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5.0 CRITIQUE AND RECOMMENDATIONS

5.1 Reviewing the reengineering efforts

It was in early 1997 that the management underwent a restructuring exercise. Core processes were defined and the Engineering Dept was the first to be reengineered. This reengineering saw the birth of a more structured design office, designed to cater for different product lines and equipped with the computer LAN server to link all the design sections. The former Projects Section was reassigned to the Sales Dept as it functions required the personality of salesmen rather than designers. Works Dept. was second to be reengineered and tremendous effort was put in redesigning the process flow. However, in later months, although positive results were noted, it did not transform the department radically.

5.2 Problems Arising

As work designs were put in place, both the reengineered departments were confronted with the following problems:

a) only a vague awareness of the plans for those not in the taskforce

b) employees heard different versions of the plans through office grapevine and got distorted information

c) new processes did not immediately produce results and people were disheartened

These were mainly due to inadequacies in:

a) readiness to change

b) communication of plans

c) commitment,

d) reward systems
5.2.1 Inadequate readiness to change

The readiness to change could only be brought about by a change in mindset. In the midst of internal strife and conflict, it was hard for any employee in ABC to see that change is for the better. A radical change in the company could not be wholly met by business process reengineering; it needed a more wholesome approach, a starting over – to see afresh a new way of doing business and to have a paradigm shift for top management to a new mindset; one that values teamwork, flexibility and adaptability.

5.2.2 Inadequate communications

ABC should have ensured that a certain level of communication during the implementation stage by more frequent use of meetings to cascade down the information or through internal memos announcing plans and activities to all levels of staff. Although the working teams and taskforce were well ware of the objectives of the reengineering, this was not formally briefed to all other workers. Bottom line staff i.e. factory workers, draughtsman and technicians were not formally informed of this and their attitudes remained unchanged. Small groups should be formed to solicit feedback from employees and allow them to air their concerns and highlight critical issues that required refinement. A comprehensive training program, which includes counselling and mentoring of displaced employees as well upgraded ones, would have greatly assisted the reengineering efforts.

5.2.3 Insufficient Commitment

Success implementation required the heads of the department to be actively committed to the change programme. They must play the role model, leading the change programme by actively involving themselves in the activities and being seen to be cooperative.
The conflicts between the Contracts and Applications adversely watered down the initial enthusiasm of setting up the new sections and hampered the progress of the reengineered sections. There were disagreements on scope of work. Senior managers of these two sections could have helped resolved the issues if they had committed to work together towards a common vision. Instead when Mr. Moh called a meeting to resolve these issues, Earl rejected it as he did not think that it warranted a meeting. He gave instructions for the Contracts to boycott the session. Such was the behaviour of the senior managers who contributed adversely to the feelings of frustrations as they continued their old practices of protecting their own ‘turf’ leaving little doubts that they were motivated by self-interest.

5.2.4 Delays in implementing the Reward System

The reward system had been delayed as the management foresaw the difficulties of setting performance indicators and were reluctant to push for its early implementation. Instead of motivating and winning the workforce over at the initial stage through a reward scheme, the restructuring was conducted with the basic assumption that the people were convinced of the need to change and therefore, should do so. However, in reality, people were resigned to the fact and support was not sustainable without the motivation to improve. Roger was of the opinion that the year end bonus and increment were sufficient to motivate the staff. However, workers' interests were short-lived and had to be motivated time and time again.

5.3 Positive Outcomes of the Reengineering Exercise

The quality of improvements on the processes was dependent on the efforts and dedication of the taskforce and the commitment invested by the senior management. The strong leadership of Roger stirred the company
forward in the direction of process restructuring.

5.3.1 Focussed Approach

If the implementation followed the design of the reengineering, the benefits derived would have increased as a more focussed approach by product grouping ensured that the right skills were assigned the right task and hence gainfully employed. However, this took time and required training to bring out such skills.

For example, the role of a Contracts manager differs greatly from the designer. Allowing one person to wear both hats can pose a problem to the smooth running of the projects as personalities tended to favour one only. Before the reengineering, some project engineers were careless in their work and did not have the time to check the work. Detailed work requires a consistent, discipline approach that those in the Contracts may not possess. Contracts were the cowboys, sharp in wit but not willing to put in the hard work.

5.3.2 Common Material List

As mentioned earlier, Works dept. had worked around the problem of material requirements by generating its own list even though the Engineering Dept faithfully generated its own version of the bill of materials.

The insistence of a common material list reduced time wasted in duplication of the work by the Works Dept. This ensured that the Supervisor had more time for his supervision of the processes. Furthermore, the Bill was designed to cater for modularity, which allowed flexibility for the Works Dept. as jobs would not be assigned to actual sales orders until the last stage of production. During implementation, a weekly
co-ordination meeting between Works staff and the Application Engineers ensured that both parties arrived at a mutual understanding of the design of the material list.

5.3.3 Value Engineering

Through the years, ABC Co. had actively localised the internal components and today, 95% of its components were locally manufactured. The R & D department handled all this localisation efforts. However, Wroks Dept. did not have the confidence to change the design without consulting R & D Dept. This created a problem when Production revised a design and R & D refused to accept it.

One positive result of the reengineering of the Engineering Dept. was product ownership. The Engineering Dept realised that innovation was no longer the privilege of the R & D Dept and had called on the wealth of expertise available internally to generate cost saving measures to existing designs.

It was done primarily by breaking down of the total product cost to costs of individual features to give a more accurate picture of the composition by cost. Then, the feature was evaluated in relation to its value to the customer. The objective of the project was to remove unnecessary product features and replace costly but low valued features with alternative designs that would still satisfy customer requirements.

Being a product owner, the Application teams were responsible for the quality of their products after hand-over by the R&D team.
5.3.4 Weekly Production Schedule

In the past, the Engineering manager, Mr. Moh went around checking on his engineers' schedules and bringing up scheduling problems at a fortnightly Production meeting. This resulted in a lot of friction between Engineering and Works dept. Furthermore, the scheduling was conducted on a monthly basis and when delays were highlighted, there was not enough time to resolve the issues.

The reengineering addressed this problem by conducting a fortnightly meeting headed by En. Kasim. Weekly reporting ensured prompt handling of problems arising and improved delivery. The fortnightly Production Meeting provided the necessary platform for discussions and problems to be aired. Effective implementation would ensure flexibility of production and increased volume of output.

5.3.5 Emphasis on Skills Development

Since the reengineering, the Engineering Dept had embarked on training sessions for the various sections to inculcate a learning culture. At the same time, a 2-year management development programme initiated by Roger provided the additional incentive for selected participants to increase their exposure. The four elected executives commenced this training programme in early 1998

5.4 Recommendations

The reengineering exercise had brought about some improvements but they were insufficient as radical change was needed to revitalise the company. Restructuring must be action oriented and results measurable. Two key factors that are critical indicator of results are breadth and depth.
Breadth concerns work processes while depth as defined by Hall is the
drivers of culture. Information technology affecting processes and the
processes in the value chain could have been reviewed at a more strategic
prospective.

5.4.1 Broader Coverage
There was a need for the reengineering to assume a broader coverage to
encompass the Sales Dept. as their smooth operations would ensure that
the Engineering and Works Dept. were adequately supported by the Sales
Dept. Without this, the reengineering would be deemed as incomplete. It
was also the right time for Sales Dept. to review its marketing strategy and
market coverage to generate more sales. The broader the process, the
more likely the redesigned process will impact business results.

5.4.2 Depth levers- root causes
Reengineering the corporation must be an in-depth organisational
transformation. What was not done was to create a new social system or a
new way of working together that would lead to future business growth.

Reframing the Organisation’s Mindset
To ABC employees, restructuring had meant reducing the pressure of
immense workload by reassigning work and regrouping the processes. At
best, ABC had managed to achieve this objective. However, this is only
part of the restructuring.

The other crucial part is the shifting of the organisation’s mindset of what it
is and what it can achieve. An adaptive and flexible mindset is needed to
satisfy the increasing customer needs. ABC got stuck in a rational thinking,
and lost the ability to develop fresh mental models of what they are and
what they can become. Reframing opens this mind and infuses new vision,
new resolves. Roger worked on the senior management initially to facilitate a buy-in. As mentioned earlier, senior management was embroiled in petty quarrels and there was no spirit of co-operation and teamwork. It was evident that the management team had developed a protective armour and there was a need to inject fresh thinking to the various departments and enforce transparency. Roger received adequate response from the senior management though not whole-hearted during each phase of reengineering. It was evident that eliciting full support was not easy as senior and middle management were reticent about the whole affair.

The first step was to engage senior officials in a serious examination of their obligations and commitment to the company that went beyond their departmental responsibilities. Time spent to get the required understanding and commitment may be protracted. For Bell Atlantic, it took a whole year.

It was important for ABC to deal with the people side of the transformation, and with the spirit of the organisation. It is about investing individuals with new skills and new values, thus allowing the company to regenerate itself. It was very important that together managers thought about how to apply their values to their own practices, their own daily behaviour and decisions as well as the system and structure in the organisation. This leads to organisational learning, a task that was given to the HRD dept. of ABC. The was an urgent need to develop a culture of tolerance, listening and intellectual curiosity. Redeployment of long staying management staff to other departments may be one possible solution to these lack-lustre effects but there would be reservations in this direction as there was always the fear that this would unsettle the well-adapted staff and cause unnecessary upheavals. Roger’s implementation of the management development programme had helped with this renewal aspect. Four young and dynamic employees were selected each year to participate in this programme. Their
exposure to the other functional units had helped open their mind to see the works in another perspective. This taught them to be more tolerance and able to handle conflicts and diversity.

_Focusing on the Customer_
Customer power was growing worldwide in this industry as the explosion of technology and the globalisation of markets increased customers' choices. So, to compete effectively, ABC must move from thinking like a producer to thinking like the customer. Focusing on the visible production mistakes was a good step for ABC but equally important were the invisible mistakes of failing to anticipate customers' requirements for example, giving what the customer may not want, and failing to innovate to create new value for the customer. One note of caution for ABC is that making a company manageable might detract from serving the customer. Because functional areas have conflicting goals and organisational imperatives, customer needs might be lost in the gaps between departments. Because decision makers were protective of their turf and lack the knowledge of the entire management cycle, they could not set appropriate priorities. There is a need for ABC to make interdepartmental cooperation work for the benefit of customers.

_Full Commitment by the CEO and his top management_
Commitment and involvement produces change. The CEO as a change leader must promote commitment to the reengineering efforts. One of the keys to successful change is that top management accept responsibilities to set goals and make commitments up-front. If the CEO wanted to overcome the pull of the past- the powerful restraining forces of habit, custom and culture- to bring about radical change, he will need to confront the problem of internal strife, to develop a programme of reinforcement and support. He must be personally involved in handling the in-house conflict
and in mimimising its root causes At the same time, he should reinforce relationships and to get people, starting with the top management, involve in the business and be responsible for their commitments. He should review the mission statement to incorporate the company vision and values together with his employees. To make it a living reality, top management must be sincere and committed to this vision.

Reward and Evaluation System

Reward system is an important means of achieving compliance with planned strategic change. ABC had delayed implementing this system as the CEO was often sceptical about the effects on the people. It is true that reward systems can have both positive and negative impacts and therefore, must be carefully weighed by the implementor. The design of reward systems is the key element in creating a climate for strategic change. A successful change programme feeds on achieving interim targets in order to reach the final goals. Without measurement, change cannot be appreciated and motivation dies. ABC had to decide on the important key performance indicators needed to measure process improvements and its reward system. The reward system must be implemented early to encourage the people to focus on results consistent with the indicators. Key performance indicators should be:

- Directly measurable (part of the process)
- Indicative of process and/or project performance
- Actionable on a routine basis (easy to use)
- Evolving: regularly modified and improved

5.4.3 Achieving Dynamic Stability through Information Technology

The world is perpetually changing in one way or another, and success
means adapting to that change. Today's competitive environment is
dramatically in two important ways: in terms of market and
product demands and in terms of available process capabilities. These
changes include advances in information technology that give companies
the power to build a stable base of process capabilities that are at the
same time flexible, efficient and enduring.

ABC had initiated steps to design its organisation for dynamic stability—an
organisation based on long term process experience and collective
organisational know-how to respond to rapid and unpredictable market
demands. The new server network for the Applications Team provided
efficient retrieval of drawings. Plan was underway to replace the existing
MRP system with an integrated manufacturing software module and the
hardware as well. However, this plan was abandoned as the business
slowed down and there was no good justification for immediate
implementation. ABC must manoeuvre itself into the integrated flexible-
manufacturing environment that makes use of integrated manufacturing
capabilities and modularity of design.

Management must think in terms of building three distinct yet interrelated
types of information systems i.e.

- systems of scope (knowledge to build and use organisational
  know-how and process capabilities),
- vertical systems (provide readily available real-time information
  about market changes, product changes and
  process and allocation of purposes for evaluating
  the use of process capabilities)
- & horizontal systems (cross-functional/organisational information
  flow to link platforms).
With the help of an integrated IT network system, ABC should diagnose problems easily in any of their international operations. Customer needs can be addressed on global perspective through IT databases and appropriate and timely product planning. The internet can transfer database wholly across the globe in a split of a second.

Horizontal systems cut laterally across functions and departments so that process capabilities can be combined and recombined to support rapid and flexible product and service delivery. In case ABC Co. is under condition of heavy product demand, differing combinations of information processing requirements will be necessary to produce and deliver the products in time. As product requirements rapidly change, so must information-processing system.

5.4.4 Redesigning the Value Chain

Due to increasing production targets, it was necessary to out-source major portions of the metalwork and assembly of switchgear. Contractors and suppliers contributed to the value chain. The monitoring of the quality of supplied parts by the Quality Inspectors helped maintain standards to ABC requirements. In addition, during peak production period, it was observed that ABC extended its expertise quite readily to help contractors complete the works.

ABC was bogged down with continuing delivery problems and shirking at the factory floor. Such pressing problems can be reduced by redesigning the value chain to take advantage of the benefits of outsourcing and strategic alliances as can be seen in Figure 16. For example, the whole Busduct manufacturing can be handled as a separate business unit instead of the interactions of a few parties, i.e., the Production Controller, the

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Applications Team and the Assembly unit. An independent and self-sufficient team will reduce interaction problems and ensure a greater effectiveness.

It is unwise for an organisation to expend financial and managerial resources on activities that add only a fraction to the final value of its products or services. ABC should concentrate on its intrinsic value of marketing (to achieve global brand equity) and technological development (to keep high level activities in-house) and leave its existing business activities such as logistics, operations, and services which can be more efficiently handled by others through outsourcing and alliances.

A word of caution is appropriate here as mindless outsourcing in pursuit of temporary cost advantage could lead to a hollowing out. The selection criteria required shrewd insights into the supplier’s abilities and financial standings. In addition, there was a need to maintain and update technological expertise and knowledge in-house. Young engineers should be encouraged to think critically. This could be achieved through organisational learning.

*Figure 15. New Value chain*