PROCESS RE-ENGINEERING IN BANKS

The Narsimaham Committee (1998) on banking sector restructuring has dealt with the issues in technology upgradation in banks. The committee has specifically suggested that banks' efforts for technology upgradation should precede the process re-engineering so that the efforts in technology upgradation become more directed and bankers derive maximum advantage out of their technology projects.

The banks have been investing very significant amounts in their IT projects since induction of IT is considered necessary for meeting the new challenges before them, i.e. managing banking risks and being competitive in a global market. The main concern before bank managements today is to ensure proper return on Investment (ROI) with large budgetary amounts committed to technology upgradation. It is widely acknowledged that technology should be used not so much for automating the existing process and procedures as for improving the existing processes and procedures, speeding up the service delivery, improving the control mechanism and offering new products and services to the customers. While these concerns are important the cost/benefit analysis is an overriding concern since any improvement in the customer service should also be coupled with reduction in the cost of service to the customer while improving the profitability of the banks.

The paper seeks to examine principles of process re-engineering and its different phases, the role of technology in process re-engineering and the possible applications of process re-engineering in banks.

Process Re-engineering

Business process re-engineering or BPR is defined as "the search for and the implementation of radical change in business process to achieve breakthrough results." BPR therefore is about searching for new business processes and implementing them to achieve "breakthrough" results. Information Technology is considered as the means to achieve these ends. New business processes are built using Information Technology and proper implementation of IT projects decide the success of process re-engineering.

A business process is defined as "a set of logically related tasks performed to achieve a desired business outcome."
The business process therefore comprises equipment, material resources and business procedures and people combined to produce a specified result. The following are some of the business process in banking:

- Acceptance and repayment of deposits
- Sanction and disbursal of loans
- Transfer of funds for the customer and for functional units of the bank.
- Handling foreign exchange transactions
- Acceptance of deposits and making payments on demand.
- Investing and disinvesting the resources of the banks for statuary requirements and investment.

Every business process has the following characteristics

♦ Each process demands a set tasks
♦ Each process requires diverse resources within the business who receives the outcome of the process
♦ The outcome of a process can be report, an idea, a desire or a product
♦ Business processes cross organizational boundaries and require participation of different organizational groups in logically related tasks
♦ Each business process or system is a collection of hierarchy of sub processes or business functions.

Hammer suggests the following principles that guide the process re-engineering activities.

* Organize around outcome and not around tasks:

If the process re-engineering is done around the tasks without taking into account the outcome of process re-engineering, it becomes difficult to debug the process in case any problem.

* Have those who use the output of the process, perform the process:

Those who need the business output should control all the variables that allow them to get the output in a timely manner. Lesser the number of constituents to a process, smoother and more rapid would be the outcome.

* Incorporate information-processing work into the real work that produces the raw information.

The spread of IT makes it possible to locate information processing within the organization. This localizes control, reduces communication time and puts computing power in the hands of those who are interested in information that is processed or produced.

* Treat geographically distributed resources as though they were centralized.
The networking of computers makes it possible to network different resources at different geographical locations into a "Virtual office." For example, it can be possible to have a "global dealing rooms" which can be dealing round the clock and located in three different cities in the world with a common back office located at a central place convenient for the bank.

* Link parallel activities instead of integrating their results:

When different tasks in process are processed in parallel, it is essential to design a process that demands continuing communication and coordination. Put the decision part where the work is performed and build control into the process.

It is possible to process the data for structured decision making and also incorporate organizational controls like limits, approved lists etc. into the application software so that decision making can be speeded up.

* Capture data once at source:

Since the data collected at one point is processed again and again for process additions, it is advisable to capture the data only once so that multiple efforts to capture data are minimized and integrity of the data can be ensured. This principle is also known as source data automation.

The process redesigning is based on the above principles.

A business process re-engineering model has following main activities.

**Business Definition:**

This is an activity where business goals of the organization are identified with the context of four key parameters. Cost reduction, time reduction, quality improvement and personnel development and empowerment. The business goal may be defined at the business level or a specific component of the business.

**Process Identification:**

The process which is critical to achieving the goals earlier, is identified. These processes are prioritized by importance, by need for change or in any other way that is appropriate for re-engineering activity.

**Process Evaluation:**

The existing process is thoroughly analyzed and measured. Process tasks are identified, the cost and time consumed by tasks noted and quality performance problems are isolated.

**Process specification and design:**

Based on information obtained, during the first three activities above 'Use case diagrams' are prepared for each of the process.

Use case identify scenarios that deliver some outcome to a customer. With the 'Use case' as the specification of the process, a new set of tasks as per the principles of BPR are designed for the process.
Prototyping:
A redesigned process must be prototyped before it is fully integrated into the business. This activity tests the process so that refinements can be made.

Refinement and instantiation:
Based on feedback from the prototype, the business process is refined and instantiated within a business system.

The BPR activities are used in conjunction with workflow analysis. The workflow analysis is an effort to understand existing process. In addition to workflow analysis, the modeling techniques commonly associated with information Engineering namely the Information Strategy Planning and business are analysis can also be used to implement the first four activities described in the BPR model.

The generic models for process engineering based on these four activities is an under:

Phases of process Re-engineering:
Research suggests that the business transformation achieved through process reservation comprises three inter-dependent phases as under:

In the first phase, the organisation strives for operational excellence stating with automation and re-engineering activities.

In the second phase, the organisation builds on the capabilities and infrastructure developed in the first phase. The organisations seek to expand, enrich and focus on the range of products and services, which they offer to their customers.

In the third phase, new business units can appear as new products and service offering become independent ventures.

The capability developed in the first phase of business transformation become core competencies that redefine the original business.

The scope of business process re-engineering expands as the business moves to next phase of process re-engineering.

This can be graphically expressed as under
Organisational Focus

<table>
<thead>
<tr>
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<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
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<tbody>
<tr>
<td>A</td>
<td>Automation of existing activities to reduce cost and raise capacity</td>
<td>*Focus on value addition to transactions and improvement relations with customer</td>
<td>Enhanced services become independent stand alone businesses.</td>
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<td>*Encompass a broad range of applications to optimize operations.</td>
<td>Enhancement appear in the form of value added activities in areas such as order entry and tracking, &amp; customer service.</td>
<td>New services appear in the form of innovative products &amp; services.</td>
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Macro and Micro Level Process re-engineering

The risks in process engineering increase as the focus shift from micro level re-engineering to macro level re-engineering. However the gains to the organisation are higher from the macro level re-engineering as indicated below:
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Micro level re-engineering</th>
<th>Macro level re-engineering</th>
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<tbody>
<tr>
<td>i) Objectives of re-engineering</td>
<td>Optimization</td>
<td>Transformation</td>
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<tr>
<td>ii) Time frame for improvement</td>
<td>Short</td>
<td>Long</td>
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<td>iii) Leadership needed</td>
<td>Local</td>
<td>Senior</td>
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<tr>
<td>iv) Infrastructure</td>
<td>Diverse</td>
<td>Integrated</td>
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<td>v) Performance focus</td>
<td>Financial</td>
<td>Multiple benefit paths</td>
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<td>vi) Focus of improvement</td>
<td>Single process</td>
<td>Enterprise</td>
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<td>vii) Scale of project</td>
<td>Small</td>
<td>Large</td>
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<td>viii) Projects</td>
<td>Multiple</td>
<td>Single focus</td>
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<tr>
<td>ix) Scope of re-engineering</td>
<td>Phase I</td>
<td>Phase I, II and III</td>
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