwise access messaging services through the provision of a QWERTY keyboard rather than the limited keypad on standard mobile phones. As such, whilst these terminals are only a means to an end and not new messaging destinations or services in their own right, they are likely to lead to a 10–15 per cent uplift in total SMS volumes.

As such, there are various steps that mobile carriers can and should take spur the development of SMS usage. Each of these steps in complementary and useful in making SMS a success. It is the combined effect from these steps that has led to the significant and almost exponential growth in the usage of SMS by many development network operators in the late 1990s.

Consumer Applications Using SMS

The vast majority of SMS usage is accounted for by consumer applications. It is not uncommon to find 90 per cent of a network operator's total SMS traffic being accounted for by the applications described in this next section. The main consumer applications based on SMS are:

Once users have familiarized themselves with reading and sending short messages, they often find that SMS is a useful way of exchanging information and keeping in touch with friends. This is particularly so when the recipient is also able to reply to messages for two-way communication. If the recipient of the short message is unable to read or reply to it, then clearly the effectiveness of using SMS as the communications media is much lower. This is one of the reasons why simple person-to-person messaging is popular with many young people, a group that is generally more willing to learn how to use new technologies such as SMS. As such, simple person-to-person messaging generates a high volume of short messages.

SMS-based chat services are an emerging application area. It remains to be seen how willing the participants in the chat groups are to pay for EVERY message sent to the chat channel. It is likely that commercial chat services will let participants select which messages they receive on their mobiles according to who the message sender is.

Corporate Applications Using SMS

Corporate applications that use the Short Message Service are currently few and far between. Most of the SMS messaging volumes are generated by consumer applications. The reasons are the older age of corporate mobile phone users and their lower price sensitivity, particularly since mobile phones bills are

usually paid by the company. Corporate users are less willing to learn how to and make the effort to send a short message—they tend to use voice as their primary communications method. The main corporate applications based on SMS are:

Corporate Email

The Short Message Service can be used to extend the use of corporate email systems beyond an employee's desk and office PC. With 40 per cent of employees typically away from their desks at any one time, it is important for them to keep in touch with the office at all times. Corporate email systems run on Local Area Computer Networks (LAN) and include Microsoft Mail, Outlook, Outlook Express, Microsoft Exchange, Lotus Notes and Lotus cc: Mail.

Corporate email notifications are similar to Internet email notifications. Users are given information such as the sender and subject of the email. Any emails of a business or personal nature that are sent to the corporate email address can be sent out over the wireless network.

Because unlike Internet email notifications, corporate email services tend to use the existing corporate infrastructure and email address, this kind of email application tends to generate significant average quantities of short messages per user. Very few corporations have so far extended their office email systems out to the wireless environment, leaving a large opportunity for the deployment of such services.

Affinity Programs

Some mobile network operators view the development of the Short Message Service as low down in their overall priorities—because few users select the mobile network solely or primarily on the basis of SMS. However, affinity programs—which are also known as

lifestyle packages—are a large opportunity for mobile network operators with the potential to secure large numbers of new customer, in which SMS is an integral part of the offering.

Affinity programs are the result of collaboration between mobile carriers and other companies in different industries with large customer groups. Affinity partners include television companies, sports clubs, supermarkets and other retailers, airlines and banks. SMS can be used to provide customers with all kinds of reminders and information such as frequent flyer miles status, overdue videotape rentals, appointment reminders and prescription drug pick-up notifications.

All parties to affinity programs can potentially benefit from the partnership-mobile network operators gain access to a largely new set of potential customers and affinity partners get to offer their customers new convenient services to their customers-offering differentiation possibilities against their competitors.

For affinity programs, the mobile phone may be branded with the affinity partner's logo and may have custom and personalized packaging. The route to market—i.e. the sales channel for the affinity product—is likely to be different from that of standard mobile phone purchases. Typically, the customized phones are marketed and distributed using direct mail—customers receive information about the affinity program through an insert into their statements or bills and they can then sign up and receive the package containing the mobile phone by post. A single bill, lower rates and easy access to the services are often features of the affinity package.

Mobile Banking

Let us take closer look at a specific kind of affinity program—mobile banking.

The successful implementation of mobile banking programs incorporates several different elements discussed in this guide, such as information services and SIM Application Toolkit.

Affinity program and related lifestyle packages are a fast growing area of mobile communications, because as competition between network operators increases, differentiation and customization for specific user groups will be necessary to extend mobile phone penetration and usage. As such, they are likely to be a significant generator of short messages.

Electronic Commerce

Electronic Commerce applications involve using a mobile phone for financial transaction purpose – this usually means making a payment for goods or transferring funds electronically. Transferring money between accounts and paying for purchases are electronic commerce applications.

The convenience of paying for purchases using SMS must be weighed against the related issues of security, integration with the retail and banking hardware and systems, and money transfer issues. However, this area of electronic commerce applications is expected to contribute to growing SMS traffic in the Customer Service. By providing mobile phone customers the information about their account, the Short Message Service can help to avoid the need for expensive person voice calls to customer service centers. In the customer service environment, SMS can help to deliver account status information, new service configuration and so on, in particular when standard SMS is combined with a protocol such as SIM Application Toolkit or Wireless Application Protocol. Some network operators find significant financial justification for deploying a value—added services platform on the basis of what they save in customer service costs alone.

Vehicle Positioning

This application integrates satellite-positioning systems that tell people where they are with SMS that lets people tell others where they are. The Global Positioning System (GPS) is a free-to-use global network of 24 satellites run by the US Department of Defense. Anyone with a Global Positioning System (GPS) receives his or her satellite position and thereby find out where they are.

Many commercial GPS receivers also incorporate support for the Russian equivalent of the Global Positioning System.

The Short Message Service is ideal for sending Global Positioning System (GPS), position information such as longitude, latitude, bearing and altitude. GPS information is typically about 60 characters in length, leaving room for other information such as the vehicle registration details, average speed from the tachometer and so on to be transmitted as part of the same short message.

Because the position updates are automatically generated, mobile network operators find that vehicle-positioning applications are amongst the leading generators of short messages.

Job Dispatch

160 characters is sufficient for communicating most delivery addresses such as those needed for a sales, service or some other job dispatch application such as mobile pizza delivery and courier package delivery.

The Short Message Service is used to assign and communicate new jobs from office—based staff to mobile field staff. Customers typically telephone a call center whose staffs take the call and categorize it. Those calls requiring a visit by field sales or services

representative can then be escalated with vehicle positioning applications—such that the nearest available suitable personnel can be deployed to serve a customer.

SMS can be used not only to the job out, but also as a means for the services engineer or sales person can keep the office informed of progress towards meeting the customer's requirement. The remote worker can send in a short status message such as "Job 1234 complete, on my way to 1235."

Remote Point of Sale

SMS can also be used in a retail environment for credit card authorization. It is particularly convenient to use mobile technology when making sales from, for examples, cards in the middle of sales at shopping malls, at flee markets or at sports stadiums, where it would be inconvenient to trail a fixed telephone wire. A mobile phone is connected to a Point of Sale terminal such as a credit card swipe and keypad. The credit card number is sent to a bank for authorization. The authorization code is then returned as a short message to the Point of Sale terminal.

Remote Monitoring

The Short Message Service can be used to manage machines in a remote monitoring environment. This application provides people with valuable information from a remote location when an important event occurs that they need to know about. The information is automatically delivered electronically without having to constantly employ physical resources locally on the off chance that such an event occurs. Examples of remote monitoring applications include remote meter reading, sending computer system fault information to mobile phones and notifying companies about empty vending machines.

Now that we have looked at the major applications that SMS facilitates, let's take a closer look at some of the factors that facilitate the achievement of the messaging milestones.

SMS Roaming

National SMS Interworking

Most network operators around the world recognize the need to allow customers to send short messages to people on network operators competing in the same country as them. Just as you can call using voice, so too should you be able to communicate using the Short Message Services.

To release national SMS interconnects, there are some issues. From a commercial perspective, network operators competing in the same country often charge different prices for the Short Message Service and offer different services.

International SMS Roaming

Generally with GSM Short Message Service, no specific international SMS roaming agreement is needed to use SMS overseas. Instead, international SMS roaming automatically arises whenever the following conditions are met:

- The GSM network operators have a voice roaming agreement, and
- The mobile network supports SMS. Obviously mobile phone users who are using another mobile network (known as "roamers") cannot use SMS if the mobile they have roamed onto does NOT support the Short Message Service they are trying to use, and
- Neither of the network operators has taken specific measures to preclude such short messaging activity.

Wireless Application Protocol (WAP)

WAP is an attempt to define the standard for how content from the Internet is filtered for mobile communications. WAP was developed to be the way of making readily available content from the Internet easily available to mobile terminals.

One of the reasons why the mobile industry has got so excited about WAP is because it combines two of the fastest growing industries: wireless and the Internet.

The Wireless Application Protocol is envisaged as a comprehensive and scaleable protocol designed for use with:

- * Any mobile phone from those with a one line display to a smart phone
- * Any existing or planned wireless service such as SMS, Data, Unstructured Supplementary Services Data (USSD) and GSM Packet Radio Service (GPRS)
- * Any mobile network standard such as Code Division Multiple Access (CDMA), Global System for Mobiles (GSM), or Universal Mobile Telephone System (3GSM)
- * Multiple input terminals such as keypads, keyboards, touch–screens and styluses.

The Wireless Application Protocol incorporates a relatively simple micro- browser into the mobile phone. WAP is aimed at turning a mass—market mobile phone into a "network—based smartphone." As a representative from the board of the WAP Forum commented "The Philosophy behind Wireless Application Protocol's approach is to utilize as few resources as possible on the handheld device and compensate for the constraints of the device by enriching the functionality of the network."

The initial Wireless Application Protocol partner companies—Nokia, Ericsson, Motorola and Phone.com (formerly Unwired Planet)—formed a company called WAP Forum Limited to administer the global Wireless Application Protocol specification process and get new companies involved in developing the protocol. By mid 1999, the WAP Forum had about 100 members comprising major phone manufacturers, network operators, SMS Center suppliers and SMS software suppliers.

For any WAP service to be launched on a mobile network (or SIM Application Toolkit), there needs to be an installed base of clients and servers. In mid - 1999, WAP had many servers but no clients.

Nokia's policy is to incorporate WAP into high—end phones such as the 7110 but not consumer-oriented phones such as the 3120. As such, the consumer market that is today's heavy user of SMS will not have access to the Wireless Application Protocol (WAP) until it has trickled down through the product range and become a standard feature. This decision will significantly delay WAP's market penetration and acceptance. Given that neither the 7110 nor the 3120 will be available in volume until the end of 1999, mass market Wireless Application Protocol (WAP) support will not arise until 2001 at the earliest.

Other phone vendors such as Alcatel have announced that they are introduced support for the Wireless Application Protocol across their entire product range.

However, since WAP requires a larger screen size and more memory to handle the WAP stack, it costs more to produce a WAP handset and will therefore mean expensive mobile phone prices.

On the server side, there are about a dozen suppliers of WAP servers including CMG, Nokia, Ericsson, Phone.com (formely Unwired Planet), SST, Dr. Materna, ApiON, MD–Co, Akumiiti and Oracle, SMS services platform suppliers such as Sendit and Tecnomen have NOT developed their own WAP Gateway. These WAP server suppliers are all trying to sign up mobile network operators who are looking to trial WAP services and gain some market feedback. WAP trials will commence in the summer of 1999.

The Future of SMS - Introducing The Long Message Service

It is a valid question to ask whether the Short Message Service (SMS) has a prosperous future ahead of it given that GSM is evolving to encompass high—speed packet data services such as GSM Packet Radio Services (GPRS).

GSM SMS has several unique features that can be summarized as message storage if the recipient is not available, confirmation of short message delivery to sender and simultaneous transmission with GSM voice, data and fax services. Importantly, these features will NOT be incorporated into other planned GSM services such as GPRS. However, SMS does have some disadvantages - primarily the limited message length of 160 characters.

SMS as we know it will be used through to the year 2005 at least, since the mobile phones, infrastructure, specifications, market development and awareness are in place today. Over time, as users connect to networks that offer more advanced data services and bye mobile terminals and support them, they will find it more advanced data services and buy mobile terminals that support them, they will find it more convenient to receive all their CHOSEN emails rather than only a notification by SMS. They will continue to use SMS for some applications—the underlying bearer will be mixed and matched according to the application and its importance to the user. SMS could be used

automatically when roaming for example due to the advantages of store and forward when in a different time zone. Non-urgent emails could be sent by SMS for users to decide whether to forward the entire message. Urgent emails get sent immediately using packet data. By supporting multiple standards and bearer services, the Wireless Application Protocol anticipates this multiple service world. Essentially, in 3GSM, SMS will not be a standalone service but part of multimedia messaging. Different applications will use different bearer services—bearers will be mixed and matched depending on characteristics of application and mobile environment.

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CIAL PLACES KERALA IN THE INTERNATIONAL AIRPORT MAP

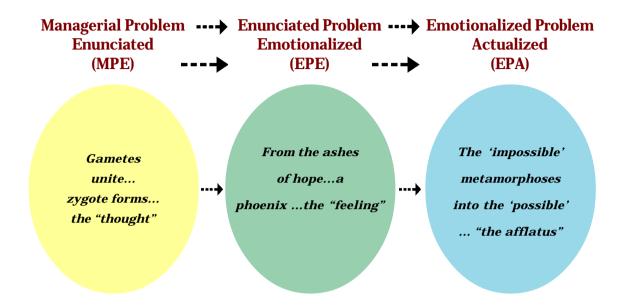
Behind the "thought," the "feeling," and the "afflatus"

of

Public Participation in Infrastructure Project An Experiment



CIAL - a bird's eye view



Managerial Problem Enunciated (MPE)

Gametes unite ...zygote forms...the "thought"

Let there be light...the beginning

Civil Aviation — Expansion-Initiative

It was at the fag end of 1991 when the Civil Aviation Ministry at the Centre convened a conference of concerned officers of all the states in India to evaluate the status quo of all Indian Airports. Kerala also sent a contingent of officers to participate in the conference. V.J.Kurian was one of the representatives from Kerala, representing the state as the Collector of the District where there was an Air Port.

Apology for Airport and umpteen Travellers

The tiny little state of Kerala had by then lakhs of air travellers, despite that it had only two "Airports," yes an apology for airports, one in the capital city of Trivandrum and the other in the commercial city of Cochin. Airbus or big crafts can only fly up over the Airports of Trivandrum and Cochin unable to fly down to land owing to too short, inadequate runways. Yes, the ports didn't qualify themselves to allow larger crafts to land. Moreover, Navy and the Air Port Authority of India owned the Cochin Air Port and the state had neither voice nor hand in its progress or development.

Flying Minds sans Flying Crafts

The mindsets of Kerala were that much grown to fly over land and sea to fetch jobs elsewhere to bring home bacon and bring homeland, bags of gold and bundles of dollars and pounds. But the physical infrastructure and ambience of the airport were found

wanting in facilities to provide the Keralites chance to see the aircraft fly low and low to the runway, too short to give landing space for larger aircrafts. People with rich mindsets flew first to the distant Bombay Airport to fly west, and Madras and Calcutta Airports to fly east. Then from there they continued their trips to their destinations.

No Expansion of Runways on Land, possible

The conference commenced. The officers of larger states made tall claims and got larger dividends of allotments. Kerala had no tall claims to take or false demands to make. In spite of that, the little young

officer of the state, V.J.Kurian made a humble plea to the August assembly to look into the grievance that Keralites used air much and requested them to make Kerala more airworthy. The experts on the dais suggested lengthening of runways from 6000' to 9000' so that larger aircrafts could be landed. The lengthening of Trivandrum runway was difficult to achieve. In Cochin there was still another problem other than lengthening the runways. The port could not be given to wings of civilians' craft freely as it can be to the small naval birds owing to strict security reasons. If at all it would be permitted where could one discover land for the same?



CIAL's runways

Encroachment of Water for more Land - Utopian?

More "imaginative" minds present there used flights of imagination by offering nonviable suggestions born of fancy. If land did not permit development of runways, we could approach adjoining backwaters for us to reclaim land enough.

Acumen of Man in Politics - A New Airport Proposed in Cochin

The Aviation Minister was no less a person than the dynamic late Madhav Rao Sindhia. He heard the deliberations there. He wanted to know the expenditure involved if the reclaiming proposal was agreed to. He got the answer: such expansion would be possible only by spending a huge sum of for Rs.76 crores. Reclaiming land and setting it for the runway would upset the ecological equilibrium and tranquility of Cochin for quite pretty a long time. Moreover it would lead to resettlement of thousands of residents. Both the tenure of the project and the finance involved were the real issues against the proposal. Sindhia suggested to the Kerala contingent that they should not be utopian. They should be more practical. He

conceded to them their just demand for an Air Port for larger crafts. But broadening and lengthening of what they had in the busy city would not help solving the issue. For that why didn't and couldn't they propose a new Airport off the sound and fury of Cochin?

Challenge thrown to the Keralites

This was a challenge thrown to the Kerala band of officers present there. Generally, there was an impression that land acquisition initiative in Kerala may culminate in many complicated issues. Moreover, politicians may intervene and further worsen the situation.

Pollen on a Fertile Mind

Sindhia plants the idea on the fertile mind of Kurian, which gets germinated into a proposal promising a portal for an airport.

Desire in an Embryo State

The young blood in the Administrative service from the collector's office at Cochin had a desire generated in his mind in an embryo state to start investigating and discovering a land fit for housing an air port, why an ordinary airport, say an International Airport!

Enunciated Problem Emotionalized (EPE)

From the ashes of hope... a phoenix... the "feeling"

Land everywhere, but not a piece to land Planes

The responsibility to find out a piece of land for acquisition would not naturally be a problem for a Collector. As a Collector generally does, V.J.Kurian also did. He let the mantle fall on a few subordinate revenue officers: Deputy Collectors, Tahsildars and Village Officers. They went out of their cabins, and

trekked for days through the rural roads. They found no piece of land large enough to house an Airport. In the process they noted a few sites with a lot of problems: eviction and rehabilitation would be a problem in some sites, the enormous amount of money as compensation was the obstacle elsewhere, the legal problem that could crop up causing impediments in some sites, and environmental activists organizing their

strength against the project in some places. They all reported that from Edakkattu Vayal to Nedumbassery fixing site for Airport could invite new problems.

Investigation in Vain

Search was in vain. Time elapsed.

The Aviation Ministry woke up from its sleep. It had to fix up its projects. It asked Kurian to explain. Sindhia the concerned minister asked Kurian whether the site was fixed. He heard a diffident "no" from Kurian.

A Blush in Shame

Sindhia's lineaments caused a blush in Kurian's visage. His ego was terribly hurt. He felt ashamed of himself. He came back home and asked himself the question "Can you see your face?" He got the answer. Yes only with the help of a reflector. He knew his face as reflected on the face of Sindhia. His face was a diffident one. He resolved he would be a different one.

New Wave

There was a "new wave" in him. He resolved to take up the search of land himself. After much picking and choosing, Nedumbassery was opted for the Airport site. It was this decision that was very critical.

Approval Granted

The site of the airport was fixed. This decision, without delay, was indicated to the Aviation ministry. The ministry was also equally prompt. The acceptance was intimated. Approval of the project was granted.

Silence on Finance

But there was a significant silence with reference to the finance involved in the project . The ministry could only do that much.

Bolt from the Blue

It was a bolt from the blue. The small state of Kerala would only reel under such a pressing demand for money. It was not viable for a small state to raise capital.

Mustering Courage in Embarrassment

V.J.Kurian admits he got embarrassed at the very outset. On second thoughts he realized he couldn't spend his time in dejection. He mustered confidence and courage. A sense of commitment and confidence slowly changed him.

Game to Begin

Kurian was ready for any game. He resolved to organize it. He picked and chose three players for such a fete: The state of Kerala is the prime player, the non-resident



V.J.Kurian, C.M.D., CIAL

Keralites form the second participant, and the third player naturally be the Airport Authority of India. The third player conveniently opted out to become the third component in the game-the umpire.

Managerial Wizard Whose Wand Turned Cochin Airworthy

Emotionalized Problem Actualized (EPA)

The "impossible" metamorphoses into the "possible" - the "afflatus"

Sanction for Airport sans Financial Support

Airport Authority's sanction for Airport in Cochin without a word mentioned on financial sanction. This created a flutter. Thus funding source for the project turned out into the main problem.

From Practice to Precept - A Precedence from Alleppey

The special officer V.J.Kurian retrieved from his memory a personal experience he had as the collector of Alleppey: how he goaded individuals and industry to power the project of putting up a children's park with sponsors' money.

Ballad to Epic

Alleppey was considered to be a backward district in the State. The district was known for its network of canals and backwaters. But the main problem of the district was drinking water. A tinge of gloom was writ large in the faces of the poor. Prosperity was the hallmark of the people of the district in the past; it was one of the treasure houses of rice in the state. But time totally changed. It was a period of despair and dejection when V.J.Kurian assumed the position of the Collector of the district. The new collector started studying the problems of the district one by one. In one part of the district he noticed the children of the poor forsaken. Proper care was given to them neither by parents nor by the Government. Among the problems of the people pending with him for solution,

he preferred children's pitiable conditions for solution. He wanted to provide a children's park for the children of poor parents near the Alleppey beach. However, it appeared a trifle for many. But it was not so. To establish a children's park, land and money were required. Government provided neither land nor money. Kurian enlightened the public living in and around this locality on the need for such a children's park. Once they were convinced, it was not a problem for Kurian. Land was procured. Money for construction was generated. With public funds, and with people's co-operation he built a children's park: Vijay Beach Park, still it is a memento of the goodwill and co-operation among people. Many of the small and big industrialists contributed liberally for the purpose. It was a lesson to know how the virtue of the people could be mobilized. This ballad of people's virtue was in his mind like a potential epic to recall for use when occasion demands.

Society Formation Failed

Now the state of Kerala in the district of Ernakulam needs an Airport. The initiative to get a society formed for the purpose failed. Rs.5000/- per share would be collected as interest free deposit and it could be returned after a span of seven years. There were not enough takers for the scheme.

Revised - Society Formation

This idea could be improved upon, suggested T.K.Jose, the then Dy.Collector of Fort Cochin. He

observed people had not responded to the call only because there was no guarantee for investors' money. For every deposit of Rs.5000/-, the investor would be given Indira Vikas Patra worth Rs. 2500/- which will mature into Rs.5000/- in seven years' time. The balance Rs.2500/- will remain as equity to the credit of the investor. The calculation was simple. It appeared logical too. The speculation was that if the twenty per cent of the two million non-resident Keralites contributed Rs.5000/- each, the amount would work out to Rs.200 crores (Rs.5000 x 4,00,000). After setting aside Rs.100 crores for the V.Patras) Rs. 100 crores would be made available for the project. The State Government then would provide Rs.75 crores and the service providers would give Rs.25 crores. These were only speculations and calculations. But the results were quite disappointing. Only Rs.5 crores could be raised.

Confidence Consumed in Skepticism

At this stage, quite naturally everyone was skeptical: the non-resident Keralites, the Industry and the politicians.

Land Acquisition Commenced

Land acquisition for the projecte was expected to cost Rs.40 crores (got escalated to Rs.80 crores). The only experiment left was the formation of a Public Limited Company. Initial response was not encouraging.

Sponsor of Impractical Schemes

Blame was showered on V.J.Kurian for coming out with a volley of 'Impractical' schemes.

Federal Bank to the Rescue

Anyway, land acquisition was initiated. The Federal bank provided a bridge loan of Rs.10 crores, but for a period of six months. The Government of Kerala was the guarantor.

Pandora's Box Opened?

The land acquisition proceedings unleashed several issues. Landowners wanted enormous amount as compensation. They started moving the court. Four thousand landowners were involved in the problem. Eight hundred and Twenty eight homes were totally demolished and removed.

Good Sense and Peace Live Together

Local resistance was anticipated. But the resistance was more massive than expected, in the form of direct and legal resistance. Court cases mounted up to huge numbers. However by joint effort with persuasion and motivation, the agitation was quelled down. Good sense prevailed. Peace was restored.

Help starts flowing in

All major financial institutions were approached for loan. Only HUDCO showed concern. They sanctioned Rs.100 crores in March 1995. Tender was floated for Runway development. It was expected to cost Rs.50 crores. When it was launched, the management had only Rs.4 crores in hand. Work started in May 1995. A.K.Antony the Chief Minister was convinced of its viability and was pleased to agree for government's equity participation of Rs.1crore.

Convince the Left; Convince the Right, and then March Forward

Each change in government demanded further 'convincing' procedure. E.K.Nayanar, the Chief Minister (succeeding A.K.Antony) gave an additional five crores as equity. HUDCO was proceeding at a slow pace. Its "matching equity" was not forthcoming.

Financial Breather

Service providers consisted of ground handling agencies, forex counters etc. It's the service providers that gave the breather. BPCL came forward with Rs.5.25 crores interest free deposits for refueling facility. Duty free shops offered 10 crores. Air India contributed Rs.16 crores for ground handling rights. Federal bank and SBT together handed over Rs.288 crores for Foreign Exchange Counters.

Maiden International Flight Landing

The Airport was opened on 10 June 1999. It was more than a coincidence: the maiden flight to land on the new airport was an International Flight of Air India.

Shunted out

In December 1999 V.J.Kurian was shunted out of the Airport. Was it a coincidence again to note whether during the absence of V.J.Kurian, the CIAL was running on loss? The losses were mainly due to the interest burden on loans.

A new Boss on Top

Babu Rajeev took over the bridle of CIAL from V.J.Kurian in November 1999. Under his stewardship, CIAL generated positive cash flows from operations. But it was falling far short of meeting its debt service requirements. In the spring of 2000, Rajeev imposed an amount of Rs.500, as fee on international passengers to earn Rs.One crore per month. He wanted to increase international traffic by attracting Air India and Indian Airlines. But the efforts didn't yield expected results, as law didn't allow such steps. In the meantime, CIAL had attracted more cargo operations and some charter flights serving Haj pilgrims.

However, soon CIAL fell on evil days and got into the red for the first three years after its inception. The accumulated loss slowly waxed to an all time high to touch Rs.71 crores by 31 March 2003.

V.J.Kurian during this tenure was elsewhere. He was virtually "rested" by the State having been praised to the skies. After a period of rest for a few years, Kurian was reinstated in February 2003.

There was an easy break through noted when a one-time settlement was reached in 2003-2004 with HUDCO and consequently the interest burden with the CIAL was substantially reduced.

The year of his return to the CIAL achieved another landmark. Pre-tax profit for the year climbed up to Rs.36 crores. Eight per cent dividend was declared. The estimated profit for 2004-2005 is Rs.43 crores. Passenger traffic at CIAL crossed the mark of Rs.15 lakhs (as against Rs.38 lakhs during 1998-99 at the old Airport).

The total cost incurred in launching the huge project was dexterously limited to Rs.288 crores (80 crores for land and 150 crores for construction). An additional burden fell on the project later on after project commissioning: nearly 60 crores was spent towards interest charges.

Low costs-reasons

Costs were kept considerably low. Reasons are umpteen:

- Not going in for "turnkey' contracts. Each part of the project was contracted out separately, after stringent negotiations.
- ☐ Transactions were all above-board; they were never targets of allegations of corruption.
- ☐ Stress on "utility" rather than 'luxury' was the hallmark of action plan adopted for the project.

Comparative Cost

The achievement was colossal. The cost estimate for the Hyderabad airport project is Rs.1280 crores. The newly proposed Bangalore airport project has an estimate of Rs.1340 crores. Both these project proposals cost over and above that of the land freely donated by the state. The cost of CIAL establishment was Rs.288 crores including the price of land.

The Airport has only 231 employees, out of whom only three are on the CIAL rolls, for three shifts operation. The smaller one in Trivandrum with only two-shifts operation has as large as 800 on its rolls.

Most of the operations, such as ground handling, housekeeping, security etc are fully outsourced. Overall employment, including indirect employment, reaches 3000.

State of the art review

CIAL lured attention of researchers but not to the extent to be the focus of an article in a Management Journal. "Cochin International Airport: The Gateway to God's own Country" is a teaching case written by Paul Hooper, Senior Fellow, Department of Economics, National University of Singapore and Jay H.Walder, Lecturer in Public Policy Programme, National University of Singapore, financed by the University of Singapore and sponsored by Kennedy School of Government, Harvard University. "This case is intended as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation."

Achievement eclipsed

Hooper and Walder - Skeptical in their Conjecture

Hooper and Walder delved deep into the CIAL. They minutely examined the "Trends in Airport Privatization in Asia." They seriously studied "the Kerala Economy." They analyzed the "Potential for Tourism." They scanned the "Initial Cochin Airport Plan." At length they offered their judgement in conjuncture: "But the future of the airport was still in doubt."

The meticulous of the Corporate Governance under the stewardship of V.J.Kurian proved their skeptical conjecture unwarranted.

Politics of Marginalization

Integrated Transport has published an article "Governance Issues in Airport Development: Learnings from Cochin International Airport Ltd," prepared by Biju Varkey and G.Raghuram, with financial support from IIM, Ahmedabad.

Implications for Governance

Varkey and Raghuram discuss "The CIAL Experience in much analytical detail. In the concluding part of the report in "Implications For Governance" they state:

"The CIAL project also acquired more land than what it wanted for its core operations and further expansion. Further, the project had built in income from land sale and commercial exploitation of surplus activity as major sources of revenue."

"During the process of land acquisition complete information about the extent of land required was kept hidden from the public. In this case land acquisition and the project proceeded almost together."

"In spite of this, there would be legal battles that need to be anticipated and prepared for."

The discussion leads to bias, it seems.

Rehabilitation and Resettlement

"Land acquisition often resulted in depriving a set of people the livelihood and quality of life they were used to. The process also harmed the fragile cultural fabric, which was shared by the community. The mechanical process of compensation payment and resettlement did not always help them to effectively rebuild their lives. Experiences of similar schemes were not encouraging."... "Here also legal battle and hard bargaining could be expected and prepared for."

Here they conjecture legal battles.

Risk Mitigation

"CIAL faced a variety of risks including political risk, revenue risk, operating risk and regulatory risk."

"The political risk was due to non-continuity of political leadership, lack of clarity on the decision making roles of the center and the state, and local political activism. Effective corporate governance and clear national policy on air infrastructure would be essential to mitigate this task."

"The revenue risk was due to demand uncertainties and pricing."

"The operating risk were due to escalation, unanticipated delivery of obligatory sources like security in the manner determined by external agencies, staffing, labour union relations and lack of coordination among various agencies."

"The regulatory risks were due to uncertainty in licensing,

tariff fixation and revenue sharing, clarity in the policy for air infrastructure would help mitigate the risk "

All these comments have been proved to be inauspicious and irrelevant in the context they were used.

Staffing

Airport operation is a niche area that requires high quality trained personnel... Planned interventions at the national level to develop human resources for managing airports are required.

The critics' doubts have been proved baseless.

CIAL's Succees

CIAL's turn over during 2004-05 was Rs.100 crores. Its profit was recorded as Rs.48 crores before tax and Rs.28 crores after tax. CIAL has declared 10 per cent dividend to its shareholders.

Looking forward/ahead

Public Issue of shares mooted

J.M.Morgan Stanley undertook a feasibility study for considering **Public Issue of Shares** and recommended 25 per cent dilution of Promoters'/ Directors' equity.

The Board of Directors decided to go in for public issue of Rs.25 crores and rights issue at the rate 6:1 at par value on the strength of the findings of Morgan and Stanley (26 June 2005).

Major Findings by J.M. Morgan Stanley

According to the consultants, CIAL has the following competitive advantages:

Cochin International Airport

Competitive Positioning

SWOT Analysis

Strengths

- Well placed to leverage on Indian diaspora in Middle East and Kerala as a hot-spot destination
- Recently surpassed

 Thiruvananthapuram in terms of passengers' preference
- Superior EBITDA and PAT margins vis-à-vis other comparable companies
- Lower leverage compared to Asian and European peers

Weaknesses

- High dependence on passengers/airlines to Middle East can add South East Asian destinations in light of new route additions for Jet/Sahara
- Relatively lower number of domestic passengers and cargo traffic
- Higher landing and ground handling charges
- > Need to enhance scale of operations

Opportunities

- Increased business activity at Kochi to Boose traffic and cargo movement
- Medium term growth acceleration from New airline operators
- Longer term growth, as additional airlines
 fly to Middle East
 400 acres prime land available for
 commercial development
- → Aero –hub at Kochi
- Acquisition/JV opportunities to enhance scale could be considered

Threats

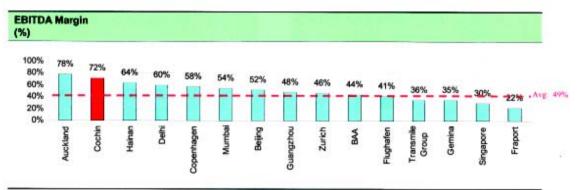
- → Competition from nearby airport of Thiruvananthapuram could increase
- Successful operations of Hyderabad as an aero-hub

Cochin International Airport

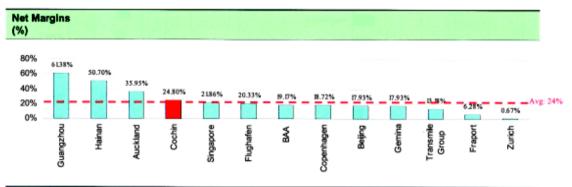
Competitive Positioning

Profitability Ratios

Comparison vis-à-vis European and Asian Airports



Source Bloomberg, Company Information

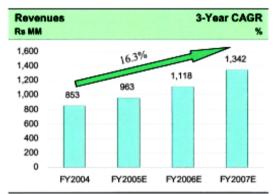


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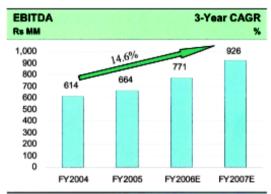
Cochin International Airport

Valuation Methodology

CIAL Financial Estimates



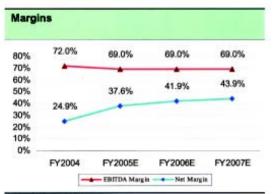
Source Company Estimates



Source Company Estimates



Source Company Estimates



Source Company Estimates

- Cochin is strategically located in the international air map - 3 major international air routes intersect near Cochin
- Well-connected to three national highways, the main railways line and the Cochin port
- Spread over 1,100 acres with 400 acres of prime land available for commercial development

State-of-the-art facilities allow any type of wide-bodied aircrafts to land

(Refer Exhibit...for a SWOT Analysis of CIAL)

Through Cost Control initiatives CIAL has been, over the six years of its operations, able to achieve the second position amongst European and Asian airports in terms of gross margin (72 per cent as against the Industry average 49 per cent) in terms of Net Margin, it comes in fourth.



Many more chicks hatch out of CIAL's Participation

Management Hatchery

The Apron gets stretched to double figures

The "Apron" gets stretched to double figures. The number of aircraft parking stands attached to the "apron's strings" is enhanced from eight to ten. The work will be over by July 2005. The expansion project undertaken fulfills the provision for infrastructure compatibility for A 380 aircraft operation.



The "Hangar" on the Anvil

A new company for Aircraft Maintenance Hangar is being floated on a 51:49 equity basis, with CIAL holding 51 per cent leaving the rest to the other participant maintenance engineers. During its former stage, investment is Rs.31 crores and generation of jobs is one thousand. During its second stage investment will be Rs.100 crores and jobs 1000.

Centre for Perishable Cargo

A very vital infrastructure in the Air Cargo for establishing a cold chain right from the field to the export market, a Centre for Perishable Cargo is to be completed by December 2005. This has been constructed by CIAL with a hundred per cent Grantin-Aid by Agricultural and Processed Food Products Export Development Authority (APEDA).



Satellite Business Town - Another Offshoot

"Satellite Business Town" is an offshoot of CIAL's ambition to set the state for Commercial utilization of the extra land available here. CIAL has taken off steps for effective utilization of the land. Mys.Ernest

& Young (P) Ltd. Mumbai has been authorized to finalize a master plan.

Why Can't CIAL do it?

CIAL starts operating flights to the Middle East, yes to other Kerala Airports in Trivandrum and Kozhikode.

When CIAL offers itself a landing/parking yard for many Airlines, why can't it offer Airline services itself? "Flying on one's own airline at very competitive fares won't be an unrealistic dream for Keralites if the State Government's idea of involving expatriates in its people's air project takes off on the envisaged path" (*The New Indian Express dated 13 June 2005*). An International low-cost Airline in the joint sector will be launched by CIAL, and Ernest and Young (P) Ltd. has been appointed consultant for the project (*27 June 2005*).

BPO Support for other Airports

CIAL has vision beyond two decades. By 2024 CIAL envisages a new visage for the Airport. It will be fully set to provide BPO support to other Airports. It will have enough potential to take up operations management of other Airports.

Tourism and CIAL

Human Resource Export and Tourism together form a panacea for the ills of Kerala State, like unemployment. Ever since the birth of CIAL, Kerala has been showing symptoms of growth in the field of tourism. The low-cost airline proposed will help promotion of tourism in the State.

CIAL, the Prime Mover of Development

Anyhow, CIAL is the prime mover for all developmental

activities in and around Kochi. Even the proposed "Smart City" with enormous job potential is a tributary of CIAI

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Trade Unions and the State in India

(A Historical Re-Examination of Indian Industrial Relations Taking One Step Forward But Two Steps Back)

by Dr.Sorab Sadri

The elimination of all social and political inequality" is also a very questionable phrase in place of "the abolition of all class distinctions." Between one country and another, one province and another and even one locality and another there will always exist a certain inequality in the condition of life, which it is possible to reduce to a minimum but never entirely, remove.

Frederick Engels: "Letter to August Bebel in Zwickau London, March 1875" cited in Karl Marx : Critique of the Gotha Programme

Social Scientists agree that class, as a social construct, is something we have to live with. The basic question that has plagued all working class movements since the beginning of modern times is how to address and redress the twin issues of unequal distribution of income, wealth and opportunity as well as the uneven development of peoples, industries and sectors. Perhaps the chasm can be reduced but not eliminated as Engels rightly suggests. The State has a major role in this respect in the developing countries. This paper is concerned with the relationship between the state and the labor collectivity in India. It points out that during the first four decades, the Party in power was the Congress and dynastic oligarchy donned the robe of democracy. Under the circumstances, the Party controlled the State, not through democratic centralism

but through the gullibility of voters under parliamentary democracy. Herein lies the changed perception of how the working class in India was managed by its espoused representatives. To justify this paper let us examine some fallacies, which are being nurtured by the pseudo-intelligentsia.

 Today, economists are making claims that the Indian markets became competitive after the reforms of 1989-90. Here, they ignore a fact. Competition has always existed in Indian markets. (The ration raj of the 1950s, the line up to buy a scooter in the 1960s, the queues for cooking gas in the 1970s and so on?). The fact is that competition has moved from the consumption sector into the production sector after 1990.

- 2. Nationalist sentiments are often trumped up against a bogey called globalization. The fact that Hindu mathematical thought in the first and second centuries BC went out to the world through the Arab mathematicians who were honest enough to acknowledge the debt. Indian thought was globalized in the first millenium itself!
- 3. The fact remains that 65 per cent of the 1 bn. strong population depends on agriculture for its subsistence and yet 53 per cent of the GDP contribution comes from the service economy. Only 12 per cent to 15 per cent of the labor force exists in the organized sector is an issue that makes a mockery of the 108 odd pieces of labor legislation enacted until date ostensibly to protect the working class.
- 4. Proponents of free market capitalism invoke Adam Smith to justify the intrusion of MNCs into India at the drop of a handkerchief. They have obviously had bad teachers or they have never read Smith since he was virulently opposed to big business and promoted the cause of the small entrepreneur all through.
- Government always makes an issue of controlling inflation. However, conveniently it turns a Nelson's eye to the issues of unemployment and underutilized plant and machinery.

We are quick to castigate Nehru and Mahalonobis, albeit ex post facto, for their Planning Effort but we forget that India needed a strong manufacturing base and technicians to man that base. SAIL, BHEL and the IITs have done a splendid job at that. We are equally quick in blaming the state for keeping sick industries and forgetting that up until 1985 sick private sector units were continually bailed out by the state. That does not imply that the public sector was blameless. What it

clearly means is that the protagonists of modernity were throwing the baby out with the bath water. The very same industrialists who were pleading for a level playing field in 1985 were asking for protection a decade later. This argument has been treated at length in Sadri, (1994) and in Sadri Ray and Hegde (1994). The issue then is as follows.

It was not at all an issue of nationalism or Indian culture. It was not important whether we buy vada, pav or hamburgers, we drive Ford Ikons or Ambassadors, we go the *dhaba* or visit Kentucky Fried Chicken, we take a dip in the polluted waters of a river or celebrate Valentine's day. What is germane to our country is the following:

- (a) We combat the issue of unequal distribution of wealth, opportunities, and incomes.
- (b) We do something concrete to mitigate the uneven development of peoples, industries and sectors.
- (c) We achieve an overall improvement in the quality of human life and give up this fixation with economic growth, which is just a statistical measure.
- (d) We begin to do something about not having too much politics with our economics and too little economics with our politics.

The answer lies clearly in pursuing Neo-Keynesian Interventionist Macro-economics wherein the government has a social conscience and has a political will to act. We must aspire towards a situation where we reward each according to his effort and examine each citizen according to his needs. We must ensure that the process of administration does not eclipse the purpose of administration. For that to happen we need a mature democracy with proper countervailing tendencies that can combat ideologues, guard against

self-styled guardians of social morality and ensure freedom to express oneself. Here we must rely on Voltaire who reminds us that freedom is permission to what one likes so long as it does not impinge the freedom of others. Liberty is not license.

Similar myths and fallacies exist in the field of Industrial Relations as well. They need to be de-bunked. Using the medium of this historical re-examination of the trade union movement in India and the role of the State, this paper attempts to posit three points in the long argument:

- The Indian State has metamorphosed from a
 position of colonialism to that of neo-colonialism,
 and thence through peripheral capitalism to state
 capitalism in the course of the present century.
 This more or less conforms to the materialist
 conception of history as envisioned by the
 Trotskyist New Left.
- 2. The Indian trade union movement was not a labor wing of any political party as has been often portrayed. Indeed, it is the reverse. The political party has used the labour movement for furthering its own agenda rather than fight for the rights for labor as a matter of principle. The proletariat has benefited by default. This is all the more relevant when we find that only between eight per cent and 12 per cent of the labour force is organized.
- 3. As India has moved towards the liberalization of markets, privatization of the means of production and globalization of competition, private capitalism has replaced state capitalism in the country. Since the form and content of this peripheral capitalism is of a retrograde variety and since the trade unions do not have a proper ideological platform, the labour force continues

to suffer just as surplus value continues to be appropriated for private gain.

State Policy towards labor and capital when interacting with Business Policy towards labor and capital provides the milieu within which Industrial Relations can be both defined and practiced. Law, in any society, is nothing but codified class relations and in analyzing legislation one can glean an insight into the various elements which interact within the economy and the polity of a country. The interactions of these elements provide the form and the content of Industrial Relations. This paper is an attempt to trace the history of the involvement of the State in labour matters and the growth of the labour collectivity. It analyses the evolution of the role of the State from colonial times to the present times and predicates the place of labour within it. The purpose then is to examine the changing role of trade unions as the role of Indian State changed. In so doing, the paper has re-examined certain historical facts and placed them within a definitive framework of the development of capitalism. The conclusions drawn are different from those oftenencountered in textbooks of Indian Labor History, (Arya, Basu, Karnik, Myers & Kanappan, Punekar and Singh) and are based entirely on a re-examination of the role of the State in peripheral capitalist society.

The works of Ram Mohan and Charu Mazumdar are ideologically powerful but they go off into the deep end. They recommended radical social change when the subjective conditions as well as the objective conditions for that change just did not exist. They also underestimated the conservatism of the peasants and the inability of the proletariat to mount a struggle without the support of the peasants.

This paper consciously takes a position based on positivist political economy and attempts a historical

treatment of Indian trade unionism from that viewpoint.

Under Mountbatten and Rajagopalachari India made its transition from a Crown Colony to an independent country. Under Nehru India remained neo-colonial but espoused a socialistic pattern of society, (a term not adequately defined but signifying a move towards state capitalism). Under Indira, and then under her son Rajiv, the country made its transition to a peripheral capitalist economy, a la Wallerstein. Three successive Central Governments wrote off massive loans in the agricultural sector in exchange of votes. The Public Sector succeeded in creating employment but failed to produce competitive products. The economy in 1990 faced a severe debt crisis. When soaring debt stared the government in the face and an IMF bailout was imminent, the country inched towards a free market economy. This was a conditionality of securing the World Bank Ioan.

Since India had not made substantial progress since 1947, except in the field of population, agriculture and selected industries, the exchange remained "unequal" a la Emanuel. With trade relations being unequal, development being uneven and the economy being in dis-equilibrium, globalization meant taking one-step forward but two steps back, using Lenin's euphemism.

This was simply because we did not globalize with circumspection and began to globalize before the process of liberalization was fully operational. Hence, the government denied opportunity to national capitalism while opening its doors to foreign capitalism. In our zeal to enter the international rat race we were acting like a motorist who is so busy looking at the rear view mirror that he knocks down a few harmless pedestrians walking on the footpath.

Globalization per se is not bad. It is as relevant to capital as it is to ideation. The globalized protests against the recent WTO Summits are a case in point. Indeed, globalization is necessary for international trade and economic development. What governments should guard against is being in a hurry to change systems. We ought not to go overboard with ideas of modernity and start inviting foreign direct investment without creating the right climate for it. Conversely, we should ensure that we attract investment in only those sectors where there is a calculated need. If not, we shall have several more fiascoes like the Enron Project in Maharashtra and the recent scam of False Clients making foreign telephone calls and thus bleeding the Bharat Sanchar Nigam Limited, to contend with. The State cannot pay the bills of Enron and the public sector power plants are not adequately modernized to take on the additional load. This is typical petit bourgeois logic that is so concerned with short run actual costs that it forgets that long run opportunity costs also exist.

The Beginnings

Mainly the British traders came to India in the middle of the 18th century, not only to earn quick profits but also to support the flagging demand for certain products made in Britain. Industries were basically labor intensive and capital inflow was kept to a minimum. Tea plantations, coffee plantations, cotton and jute mills, coal mining, railways, all based on the capitalistic method of production, were started between 1850 and 1860. The peculiar feature of industrial growth in India, for a considerable period of time was threefold:

(i) It was slow and localized in some parts of the country thus having a concentration of working population in factories of Bombay, Calcutta and Madras and in the plantations and coal mines.

- (ii) It remained in sectors, which were labour intensive.
- (iii) The rate of exploitation of surplus value was high since there was an acute absence of labour legislation. Although there were sporadic incidents of spontaneous strikes of a limited nature as protest against autocratic/feudal/ despotic behavior at the hands of British management, they were however short lived and there were no organized institutions in the nature of a trade union in the background. They were led for the particular occasion by a philanthropist in a bid to get redress for the workers immediate grievance or a rabble-rouser who sought to make a point. In either case the spontaneous leadership was thrown up by the situation at hand. Changes in England arising out of the Second International had ripple effects in India. The first Factory Commission was set up in 1875 and the consciousness of the working class began to be cogently formulated. The nationalist leaders were quick to exploit the situation. As a result of this, we more often than not, had nationalist leaders doubling their role as labour leaders.

But it would be only fair to state that the State's attitude was one of despotism and union activities were paid only lip service while the labor leaders felt the heavy hand of the law. Traditional labor historians ascribe that the origin of the Indian labor movement lay in the deplorable working conditions and the economic exploitation of the children and women in the factories. This was coupled with the doctrine of laissez-faire, which so much dominated the outlook of the government that its main concern seemed to have been to protect the employers from the workmen rather than to protect the workmen from the employers.

What is probably truer is that a rise of nationalism coupled with an influx of radical ideas from the 1848 revolts in Europe made the leadership conscious of the plight of the working class. The Colonial Government did espouse laissez faire as its avowed policy, but what was witnessed was a form of primitive accumulation of capital. The local landlords were known to be cavalier in their methods of exploitation. There is evidence of migration of labour from areas under local Indian principalities to areas that were directly under the control of the British. Of course, when you compare feudalism with primitive capitalism, the latter is undoubtedly a more refined form of society.

Management and Unions

The employee collectivity is an important and necessary constituent of an industrial relation system. The collectivities strive to improve the terms and conditions of employment. So doing they improve the social well being of labour by securing for them a higher standard of living. They set into motion a process of democratization of industry by establishing proper worker management relations. For workers, the union then acts as a service-rendering agency in the area of their relationship with the owners of capital. (See the works of Ramaswamy and Mommsen). But this is difficult unless we stop taking decisions autocratically and insist on having them carried out democratically as is our habit. (See Sadri, Jayashree and Ajgaonkar comment on this factor).

Trade unions also claim to confront the managements' feudal outlook and autocratic tendencies. Studies in working class consciousness and labour aristocracy show that the unions are also not immune to such retrograde behavior. Hence to use C.Wright Mills' terminology, unions, at best, become *managers of discontent*.

Managements found it convenient to deal with a collectivity which could keep its bargain and which had the support of its membership. It is because of these reasons that the institution of trade unions gradually received larger acceptance by management in India. The more enlightened managements preferred to give benefits to the workers through trade unions while the majority would rather have had a docile and a "puppet" union leadership. It would be analytically convenient if the period 1875-1947 were to be examined in two phases.

1875 to 1916

Arising out of the report of Major Moore, (Chief Inspector of the Bombay Cotton Department), in 1874 and that of Mr.Rendrave, (Inspector of Factories in England), about the condition of workers in India, (particularly of the situation in Bombay), the public opinion in England set in motion a demand for suitable legislation to regulate the working condition in factories in India. A Factory Commission was appointed in 1875, but the much expected factory legislation was not visible due to the protests made by vested interests both national and foreign. This led a well-known social worker Sorabjee Bengalee to draft out a Private Bill and send it to the Governor of Bombay. In the year 1881 the first Factories Act was passed. (Madam) Bhikhaijee Cama and Shapurji Saklatvala (Comrade Sak) took the battle for freedom and for the emancipation of the working class overseas.

All this greatly helped generate international public opinion in favour of reform forcing the British to act. The Indian Factories Act of 1881 is very significant in the sense that it led to the emergence of the working class point of view in the India in subsequent years and ultimately to the birth of the Indian labour movement. Another development that took place in

the wake of factory legislation in India was the publicity given to the conditions in the factories. While the recommendations of the Indian Factory Commission of 1884 were still under the consideration of the Government, a combination of several factors resulted in the appointment of the Indian Factory Commission in 1890. The Bombay workers by that time had become alive to the issues affecting them. The year 1890 saw the formation of the Bombay Mill Hands' Association, the first trade union in India through which the Bombay mill workers presented a petition to the Commission reiterating the previous demands though not all of them. In the following year the Indian Factories Act 1891, largely based on the recommendations of the 1890 Commission, was passed.

This Act would be seen that though something like a workers' point of view which had definitely taken shape by the eighties of the last century. The term *movement* signifies an organized activity motivated by common consciousness, or an assertion of rights by the workers as a class. But the Indian factory workers, at that time, were too meek and docile to assert themselves.

During the period 1890 to 1917 some organizations of workers did come into being for example: The Bombay Mill Hands' Association (1890) but they were so "ad hoc" that they soon relapsed into anomie. However, there were some organizations, which had the rudiments of a trade union and were fairly stable like The Bombay Postal Union (1907), and The Indian Telegraph Association (1908). During this period the labor movement was largely dependent on the philanthropic/paternalistic gestures by the Colonial State and was marked for its lack of organizational capability as a cohesive force. An awakening, however, had emerged that by uniting they could make their voice heard.

The success of the Bolshevik Revolution in Russia had been a shot in the arm for these unionists and revolutionary literature from Europe began to find its way into India. This made the British uneasy and their "loyal servants" more eager to please by cracking down on labour. The failure of the Great Civil War in Russia sent a chill down the imperialist camp. They would do whatever was needed to prevent India going Red. And this is exactly what they did. The senseless carnage at Jalianawala Baug, the martyrdom of Chandrashekhar Azad, Bhagat Singh, Raj Guru and Sukh Dev could have been avoided if the British had not feared a repetition of anti-imperialist history. Liberal leaders similarly failed to espouse the cause of the revolutionaries sufficiently and this gave the British a chance to split the freedom movement itself. For instance, Mohandas Gandhi refused to plead with the Crown for clemency in favor of Bhagat Singh, Raj Guru and Sukh Dev for fear of jeopardizing his talks with Lord Irwin. This did not diminish his greatness but merely put a patch on it. After all, one must acknowledge Gandhi not as a saint but as an astute general leading a nation into battle without arms and winning the war.

This period also saw the birth of Indian entrepreneurial capitalism with such stalwarts like Jamshedji Tata, Ardeshir Godrej, Ghanshyam Das Birla and the Sahu Jain Group leading from the front. What was even more startling was that their liberal vision was well ahead of that of the State and the benefits given to labor by them preempted the labor laws formulated by the State. This liberal view further depleted the chances of a formation led by the ideological Left.

1918 to 1948

This period of nearly three decades was checkered with experiences of a very varied nature. Though quite a number of workers' organizations did spring up during the early years of the twentieth century, legal recognition

of the movement was not forthcoming readily. A significant start was given to the movement with the formation in 1918 of the Madras Labour Union (MLU).

Most labour historians as the first genuine, properly organized trade union in India have accepted the MLU. The basic issues which led to its formation were the attempt of the workers of the Buckingham and Carnatic Mills to resolve their grievances like a short midday recess, low wages and abuse, insult, and assault by the European supervisors. This union was an immediate success and through a number of strikes was able to remove a lot of grievances of the workers. The pressure exerted by the working class movement in the United Kingdom and the active role of the Trade Union Congress resulted in a Royal Commission on Labour being appointed. In the western part of the country a new experiment on the labour front was initiated just about the same time. The textile mill workers in Ahmedabad launched a strike in 1918 and Mahatma Gandhi who turned it into a Satyagraha took its leadership. From this was born the famous Textile Association of Ahmedabad. Public awareness on the plight of the colonial workers grew and this eventually led to the enactment of the Trade Union Act of 1926.

The enactment of the Trade Union Act in 1926 and formation of the International Labour Organization gave a fillip to the development of consciousness of workers' rights. The formation of the International Labor Organization saw the birth of the All-India Trade Union Congress in 1920. With the formation of the I.L.O., there was felt a necessity for a forum for election of the workers and their representatives to that organization or, at least of an agency that could tender suitable advice to the Government regarding 'the representatives of the workers.' This necessity led to the formation of the All-India Trade Union Congress. Hence, one can suggest that the birth of the movement

was caused not by a spontaneous revolt as envisaged by Luxembourg, or through the activities of a revolutionary party as suggested by Lenin. Instead, it came about by the need of the Colonial State to legitimize itself in the eyes of an international fraternity of nations.

The Trade Union Act (1926) itself provided for any seven persons to join up and register a union but did not make any provision for the compulsory recognition of the union by the employer. It was thus an instrument used to divide the labour collectivity and sap its strength by creating conditions amicable to intra-union rivalry. Our inability to change it even 55 years later speaks volumes for the lack of political will and the managerial myopia of our leadership.

Political Leadership

The much-needed momentum was added by national leaders. All India Trade Congress provided a platform, on the labor front. Similarly, radicals like Yusuf Meher Ali and M.N.Roy provided the ideological foundation for the trade union movement. Apart from assumption by Mahatama Gandhi of the leadership of the Textile Labour Association of Ahmedabad, names of such eminent leaders of the nationalist movement like Lala Lajpat Rai, Deshbandhu Chittaranjan Das, Jawahar Lal Nehru and Subhas Chandra Bose held the highest offices in the All India Trade Union Congress. Even the legendary C.F.Andrews and great liberals like Dadabhai Naoroji pitched in for the working class within the first decade of its formation. One could easily suggest that the political leadership to further its nationalist cause used the labour movement.

Though the top leaders of the nationalist movement were the policy framers, middle class intellectuals provided the immediate day-to-day leadership. These middle class leaders had an obvious advantage. Since

they were not employees they were free from the inherent fear of victimization and thus posed a potential risk to the political leadership. Being generally well educated they also had a better perspective and sense of organization. The political leadership set about indoctrinating this outside leadership and soon the two began to work in tandem. And, herein lies the genesis of the external leadership in Indian trade unionism. External leadership was therefore historically necessary and grew out of social concern rather than mercenary intent. This is not to say that internal leadership did not exist. It did but was successfully emasculated with the blessings of the colonial state. Three instances in Jamshedpur are worthy of note. When Abdul Bari, Manek Homi and Madioma Madan espoused the workers cause they were harshly and ruthlessly dealt with by their employers.

Factors Contributing to Trade Unionism

The Rise

The factors contributing to the rise of trade unions in the early part of the twentieth century.

- a) Economic distress of labour due to price-rise caused by World War I,
- The national movement and the interest taken by national leaders in labor matters obviously for political gain,
- c) Exposure to the outside world. Men who went to represent the Empire in World War I were exposed to external views especially about the conditions of labour in the European countries, and
- d) Impact of the Great October Revolution and the emergence of militant leadership in India under the influence of Lenin, Trotsky, Bukharin and Plekhanov.

But there was one other factor, which is often missed out. The British themselves educated the Indian workers through the interventions by the Trade Union Congress and through enlightened leadership by such stalwarts like C F Andrews. Hence to paint all British citizens as colonialists is an error. What is more factual is to ascertain that the ruling classes in India combined with the ruling classes in Britain to exploit the working class generally. It was like the Indian class colleagues telling their British class colleagues come to my country and exploit the land so that we as a class may benefit from it. Then again there were several from within the socalled elite who spearheaded the freedom movement in the initial as well as the later stages. So we could alter the above contention by stating that generalization is difficult to make but what we spoke of was a mere trend.

The Split

The strike wave that swept India alongside of a national movement for independence brought into focus two distinctly different lines of action for the working class. It established the dominance of communists who successfully organized many strikes, held radical views and believed in revolutionary class struggle. They were strongly in favour of politicizing workers so that they could intensify their economic struggle. There was the other group in AITUC who wanted to be affiliated with the reformist trade unions such as the International Federation of Trade Unions, Amsterdam.

Those of a more radical persuasion, who had a firmer ideological base, insisted on its affiliation with the *Red International Labor Union*, Moscow, and the *Pan Pacific Trade Union Secretariat*. The inability to produce ideologues who could chart a strategy that was contingent upon the Indian environment was perhaps the greatest weakness of the Left. Also, the great divide

between the proletariat and the peasantry prevented the trade union movement from becoming the vanguard of a revolution.

The divergence of views amongst the top leaders culminated in a major split in AITUC at its tenth session held at Nagpur on 28-30 November 1929. The reformist group under the leadership of N.M.Joshi seceded from the AITUC and formed All India Trade Union Federation. They were in favour of co-operating with the government in matters of official commissions and committees and established their link with the British Trade Union Congress and the International Federation of Trade Unions. Their ideological persuasion was at best Fabian socialist and at worst collusionist. The reformist leadership could be described as having the tendency towards embourgeosiement. The communist domination in trade unionism was gradually gaining momentum while industrial unrest mounted. As a reaction to both these factors the government decided to take certain repressive measures. The foremost among them was the enactment of the Trade Disputes Act, 1929. Although the Act laid down provisions for the formation of a Conciliation Board and Courts of Inquiry for the settlement of disputes, it also imposed fines or imprisonment or both for any strike or lockout in public utility services and a ban on any general strike or sympathetic strike. Secondary picketing was banned. In order to counteract the growing opposition and unrest and especially to eliminate the *communist menace* from trade unionism the government took a desperate step and arrested 31 leading communist leaders in March 1929.

The charges against them were engaging in communist activities, forming labour unions, conducting strikes and similar other activities and above all to conspire against the British rulers. The elite in India and elsewhere

criticized the trial of this case, known as the Meerut Communist Conspiracy Case and which concluded on August 3, 1933 as a judicial scandal. The second split in AITUC came in 1931 when the extreme communist group led by B.T. Ranadive and S.V.Deshpande left AITUC and formed All India Red Trade Union Congress, being critical of the role of nationalist members in the AITUC. Such divisions in the Indian Labour movement came up at a crucial juncture when the country was suffering from the consequences of a severe economic depression. A large number of workers in various parts of the country were thrown out of employment and the employers took recourse to rationalization and wage-cuts.

Influenced by the dictates of the Communist Party of India the communist unions staged strikes in the textile industry in Bombay, Nagpur and Sholapur but were suppressed. The government of India took repressive measures against the leaders and thus the labour movement received a big jolt.

Between 1935 and 1938, workers unity was very much evident. This led to revival of trade union activity. In 1935 the All India Red Trade Union Congress merged itself with the AITUC. Furthermore, in 1938 an agreement was arrived at between All India National Trade Union Federation and AITUC and consequently AINTUC affiliated itself with AITUC in 1940. Several factors led to the revival of trade unionism. First, the change in political setup in the country was responsible for the change. It is significant that Congress Party, which formed its Government in 1937 in several provinces, tried to strengthen the trade union movement and to improve the conditions of labor. Second, the working class was also awakened to their rights and they, therefore, wanted to have better terms and conditions of service. Third, management also changed its attitude towards trade union somewhat.

The year 1938 saw the most important state enactment viz., the Bombay Industrial Disputes Act, 1938. The significant features of the Act were as follows:

- (a) Compulsory recognition of unions by the employer,
- (b) Giving the right to workers to get their case represented either through a representative union or where no representative union existed, through the Government Labour Officer,
- (c) Certification of standing orders which would define with sufficient precision the conditions of employment and make them known through workmen,
- (d) The setting up of an Industrial Court, with the original as well as appellate jurisdiction as an attempt to help the parties to settle matters between themselves through conciliation did not bear fruit, and industrial relations had to be adjudicated upon,
- (e) Prohibition of strikes and lockouts under certain conditions.

In order to fulfill their election promises and prevent the future out-break of strikes, the Provincial Governments in Madras, Bihar, Bombay, United Provinces and Central Provinces and Berar appointed Labour *Inquiry Committees* to investigate the actual conditions of labor. Several other enactments were also made in favour of worker, viz., the Bombay Shop Assistants Act, 1939, the Bengal Maternity Act, 1939, and the Central Provinces eternity Act, 1939. And here we find the working class benefiting yet again by default since these pieces of legislation were far ahead of their times. That sufficient amendments since then have failed to update them to keep with modernity speaks volumes for the weakness of the trade union movement and the lack of political power on the part of its leadership.

World War-II and the End of Colonialism

To understand the argument posited in this part of the paper the reader would do well to cast his mind on the writings of Kalecki, Sraffa, Lucaks, Gransci and Trotsky. These have been adequately treated in the works cited at the end of the paper. This would enable them to grasp the historical significance of how trade unions behaved during the period.

In September 1939 the World War II broke out. The national leaders of India, mostly from the Congress, were against Indians participating in the War efforts and it was evident in the massive strike organized by workers on 2nd October 939, by some 90,000 workers. The Indian Federation of Labour announced its purpose as two-fold, viz. (1) Mobilization of Indian Labour for conscious and purposeful participation in war efforts; and, (2) Securing for workers, the bare minimum of wages and amenities which war-time condition demanded and without which maintenance of workers; morale was impossible. The wartime inflation helped industrialists to accumulate enormous profits, yet the rise in wages was negligible. The real earning of the workers witnessed a steep fall from Rs.108.6 to Rs.74.9 per month.

The economic hardship of the workers led to widespread strikes in different parts of India. They demanded dearness allowance and bonus to compensate for the unprecedented rise in prices. But the Government invoked rule 81-A of Defense of India rules and banned all strikes and lockouts. This showed the State Capitalist nature of the Colonial government in its true colors.

In the beginning of the War, in view of the Non-Aggression Pact of Hitler with the Soviet Union, the Communists of India joined hands with Indian National Congress in condemning the War as an 'imperialist war.' Later in 1941 Hitler and Stalin fell out and the Soviet

Union allied itself with the French, the British and the Americans. This brought about a change in the stance of the communists in the AITUC and they lent their support to the government.

Having agreed to join the war efforts, the demands for redress of the fall in real wages was given up. Thus the war brought no relief to the workers. The independence struggle was getting intensified and the ability of the British to maintain an empire was failing. Inflation was rampant. Discontent among workers persisted and the number of unofficial strikes was on the increase. Disunity in the trade union ranks was still very high. In 1945 the war ended and the Congress leaders were released from jails. In the general elections for the Provincial Government of 1946, Congress won and formed ministries in all the states except Bengal, Punjab and Sind. Whereas the Leftist influence dominated Bengal, the feudal and reactionary elements held away in Punjab and Sind. The same year the Bombay Industrial Relations Act, 1946 was passed. The Industrial employment (Standing Orders) Act, 1946 was another piece of legislation passed that year. This was also the time when the Indian National Trade Union Congress (INTUC) was formed on 3rd May 1947. The AITUC remained in the hands of the Communists while the INTUC became the labour arm of the Congress. This division remains till date.

1950 and the Era of Neo Colonialism

The government of India is committed in its labour policy to the encouragement of trade unions in industry. The First five-year Plan stated that the workers right of association, organization and collective bargaining is to be accepted without reservation as the fundamental basis of mutual relationship. The attitude to trade unions should not just be a matter of toleration. They should be welcomed and helped to function as part and parcel

of the industrial system. The Second five-year Plan stated that a strong trade union movement is necessary both for safe guarding the interest of labour movement and for raising targets of production. The Report of the Third five-year Plan stated that trade unions have to be accepted as an essential part of the apparatus of industrial and economic administration of the country and should be prepared for the discharge of the responsibilities, which attach to this position.

Subsequent plans industrial policy resolutions and several Government reports also suggested the need to encourage trade unions. But *participative management* remained an illusive rainbow.

However the steps taken by the Government were not in consonance with the policy statements. The Government could not come forward with a comprehensive trade union legislation, which could increase the bargaining strength of workers. It could not provide a statutory provision for providing recognition to unions and could not adopt an objective method to select the bargaining agent. Similarly, it could not bring out legislation for the forming of trade unions of rural and unorganized workers. After all the rural and the unorganized sector constitute more than 80 per cent of the total workforce. It could not provide a statutory provision for providing recognition to the unions and could not adopt an objective method to select the forming of trade unions of rural and unorganized workers. To intensify the contradiction between policy and practice, the Government has passed several legislation's to limit the powers of trade unions such as Essential Security Maintenance Act (ESMA), Maintenance of Internal Security Act (MISA), National Security Act (NSA) and Defense of India Rules (DIR). Such regulations gave wide powers to the

Government to check trade union activity and even empowered the government to imprison the leaders from six months to one year "in the larger interest of the country" (read capitalism). Government had also used its Research and Analysis Wing (RAW) to help it to check militant unions.

1975 and the Period of Peripheral Capitalism

When Indira Gandhi lost the legal battle in the Allahabad High Court nullifying her election, she used the Parliament to her advantage and declared a State of Emergency. Democracy was well and truly raped although (as is often the case in totalitarianism) industrial output increased during the period. During this period industries benefited and in the name of the good of India, workers demands were kept on the back burner.

Neo-colonialism had developed into peripheral capitalism, which had its own mechanics and its own momentum. India moved towards perfecting its state capitalism as it inched towards becoming a part of the new unipolar world order. Both Bukharin and Wallerstien have taken up the rationale for this sort of argument elsewhere.

The neglect of the unions caused by the dichotomy between Government Policy and Practice can be witnessed by the fact that the Indian Labour Conference, a tripartite body set up to formulate policies and solve industrial relation problems, met after a gap of 14 years in November 1985. Similarly, the Central Industrial Relations machinery, which settles the disputes regarding recognition of trade union under Code of Discipline has not, met since 1972. The working of the Labour Commissioner Offices at the central level and in various states also is reported not to be operating in a satisfactory manner.

Labour Collectivity Under Mature State Capitalism

With the advent of independence the trade union movement in India got diversified on political considerations. The labour leaders associated with the National Congress Party formed the INTUC. The aim of the INTUC was declared thus:

to establish an order of society which is free from hindrances in the way of an all round development of its individual members, which fosters the growth of human personality in all its aspects and goes to the utmost limit in progressively eliminating social, political and economic exploitation and inequality, the profit motive in the economic activity and organization of society and the anti-social concentration of power in any form.

The failure of INTUC to raise a voice against the Linguistic Division of States and the Reservation Policy showed the *micro nationalist* and the *macro racist* nature of its leadership. Students who have read the works of Mandel, Toyo, Blackburn, Westergaard and Trotsky could hardly be surprised.

In 1948 the Socialist Party formed an organization known as the Hind Mazdoor Sabha. January 1942 marked the beginning of the concept of tripartitism in India. Tripartite consultation symbolizes the faith of India in the ILO's philosophy and objectives. The positive action of the tripartite arrangement was in the following four areas:

 a) ++ Discussions on the proposed legislation and amendments to existing enactment among the interested parties with a view to obtaining a consensus on the principles of drafting legislation;

- Setting up of normative guidelines for resolving labour-management disputes, for voluntary adoption by the two parties;
- c) Codification of their rights and duties through mutual agreement in regard to important matters pertaining to welfare and conduct; and
- Advising the government on the ratification of ILO conventions.

Whether the industry was in the private sector or in the public sector, the bargaining was essentially bipartite as the Government (as a class) was no different from the class that owned the means of production. The HMS failed to see this contradiction in the polity of the trade union movement and exposed its ideological weakness.

The All India Trade Union Congress (AITUC) became a political arm of the Communist Party of India (CPI) and followed the dictat of the Party in most matters, following the Leninist doctrine. Hence, the workers became instruments of the Party and its policies.

The Center of Indian Trade Unions (CITU) was formed by the Communist Party of India (Marxist), (CPIM), as an answer to the AITUC, following the Leninist doctrine but tending towards Stalinism. Once again the workers became instruments of the Party.

The Indian Peoples Front (IPF) was the labour arm of the Communist Party of India (Marxist-Leninist), (CPI-ML). It could not dissociate itself from the Party, of very Maoist and doctrinaire. They have support among the rural agricultural and plantation workers where the level of exploitation is markedly high.

The ideology of all the unions had been to view management and workers in terms of *them and us*. See for instance the works of Bell, Thompson, Plamenatz and Wright Mills for elaboration of this

argument. Historical growth of their organization had strengthened this conviction except in the case of INTUC, which was never strong at the grass roots level and always curried favor of the Government at the Center. Except for a brief period under Bagaram Tulpule even the INTUC did not take workers participation in management seriously.

Between eight per cent to twelve per cent of the total workforce is unionized. The larger unorganized rural labour continues to be overlooked both by the state and by the organized collectivity. And, that is where the bulk of the work for labour economists and human resource specialists lies. Workers' participation for this chunk of the workforce is a meaningless, senseless, abstract phrase. The reforms at the Panchayat level therefore become a necessity and this is not a big ask. The Konkan Development Corporation in Western India some years ago proved that rural labor could be developed only if one set one's mind to it as Vijay Page had done when he was at the helm of affairs there.

In the public sector undertakings, the principal employer was the State. And, logically if participative management was to be introduced by State Policy this was the sector that would lead the way. However, the logic by which state capitalists and private capitalists operate is the same and so not much hope can be held out for its success. As pointed out by Jayashree (1994) and by studies conducted in the Ranchi Region involving public sector undertakings such as Central Coal Fields Limited (CCL), Heavy Engineering Corporation (HEC), Metallurgical and Engineering Consultants (India) Limited (MECON), State Bank of India (SBI), and Central Mine, Planning and Design Institute Limited (CMPDIL) between 1990 and 1994 indicated the following:

- (a) The workers were very conscious about the changing political economic scenario and were apprehensive about the future.
- (b) The management and the labour collectivity had given the workers very scanty information about the changes taking place.
- (c) The gap created by this uncertainty was filled by rumors and stories, which were far removed from reality.
- (d) Many of the utterances made by the Finance Ministry and the Planning Commission were misquoted, mis-interpreted, and hence, misleading.
- (e) The role of the collectivity during the period under study (1990-94) was ambiguous and workers were unsure of what the actual position of the union would be in the future.
- (f) The union leadership was seen as working in tandem with a management and the workers saw in the union leaders more of labor aristocrats who were manipulating labor rather than developing them.

An obvious question arose in the minds of the workers: When the public sector was secure and its products had a ready market, nobody spoke of workers' participation. Now that globalization has disequilibrated the economy and privatization is on the cards, why is the Government vehemently talking about participative management?

Moreover, are the public sector going to continue to do so once the markets have been captured and the sale of their products assured? This is unlikely since the class that controls the means of production is not different from the class that controls the means of government. This especially so when Centrist and Right Wing political forces have dominated the Center at least since 1963. It is in the interest of capital to keep inflation rates low (in single digits) even when unemployment levels are rising, as is the case in India.

Evidence supports our contention when we see the *Times Of India* report of March 1, 1999, which states that during the period 1997-98, the Public Enterprises Survey reported an increase of net profit to the tune of 37 per cent in public sector enterprises. In 1996-97 the figure stood at Rs.9, 9992 Crores when in 1997-98 it had risen to Rs.13, 725 Crores. Gross sales during the same period rose from Rs.2, 54, 910 Crores to Rs.2, 82, 251 Crores i.e. a growth of 11.9 per cent Gross internal resources generated by central public enterprises during that period rose by 22.8 per cent i.e. from Rs.25, 585 Crores to Rs.31, 432 Crores. The export earnings similarly during that period rose from Rs.1, 91, 799 to Rs.2, 04, 054, i.e. by 6.9 per cent.

No corresponding news item during the period shows that the public sector even paid a perfunctory lip service about workers participation in management. That the political leadership too did not mention the rising levels of unemployment during the period or the number of industrial units that closed down sheds enough light on its poverty of ideology. That the Left did not adequately highlight the issue shows that the tiger is fast loosing its teeth.

Unfortunately, nothing said or done by either the State or the collectivity is clarifying this doubt. The workers are alienated from the trade union leadership. The leadership is one of labour aristocracy. The collectivity rank and file is living under conditions of uncertainty and the lack of information increases the insecurity. The history of the trade union movement and the structure of the collectivity do not lend itself to

transparency of policy. When this is combined with the ambiguity of the State, workers continue to be alienated and insecure. Under such conditions worker participation is a myth.

When global pressures impinge on the organization to perform, the human element is forgotten and workers needs are lost sight of in the interest of competition. Development is unplanned and growth is uneven. Discontent is increased as the workers find themselves to be misfits in the changing scenario. More man-days were lost between 1988 and 1997 from management action (or inaction) than from labour disputes. And yet the State expects the workers to perform and participate. This contradiction does not (obviously) find favour with the rank and file. The role of the collectivity and the oligarchy of its leadership emphasize this contradiction.

Once the unions have been sidelined by the State in the interest of the economy, by the management in the interest of profits and by the rank and file by the nature of their alienation from its leadership, the collectivity becomes a toothless tiger. The big fish eat the small fish, capital is centralized and concentrated. Strategic restructuring shows that little fresh capital has come in by way of direct foreign investment. If globalization has to be enhanced and Indian products are to be more competitive without an increase in the nature of capital, it means that the marginal productivity of labor must alone rise to bridge the gap. And with the collectivity disarmed, the field is clear for exploitation. Unequal trade, uneven distribution of wealth and unstructured growth, well on its way towards a form of economic colonialism causes India.

Contradictions in the nature and content of capitalism are writ large. We have, in Lenin's immortal words, *taken*

one step forward, no doubt, but have we not taken two steps back as well?

And the central conclusion that emanates from this long historical discourse can be summarized thus:

- * The political parties used the labor movement to promote their own ends and meet their own objectives rather than help the working class to better its lot.
- * The Indian State did not do as much as was expected of it to improve the lot of the working class and improve the quality of life.
- * The Trade Union leadership failed to add value to its function sufficiently due to a variety of reasons ranging from the rise of labor aristocracy, the preponderance of false consciousness and the power vested in the mediocrity.

Under the circumstances, there was an absolute absence of a powerful countervailing tendency to offset managerial actions. And since the level of consciousness of management itself was low, there was little real value addition in the economy and the polity when we compare it with the level of value addition that could have been possible under normal rather than ideal conditions. E. P. Thompson's analogy of the Trade Union movement in Britain and Althuser & Balibar's brilliant polemic is stirringly similar. The rise of right wing fundamentalism and the continued inability of right-centrist forces like the Congress Party to provide a balance of power have a lot to do with this phenomenon. If we have to eschew development less growth then the threatening rise of neo-fascism in the garb of self appointed guardians of public morality has to be faced squarely.

Earlier on we argued that outside leadership was historically necessary in the Indian context. However,

when this external leadership had outlived its mission and has begun to be used in the pursuit of right wing fundamentalism, a mockery of the human intellect and a farce of the Indian polity were laid bare. Perhaps if Indian schools made social history and international political history a necessary part of the curriculum, the electorate may have learnt from what happened in Germany before 1938 and begun draw parallels with it. On the other hand, the low levels of education across the country and especially in rural India where the vote banks are, we doubt if such an inclusion would have made a difference.

This is especially so when the Press appears to be so pro-establishment that the Fourth Estate seems to have been emasculated. *The Times of India* today, for instance, has lost its teeth and is a far cry from what it was when the likes of Girilal Jain called the shots. Why the trade union movement has failed to have its own controlled media or even a regular column in press (except some newspapers in localized pockets) is also an enigma that defies logic.

The historical blame for the mockery of democracy at the end of the millennium has to be shared by the capitalists, the trade unions, the political ideologies and the intelligentsia alike. In fact, the last category, are the to take the greatest blame for being conspicuous by their silence and abrogating their duty to speak up. Under such an environment speaking of promoting the satisfaction levels of the internal as well as the external customer may well be a very tall order to place. That some companies and industrial groups have still managed it has more to do with the immaturity of the corporate leadership and managerial myopia than with the counter-veiling forces of trade unionism!

As for the ideologues of the left who claim to be pro working class but fail to rise to the occasion and do something concrete to elevate their suffering one is reminded of what Trotsky said of Plekhanov in 1917:

He is like a teacher of geography who taught all his life about winter, but when winter finally came, he dismissed it as a seasonal discrepancy.

Coming to the so called managers of business and industry one can ill afford to forget Jayshree's castigation in 1999 when she wrote:

A specter is haunting India; the specter of mediocrity.

The time is ripe for the State to re-examine its role and consider proactive interventionism with a clear mandate to improve the quality of life of its working class without sacrificing economic growth. History may not give our economists another chance.

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Why SRTUs are Functioning Poorly?

by Dr.J.S.Mathur

Transport—*de facto* barometer of economic, social and commercial progress—has transformed the entire world into one organised unit. Among various means of transport, road transport is the only mode which is complete in itself. It occupies prime position because even when we use other means of transport, road transport is needed. M.R.Bonavia while submitting his report on "Traffic in Towns" to the U.K.Minister of Transport in 1963, rightly remarked that road transport is one of the two great nation-building influences (education being the other), which are basic to everything else.

As regards bus transport services in India, there are two agencies viz. State Road Transport Undertakings (SRTUs) and private transport operators catering the needs of the travelling public. As on 31 March 2003, the total number of buses owned by the public sector (SRTUs) and private sector were 1.15 lakh (16.13 per cent) and 5.98 lakh (83.87 per cent) respectively. There are 62 SRTUs in the country rendering service in hilly, rural and urban areas. There are four forms of management of SRTUs in India – (i) Departmental form, (ii) Corporate form, (iii) Company form, and (iv) Municipal undertaking. The break-up of present 62 SRTUs is as follows:

- 23 State Road Transport Corporations
- 22 Companies
- 9 Municipal Undertakings
- 8 Government Departments

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As on 31 March 2003, total capital invested in SRTUs was Rs.9195.56 crore.

Review of Revenue and Cost

Table 1 clearly indicates that SRTUs have gone into the quagmire of losses and cumulative deficits of these undertakings is mounting unabatingly. In 1988–89, the SRTUs suffered a total loss of Rs.428.29 crore which swelled to Rs. 2192.66 crore in 2001–2002, an increase of more than five times during a period of 14 years. It is pertinent to note that the overall net loss decreased to Rs.1524.74 crore in 2002–2003 from Rs.2192.66 crore as in 2001–2002. The decrease in net loss was worked out by 30.5 per cent over 2001–2002. It is also important to mention that 2002–2003 is the only year in which total cost of operation showed declining trend over the previous years.

In the year 2001–2002, out of 46 SRTUs for which data were available, only eight undertakings made a little profit. While in 2002–2003, out of 43 SRTUs for which data were available, only seven undertakings earned little profit. Section 20 of the Road Transport Corporations Act, 1950 reads clearly, "It shall be the general principle of a Corporation that in carrying on its undertaking, it shall act on 'business principles." The term "business principles" clearly indicates the SRTUs have to be self–financing and growing. This, in turn, imposes upon them the responsibility of earning profit which adhering to the ethics of business.

There are various reasons which are responsible for poor financial performance of SRTUs. But, none understands the reasons, other than inefficiency and dishonesty of some of the employees, as to why SRTUs are functioning very poorly.

Table 1
Financial Performance of SRTUs (Rs.in crore)

Year	Total Revenue	Total Cost	Profit/Loss
1988 - 89	4,008.37	4,436.66	-428.29
1989 - 90	4,556.66	5,120.26	-563.60
1991 - 92	6,054.25	6,705.14	-650.89
1992 - 93	6,967.62	7,626.11	-658.49
1993 - 94	7,936.61	8,558.15	-621.54
1994 - 95	8,773.36	9,475.75	-702.39
1995 - 96	9,499.01	10,558.95	-1,059.94
1996 - 97	10,088.48	11,502.52	-1,414.04
1997 - 98	11,556.08	12,838.44	-1,282.36
1998 - 99	12,367.00	14,284.88	-1,917.88
1999 - 2000	14,113.47	16,310.81	-2,197.34
2000 - 2001	15,325.56	17,272.02	-1,946.46
2001 - 2002	16,040.50	18,233.16	-2,192.66
2002 - 2003	16,618.35	18,143.09	-1,524.74

(Source-Profile and Performance of SRTUs, 1988-89 to 2002 - 2003, CIRT, Pune

Problems

The total revenue earned by SRTUs has been always lower than the total expenditure. There are five reasons for this situation: (i) Concessional Travel Facility, (ii) Uneconomic Routes, (iii) Lack of Freedom in pricing, (iv) Leakage in Traffic Revenue, and (v) Rise in input prices.

(i) Concessional Travel Facility

Financial burden, due to concessional fare and free passes becomes inevitable to SRTUs. Financial burden due to aforesaid reason is presented in the Table 2. This burden has been increasing year after year. It increased from Rs.203.89 crore in 1989–90 to Rs.1,523.74 crore in 2002 –2003, an increase of 7.5 times in 13 years. Break-up of concessions extended to different sections of the travelling public, the subsidy received from Government and net financial burden on SRTUs are depicted in the Table 3. Financial burden in 2002–2003 due to students' concession was

Rs.1,269.61 crore (around 83 per cent of the total concessional travel facility), that of free pass to blinds was Rs.100.31 crore, freedom fighters and MLAs Rs. 26.17 crore, journalists Rs.8.12 crore, senior citizens Rs.63.94 crore and others Rs.55.59 crore. The figures of total concessional fare works out to 43.4 per cent, 58.4 per cent, 59.9 per cent and 99.9 per cent of the total losses in 1999-2000, 2000-2001, 2001-2002 and 2002-2003 respectively. This means, full reimbursement of the traffic revenue lost would have enabled the SRTUs to lower their operating losses or to improve their profit by aforesaid percentage. As per Table 3, the amount of subsidy granted by state governments was Rs.252.48 crore, Rs.471.29 crore, Rs.627.75 crore and Rs.628.34 crore leaving a net financial burden of Rs.701.35 crore, Rs.665.51 crore, Rs.685.09 crore and Rs.895.40 crore respectively. Though SRTUs deserve complete reimbursement of such burden, only few state governments grant subsidy to compensate SRTUs in this regard. Social obligations of SRTUs, therefore,

Table 2
Financial Burden Due to Different Concessions (Rs. in Crore)

Year	Number of SRTUs	Financial Burden
1989 - 90	28	203.89
1990 - 91	30	281.26
1991 - 92	31	332.69
1992 - 93	32	374.48
1993 - 94	30	314.66
1995 - 96	35	364.39
1996 - 97	37	486.12
1997 - 98	35	450.71
1998 - 99	41	737.09
1999 - 2000	43	953.83
2000 - 2001	44	1,136.81
2001 - 2002	46	1312.84
2002 - 2003	43	1523.74

(Source - Profile & Performance of SRTUs 1989-90 to 2002-2003, CIRT, Pune)

Table 3

Break-up of Concessional Travel Facility

(Rs. in Crore)

Particulars	1999 - 2000	2000 - 2001	2001 - 2002	2002 - 2003
(1) Students' Concession	739.64	874.27	1,015.94	1,269.61
(2) Free passes to blinds	62.39	57.61	98.31	100.31
(3) Passes to freedom fighters and MLAs	43.19	45.55	56.24	26.17
(4) Passes to Journalists	6.93	13.52	7.03	8.12
(5) Concession to Senior Citizens	34.77	86.67	89.08	63.94
(6) Others	66.91	59.18	46.24	55.59
Total	953.83	1,136.80	1,312.84	1,523.74
Subsidy Granted	252.48	471.29	627.75	628.34
Net Financial Burden	701.35	665.51	685.09	895.40

(Source - Profile & Performance of SRTUs 1999-2000 to 2002-2003, CIRT, Pune)

required to be quantified and reflected properly in the performance evaluation of SRTUs. Moreover, such social obligations should be fully compensated by the respective governments.

(ii) Uneconomic Routes

SRTUs have been operating, on the direction of the government, a large number of uneconomic routes. The government's concern for the development of backward areas is expressed in terms of extension of

State Road Transport Services regardless of the financial viability and profitability. SRTUs run services on such uneconomic routes on which no private operator would venture. Data available for 1999–2000 reveal that in case of 21.7 per cent of the routes operated by 32 SRTUs, the traffic revenue was less than the variable operating cost. In case of another 57.3 per cent of the routes, the revenue was somewhere between the variable operating cost and total operating cost. That means, the SRTUs earned less revenue than the cost of

operating 79.0 per cent of the routes they operated. Only 21.0 per cent of the total routes were earning profit.

People give arguments in favour of low profitability and losses of these undertakings. Since they are public enterprises and they have to discharge social obligation, these things can be overlooked. We agree that the object of SRTUs are to serve the public and do all those works which are not done by private operators. But that does not mean they do not fulfill minimum principles of business finance.

(iii) Lack of Freedom in Pricing

Poor financial performance of the SRTUs is also due to delay and inadequacy in the revision of fares. Though State Road Transport Corporations (SRTCs) are called autonomous corporations by statutory provision and are expected to operate their services on business principle, they do not have any freedom of pricing their services. Fare rise is unpopular. It causes criticism and annoyance in the travelling public and is generally avoided by the government. The procedure of fare hike is also so cumbersome that by the time of fare hike is allowed by the government the cost hike overtakes fare rise. Such a situation can be avoided if a notification is made which provides for automatic increase in fares according to a prescribed formula on any substantial increase in the price of diesel and the relevant consumer price index on which Dearness Allowance is based. It could also be supplemented by an annual review.

(iv) Leakage in Traffic Revenue

Leakage of revenue on account of wrongful practices adopted by employees, particularly by conductors and drivers, is a common problem being faced more or less by every SRTUs. Many experts in the trade

have, in the past, estimated the incidence of leakage between two and ten per cent of the gross receipts of the undertakings. There is, however, no empirical evidence to corroborate the percentage referred. Nevertheless, no one in the industry can deny the existence of leakage, nor question of the seriousness of it.

(v) Rise in Input Prices

Traffic revenue is directly hit by some of the policy decisions taken by the governments which SRTUs implement promptly. Hence, the scope for reducing the gap between cost and revenue in the case of loss—making undertakings or to increase the gap between revenue and cost in case of profit making undertakings by increasing traffic revenue is very limited. Consequently, the SRTUs have to concentrate more on cost reduction and control. But, even this appears to be very strenuous task because prices of some inputs have been continuously rising (Table–4). The management has no control over these prices. It may be noted that the increase in the operating cost on account of price hike is neither due to reduced efficiency nor failure to exercise control over cost.

Various Types of Taxes

Both the Central and State Governments have been levying various types of taxes on SRTUs. The rates of these taxes have been increasing year after year, and they have become a big drain on the resources of the SRTUs, adversely affecting their commercial viability. Motor vehicle (MV) tax is one of the important levies imposed by governments on commercial vehicles. The base used to compute this tax differs from state to state. For instance, in Andhra Pradesh, the type of service (ordinary or express) and the distance covered are used to levy the MV tax. In Madhya Pradesh, MPSRTC has to

Table 4
Increase in prices of some inputs

Input Factors	Price (Rs.)		Amount of	% of
	1991	2003 (Dec.)	increase during last 12 years (Rs.)	increase in the prices during last 12 years
1. HSD per 1,000 litres	5,788	25,204	19,416	435.45
2. Tyres, Tubes & Flaps (9.00 × 20)	6,332	6,081	-251	-3.96
3. Lubricants (Per litre)	26.89	36.85	9.96	37.04
4. Chassis: TMB or TATA Leyland	4,04,389 3,91,091	6,58,718 6,46,620	2,54,329 2,55,529	62.89 65.34

(Source - Profile & Performance of SRTUs 2002 - 2003, P. 44)

pay a lump sum amount, per vehicle per quarter, as MV tax. In Maharashtra, MV tax is levied at a specified rate, per seat per annum, and a reduced rate per authorized standee.

Besides the MV tax, passenger tax is levied on SRTUs in some states like Maharashtra, Uttar Pradesh, Himachal Pradesh and Haryana. It is also noted that the rate of passenger tax varies widely, between 17 per cent in Maharashtra and 40 per cent in Himachal Pradesh. In the case of Rajasthan SRTC, passenger tax is levied as a lump sum amount, per seat – Km. along with a ten per cent surcharge. MV tax (and others including passenger tax) paid by different SRTUs in 2002–2003

is presented in the Table 5. It is clear from the table that total tax amount paid by different SRTUs vary widely from one state to another.

Out of 43 SRTUs, for which data were available in 2002–2003, the annual tax per vehicle was less than Rs.10,000 for six undertakings and more than Rs.1.00 lakh for 25 SRTUs. The tax incidence is the highest in ST Haryana (Rs.4,99,115) followed by Pepsu RTC (Rs.3,08,178) and the lowest on the Nagaland ST (Rs.965). The difference between highest and lowest is very large. Such variations are simply ununderstandable and not desirable.

Table 5
Tax Incidence on SRTUs
(2002–2003)

SRTUs	Total Tax per bus held per year (Rs.)			
Ten Highest Taxed SRTUs				
(1) ST Haryana	4,99,115			
(2) Pepsu RTC	3,08,178			
(3) ST Punjab	3,08,123			
(4) Maharashtra SRTC	2,43,246			
(5) Uttar Pradesh SRTC	2,30,015			
(6) Himachal RTC	2,05,223			
(7) Gujarat SRTC	1,83,760			
(8) Rajasthan SRTC	1,68,882			
(9) Andhra Pradesh SRTC	1,68,401			
(10)Thane Municipal Transport Undertaking	1,52,117			
Ten Lowest Taxed SRTUs				
(1) Nagaland ST	965			
(2) Pimpri Chinchwad MTU	2,676			
(3) Kolhapur MTU	4,274			
(4) Assam STC	8,000			
(5) South Bengal STC	8,145			
(6) Ahmedabad MT Service	9,474			
(7) MTC Ltd., Chennai	19,315			
(8) Kadamba TC	26,247			
(9) Jammu & Kashmir SRTC	34,150			
(10) Bangalore MTC	43,467			

Suggestions

Following suggestions may be made to improve the financial performance of the SRTUs:

- Financial burden due to concession and free passes need to be completely reimbursed or adjusted against tax payment.
- An appropriate fare policy to neutralize rising cost of operation is inevitable to improve the financial position of SRTUs.
- Instead of different bases being used to levy vehicle and passenger taxes which involve a very lengthy, cumbersome and time consuming process, a common and simple base should be evolved for the purpose.
- 4. Effective checking by the inspecting staff and the flying squad, payment of incentive bonus to drivers and conductors on higher load factors etc. are some of the usual methods which are used by the SRTUs to combat the problem of

- leakage of revenue. Education to the travellers to pay proper fare by arousing their conscience will also bring down the gravity of the problem.
- If the SRTUs in India are to be made commercially viable, then they should be given more autonomy in the management and functioning.

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Book Review

Title : Successful Business Planning: Energizing your company's potential

Author : Norton Paley ISBN : 817649949X

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"The plan is nothing; planning is everything." – Former US President and General Dwight D. Eisenhower

What the great General implied by the above statement is that the process of planning is in itself more crucial than its outcome, the 'plan.' The plan is only a structured format containing a list of directions. It is the mode of planning that stretches your thinking into the future, analyzes events and statistics, makes judgements, formulates ideas and converts them into action.

Planning, according to the author, is a mental process, where experience, skill and insight converge to envision the future. It involves prioritization of objectives, formulation of imaginative strategies, deployment of human, material and financial resources for maximum impact, and assignment of authority and responsibility to capable and trained individuals who can skillfully implement the plan.

The positive outcome of immersing oneself, and those with whom one interacts, in the planning process is that it enhances your ability to:

- * Make market estimates and thereby calculate your chances of success.
- Identify your competitor's strategies and counter them before they materialize.
- * Resolve internal difficulties before they arise.
- * Recognize customers' needs and buying



About the Author

Norton Paley has over 25 years of corporate experience in general management, marketing management and product development at McGraw-Hill Inc. John Wiley & Sons and Alexander-Norton Inc. He has authored seven other books, on topics such as Marketing Strategy, Pricing Strategies and Practices, Marketing Principles and Tactics and Competitive Strategies.

In addition to advising management on competitive strategies and strategic planning, Paley also had extensive global experience lecturing to managers at such firms as American Express, Cargill (worldwide), Chevron Chemical, Babcock & Wilcox, Dow Chemical (worldwide), W.R.Grace & Co., Prentice Hall, Ralston-Purina, Hoechst, and McDonnell-Douglas. Also, he participated in lecture tours in the Republic of China and Mexico.

His byline columns have appeared in The Management Review and Sales & Marketing Management.

behaviour, and then translate the findings into new market and product opportunities.

- Create strategies and tactics that result in a sustainable competitive advantage.
- Concentrate your strength against a competitor's weakness.
- * Manage personnel with greater efficiency.
- Assess your company's and employees' states of readiness.
- * Select the markets to concentrate your resources.
- * Make strategic decisions with greater precision
- Energize your group or organization to take advantage of the immense global opportunities.

Contents

The book is divided into six parts.

Part One deals with Strategic Business Plan and is subdivided into:

- * Strategic Direction
- * Objectives and Goals
- * Growth Strategies
- ★ Business Portfolio Plan

The Second Part covers Tactical Planning and contains Situation Analysis encompassing the 4P's of the Marketing Mix. It also deals with Competitor Analysis, Market Background Analysis, Identification of Market Opportunities, Tactical Objectives, and Financial Controls and Budgets.

Part Three comprises 17 Case Studies, covering a wide spectrum of Businesses, ranging from Apparel Industry to Banking, and from Automobile Industry to Information Technology. Each case relates to a particular situation where the firm concerned had to find solutions to questions such as:

* "How to maneuver into a market already occupied by an Industry Leader?"

- * "What strategies can help reverse a steep decline in a company's sales?"
- * "How do you make the culture of your organization the centerpiece of your strategy?"

IBM, Hyundai Motor Co; Southwest Airlines, Sony, SAS and General Electric are some of the firms covered under this section. Each of the cases cites instances where Strategic and Tactical Planning enabled the firm concerned to find solutions to typical business related problems, enabling it to gain competitive advantage.

Parts Four and Five deal with "Checklists for Developing Competitive Strategies' and 'Help Topics,' respectively. Both enable the reader to put the concepts developed in the previous three parts, into practical use. Part Six contains an overview of the previous sections and is appended with Forms and Guidelines, aimed at helping the reader in carrying out the Planning Exercise effectively.

Throughout the book, the author has adopted a 'down to earth' strategy. He does not burden the reader with all the management 'jargons.' The persual of the book, with an open mind, will enable the reader, irrespective of whether he is a Management Student, Academician or Practitioner interested/engaged in Business Planning, to understand the nitty-gritty of the planning process in a pragmatic way. Especially, the 'Checklists' and 'Help Topics' provided will eanble the reader to cruise through the planning process effectively and systematically. The Tables, Working Drafts, Exercises and Illustrations that form part of each section will be of great utility to any practicing Business Planner.

Features of the book, such as its layout, print quality and chapter scheme are really commendable. A 'must read' for anyone interested in Business Planning - Practitioner, Teacher or Student.

Prof. K. J. Paulose Dean, Management Studies, SCMS.

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