

## **BPR or ERP - What Comes First?**

*by Sunil Thawani*

### **Introduction**

Today's forces of change – Customer, competition and the change itself is forcing businesses to continuously improve and innovate in terms of speed, flexibility, quality, service, cost and so on. The pace of improvement has to match, if not exceed the forces of change.

The initiatives like Business Process Reengineering (BPR) and Enterprise Resource Planning (ERP) promised radical improvements in relatively short periods of time. Both got lot of attention and investments, provided huge benefits but not without pain, disruption and some failures.

As part of the change program, organisations need to take a critical look at their core business processes as processes are at the heart of every enterprise. It is the processes through which companies create value for their customers. Processes are central to both - BPR and ERP.

### **Critical Question:**

The critical question facing the organisations is what to do first – should the processes be reengineered first and then improved processes be automated or select from “ menu “ of supposedly world class best practices offered by the ERP packages and avoid BPR altogether or reengineer them after implementing ERP.

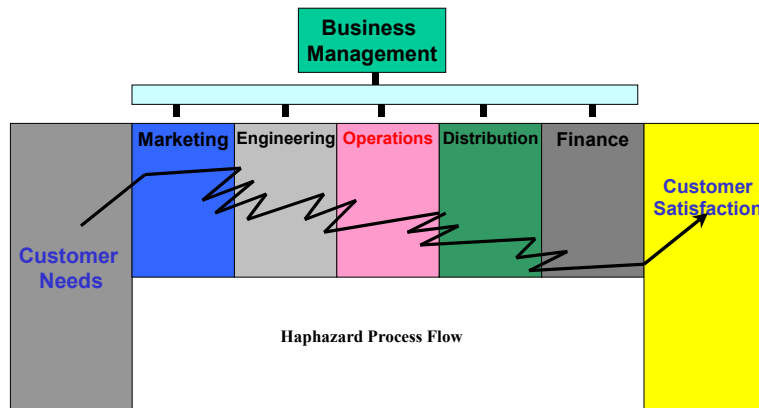
In search of the right answer to this critical question, I visited some of the companies implementing ERP, listened to their experience and advice, interacted with leading authorities on the subject like Mr. Janak Mehta, Managing Director, TQM International, India, met IT experts from SAP, Oracle and other IT solution providers during the recent GITEX exhibition in Dubai, read research findings of Dr. Mohamed Zairi and Abdullah Al Mudimigh of European Centre for TQM, UK, revisited my own experience of reengineering business processes. Purpose of writing this brief article is to share some of the key findings with the organizations planning to implement BPR and/ or ERP.

### **Significance of Processes**

Though business processes are central to the organisation and create value for customers, few people understand how their work relates to the overall process in which they operate/ participate. Processes are invisible and essentially unmanaged. In traditional organisations, processes are “orphans” and fragmented across many organisational units. Many companies are still primitive in the ways they manage their processes.

The informal & haphazard management of processes (figure 1) has a number of undesirable consequences like:

Figure 1 : Haphazard Process Flow Between Functions



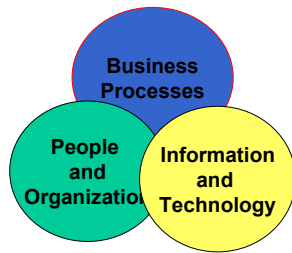
- Customers receive inconsistent and often inadequate services, even to the extent of sometimes compromising the company image;
- Managers continually struggle to manage the “ horizontal “ interactions between people in different parts of the company;
- High cost of poor quality;
- Installing new computer applications like e-commerce or ERP is often extremely difficult - not primarily because of the technical problems but because of the organizational ones.

The need for having efficient and effective processes and their management cannot be undermined.

### **BPR & ERP – Successes and Failures:**

Processes, organisation, structure and information & technology (see figure – 2 below) are the key components of the BPR. ERP combines business processes & IT into one integrated software. It automates business processes across the enterprise and provides an organization with a well designed and managed information system.

Figure 2 : Components Of Process Reengineering



Michael Hammer and James Champy's "Reengineering the Corporation" sold more than 1.7 million copies and was translated into 19 languages. 75 – 80 % of America's largest companies started reengineering. Companies like IBM, Texas Instruments, American Express, Johnson & Johnson, Chrysler, Ford, Shell oil and many others have achieved major reengineering successes. Yet various research studies by leading management consulting companies, Forrester Inc. etc. have shown 60 – 70 % of BPR efforts have either failed or did not achieve the expected benefits.

Similarly for ERP, according to AMR Research, total revenue in ERP software market in 1999 was US \$ 18.3 billion and is expected to reach US \$ 66.6 billion by 2003. Many organisations have successfully implemented ERP systems and reported huge benefits. Yet research studies by Dr. Mohamed Zairi and Abdullah Al Mudimigh of European Centre for TQM, UK estimate that at least 90 % of ERP implementations end up late or over budget and several failure stories are cited.

Failure of some of the ERP & BPR implementation is due to variety of reasons like lack of strong executive leadership; focus on processes, poor planning, inadequate communication, lack of employee involvement and management perseverance etc.

In spite of the pain and challenges, successes and failures, organizations continue to commit huge investments, time and effort to implement ERP and BPR and give it a sincere try.

### **BPR & ERP - Inseparable Twins:**

Michael Hammer in his path breaking article "Reengineering Work: Don't automate, Obliterate" published in Harvard Business Review, defined BPR as "use the power of modern information technology to radically redesign business processes in order to achieve dramatic improvements in their performance". For BPR to succeed or achieve the intended benefits information technology has a critical role to play as the key enabler of business processes.

Organisations have following options:

1. reengineer business processes *before* implementing ERP
2. directly implement ERP and *avoid* reengineering

In the first option of reengineering business processes, before implementing ERP, the organisation need to analyse current processes, identify non value adding activities, redesign the process to create value for the customer and then develop an in-house applications or modify an ERP system package to suit the organisations requirements. In this option employees will develop a good sense of process orientation and ownership. This would be a customized solution considering the organisations structure, culture, existing IT resources, employee needs and promises relatively less disruption to routine work during the change program. It is likely to have a high probability of implementation. But the reengineered process may not be the best in the class, as organisation may not have access to the world-class research and best practices. Moreover, this may be the only chance to radically improve in near future and going for less than the best may be a costly mistake. Plus developing an in-house application/ implementing a modified ERP can take lot of time.

In the second option of implementing ERP package with minimum deviation from the standard settings i.e. “one size fits all “. All the processes in a company should conform to the ERP model and the organisation has to amend its current work practices and switch over to what the ERP system options offers. This option offers a world-class efficient and effective process with built in measures and controls and is likely to be quickly installed (need not necessarily be quickly implemented fully). But if the employees do not have clarity of existing processes and good understanding of their internal customer needs or current processes are not well defined and documented, it is quite possible that while selecting the standard process from the ERP package, employees may not be able to perceive the difficulties likely to be encountered during implementation stage. Employees would lack process ownership and orientation. Other than technical issues like organisation structure, culture, lack of involvement of people can lead to major implementation difficulties and full benefits of standard ERP package may not be achieved. Situation may arise that after implementing ERP, organisation may have to reengineer its processes. This could be a very costly mistake.

Theoretically the third option of reengineering business processes *during* implementation of ERP also exists. It may sound to be the best option but being an ideal situation it does not seem to be practical option and is likely to cause maximum disruption to existing working. It should not be forgotten that during BPR & ERP initiatives, routine work is still to be carried out and customers served.

## **Conclusion:**

As we see, there are no right and easy answers. Each approach has its pros and cons. Implementing ERP system and/ or BPR is an organisational revolution process itself. Decision to embark upon BPR and/ or ERP is a strategic decision and would largely depend on the objectives the organisation has set for itself to achieve and the time and resources it is willing to commit. Prior to start it is essential for the top management to arrive at a consensus on the approach so as to fully exploit the built in potential of BPR & ERP package.

### **References:**

“ The Reengineering Revolution Handbook “ by Michael Hammer & Steven A. Stanton.

“ ERP Systems Implementation – A best practice perspective and a proposed model “ – by Prof. Abdullah Al-Mudimigh & Prof. Mohammed Zairi, European Centre for TQM, UK.

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