

Vanguard Articles - Business process re-engineering and culture change

'It is time to stop paving the cow paths. Instead of embedding outdated processes in silicon and software, we should obliterate them and start over. We should "reengineer" our businesses: use the power of modern information technology to radically redesign our business processes in order to achieve dramatic improvements in their performance.'

Michael Hammer, 1990 'Reengineering Work: Don't Automate, Obliterate' Harvard Business Review

Business Process Reengineering (BPR) was created as a way to achieve significant change in organisational performance. BPR emerged from the writings of Hammer and his co-author James Champy in the early 1990s. In essence, the authors argued that, in the rush to automate using the new technology available to them, managers were not reviewing their processes first. Conventional BPR maps a process into an 'as-is' chart, then managers plan what the 'to-be' chart should look like and impose it on their workers. Our argument is that this approach to improvement is firmly in the camp of rational change, and will not challenge the thinking of managers. Adjusting the thinking which has led to the current situation should be a greater priority. A change of the order achieved by BPR is, de facto, a major change to the system. It will be argued that the opportunity exploited by BPR has, in part, been created by the way we currently think about and run our organisations.

It is thinking that informs culture - the way people in organisations behave - and success or failure with BPR has already been shown to be dependent on organisational culture.

Juran (1) said all there was to say in his book *Managerial Breakthrough*, there being only two ways of improving performance - reducing variation and redesign. BPR is redesign of a more extraordinary nature than he could have imagined. Managers still show little understanding of the principle of variation and that failing is just part of the wider problem - managerial thinking - which underpins success or failure with BPR.

Two important changes have occurred since Juran wrote about performance improvement. Firstly, he could not have predicted the impact of information technology (IT) on organisations. Secondly, he wrote in the socio-cultural context of his time when there was more of a gulf between managers and workers. IT is sometimes an important enabler of organisation change (but no more than that). It is the socio-cultural issues that have been and continue to be the dominant issues in transforming organisations. The advocates of BPR claimed many outstanding examples of performance improvement through its use. At the same time there are many documented examples of disappointment and failure.

Organisation culture has been identified as a key determinant of success or failure. Here we address two cultural issues; the thinking about the initiative itself and implementing changes as a consequence of the initiative.

Thinking about the initiative - why are we doing BPR?

Following fashion?

Though they would not be proud to confess it, there are organisations which have undertaken BPR simply because it seemed to be the thing to do.

In one case, a BPR project team had successfully collapsed a number of processes into one, providing customers with a better quality service. The project had been completed in one branch when top management took a more active interest. What, they asked, would be the manpower savings if this change were rolled-out to all branches? The project team couldn't answer. It had not originally been their intention to reduce staff numbers, neither had they conducted any pre and post productivity measurement. Top management had endorsed the project because it was something everyone was doing and it fitted with their general desire to improve service. Later they saw it as a potential opportunity to satisfy a different agenda.

Can costs be reduced through BPR? Of course. But if BPR is approached with a cost-cutting mentality we run the risk of diminishing its potential value.

Re-engineering or cherry picking?

A utility company employed consultants to lead an internal BPR project team. The brief was to re-engineer customer acquisition and customer service processes. The team were guided through a process mapping methodology which they then applied. They were told to identify opportunities for improvement and make recommendations to the top management team. More than seventy recommendations were made. Top management chose to implement only some of the recommendations; those that they felt would achieve the best cost savings. Members of the project team were disappointed; they felt they had not explained themselves well enough. They knew that many of their recommendations could not be cherry-picked - they had to be seen as interdependent.

Top management needed to be influenced to see their organisation as a system. That's a difficult task for their subordinates. If they had taken such a perspective they would have seen the interdependencies (they would also have been in a better position from which to choose priorities).

Improving service?

A customer-service organisation employed IT consultants to re-engineer their front and back offices. The consultants set themselves up in a room in the client's building. They brought with them computer applications which would map the current processes. One by one staff were invited to the consultants' room to explain what they did. The consultants recorded each individual's inputs, activity and outputs. The result was a complex mapping of all current activity.

The consultants took a view on how the processes could work and what the resulting improvements would be in service and efficiency. As a part of their presentation (designed to sell the next tranche of work) they discussed the importance of managing resistance to change. In fact, the consultants approach had already created it. The top management had been lobbied by staff who felt the method was unacceptable. They had given the consultants all of their thoughts about how the organisation worked and how it should work. They felt that they had a stake in its future and were fearful of being manipulated. The chief executive realised that the people were his most important asset. They should not be subjected to change, they should be at the heart of it. As they developed solutions, their knowledge would be an appreciating asset. The consultants were fired and the organisation took a different route which put the staff at the centre of the action.

These cases are not unusual. Implicit in these experiences are assumptions about the purpose and methods of change. Many of these assumptions are manifestations of traditional management thinking - thinking which has stood in the way of change for generations - BPR is merely the latest intervention to suffer in the hands of traditional management; its failure is only further evidence that we have a more pressing problem. The problem of management itself.

Traditional management thinking impedes effective change

In traditional command and control cultures, managers think about their organisations as a collection of functions. Budgets are drawn up which set expectations for functional or departmental performance. Viewed from such a perspective managers look for opportunities to improve departmental numbers and change will tend to be a cost-cutting or cherry-picking exercise which can ignore deleterious consequences in other parts of the organisation. The organisation is not a mere collection of functions, it is a system - the parts are interdependent, they work together for better or worse.

In many cases BPR is treated as a project. The project team is to do the analysis and implement the required changes. However, if management thinking and behaviour remains the same (attending to functional performance), the result is only a re-arrangement of the original pathology. Learning is unlikely.

The organisation as a system

It was Deming (2) who observed that management's failure is a failure to distinguish between costs and the causes of costs. Costs are easily identified in financial reports, causes of costs are in the system and usually need to be found.

To illustrate: the teams in the second example had mapped the process for handling invoice queries and recommended actions which would have reduced the number of handovers and

hence increased the efficiency of handling queries. Going straight to an analysis of activity meant that they missed the wider perspective - over half of the customers calling in with invoice queries abandoned their first call (it was difficult to get through to credit control). These customers then called the sales offices who processed their calls to credit control by filling in forms. The forms took six days to get to someone who would respond to the customers, so customers called in again. The volume of invoice queries was stifling the whole system. There was no study of what caused invoice queries with a view to eradicating them. The recommendations were limited to what each of the departments (finance and sales) could do to improve the current processes.

The real costs of operating this system were increased simply by the way the system worked. The best way to improve sales revenue would have been to prevent billing enquiries from clogging the sales process. This view was beyond the horizon of the managers, whose view was framed by the numbers they worked with: in finance, bad debt; in sales, time to answer, volume of calls unanswered and revenue. These numbers gave no indication of the problems. BPR is less than successful when managers don't see their organisation as a system.

Our organisations, run as traditional, command and control, hierarchical, functional and output-driven systems have created many of the opportunities for BPR - poor, inflexible service defines the need. The current situation can only be addressed by radically re-thinking the way things are done.

In our experience, the adequacy of studies at the beginning of BPR work is the single biggest weakness. People in organisations have been conditioned to look inward and upward. Traditional specialisation of work breeds unresponsiveness to the external environment. The whole thrust of BPR is to cut through the complicated processes built by years of working with functional specialisation. The anchor required to pull through that view lies outside the organisation - it is based on a clear understanding of what matters to customers and our current capability in achieving it.

In the above example, a study of capability would have shown the following:

- fifty percent of customers with billing enquiries abandoned their call
- of those that got through to credit control, only fifteen percent were resolved at the first point of contact
- forty percent of calls to sales offices were billing enquiries
- the time taken to respond to queries that originated at the sales offices was six days
- customers who initiated their billing enquiry at a sales office were likely to ring again to progress chase their call

All of these phenomena were predictable. If nothing happened they would continue. What is the purpose of this system? To make it difficult for customers to resolve their invoice queries?

A functional view or a system view?

That analysis teams and management decision-makers tend to focus inwardly is, again, a reflection of an adherence to the functional view of organisations. The finance, sales and service directors were all prone to adopt recommendations that made sense to their particular function. Being responsible for their functional numbers, none was inclined to take a broader view. Even if they'd had the inclination, they had amongst them no experience of viewing and managing their organisation as a system. Such a different view requires insight, creativity and judgement. It is a challenge simply because it is unfamiliar territory for most managers.

How would understanding the organisation as a system help the manager with BPR?

There are four levels of understanding:

1. Thinking
2. Purpose
3. Design
4. Method

BPR generally concentrates on design and method. Thinking, however is the strongest lever for change as it impacts everything that follows.

What do we want from BPR?

Improved performance (revenue, efficiency, service).

Command and control thinking Vs System thinking

How do we think about purpose?

Defined by functional measures Vs Defined by what matters to customers

Starting point for analysis:

Current process activity Vs System response to customer demand

Method for change:

Analyse, design and tell Vs Check and learn

Use external resources Vs Use internal resources (aided by catalyst)

Managements job:

Control Vs Prediction

Result:

(If successful) incremental improvement Vs Learning, flexibility, then stasis continuous improvement

A system view of the organisation would lead a manager to first gain an understanding of the organisation's current capability and the reasons for it (system conditions). In other words he would know what the system is currently achieving and why. This understanding is a prerequisite to removing things that inhibit change and introducing the things required to manage the new system.

BPR is meant to re-design the system, it requires a system perspective. The best place to start is check, in the 'check, plan, do' cycle of the Vanguard Method.

The priority is to understand the current system warts and all. In simple terms, this means understanding what matters to customers; the organisation's current ability to respond to those requirements; the nature and scope of the processes which deliver that performance and the way in which the current system - rules, roles, measures and so on - impacts process performance.

Some argue that the present system is to be obliterated, so why start with check? The danger is that change not based on understanding can produce disastrous consequences. The example below is an extreme illustration of what is an all-too-common phenomenon. Furthermore, understanding the current system tells you more about customer demand; how can processes be re-designed without it in mind?

Making changes without knowing how things currently work

A maintenance organisation had grown rapidly by acquisition. Each of the acquired companies had its own procedures and practices. Clearly there was an opportunity to make

efficiency gains by standardising procedures. On the advice of consultants, groups of managers were brought together to re-engineer systems and procedures for the newly integrated organisation.

The group responsible for the spares system determined that it would be most efficient to organise nationally, using a system similar to that being operated by one of the original companies. The decision was announced and the new system implemented. Some unfortunate consequences followed. Managers in most of the merging companies had been held accountable for the cost of spares held locally. These figures were still being used to determine branch profitability and, therefore, the manager's bonus. Under the new system, where spares were treated as a national resource, one branch manager could, in an emergency, order a spare from another. As the cost of spares held locally effectively counted against a manager in his bonus scheme, it soon became common practice to hold minimal spares locally and order them as emergency items from nearby branches when required. The additional cost associated with transportation was the immediate wasteful consequence, but worse was to come.

To avoid losing spares to nearby branches, managers began to stop logging some items on the national system. Quite rightly their concern was to maintain a level of service to their customers. The practice of hiding spares resulted in two problems. Firstly, the unreliability of the national system, and secondly the increase in the cost of spares held throughout the organisation. In circumstances such as these, senior managers can only respond with drastic measures. In this case they stopped managers buying spares by reducing their authority levels. The first person to be affected was the customer.

What matters to customers and current process performance (how well we respond) would be the baseline against which the success of the initiative should be measured.

From an understanding of the organisation's current capability and the reasons for it (system conditions) the manager would be more able to act on the sources of improvement, he would know how to act on the system. And it is not just a work system, it is a human system.

People as the solution, not the problem

In a command and control culture, managers tend to think of performance problems as people problems. To solve these problems they pursue motivational programmes, development programmes and put in place a variety of people management processes (e.g. appraisal, pay). A systems view would lead to quite different action.

Deming and Juran estimated that more than 95% of performance problems were due to the system. The people are in the system, they are subject to the measures, processes,

information, methods, tools and so on that are in place. In every organisation you find that people in the workplace know things about what works and what doesn't. They are fully aware of the impact of their system's performance on customers and are often powerless to do anything about it. If they have to work to constraints (e.g. standards, measures) imposed by managers who know little of the work, their morale suffers.

A manager who thought of the organisation as a system would recognise the need to develop methods for change which put the people, the future knowledge-workers, at the forefront of the development of that knowledge. He would not value black-box consultancy agreements, he would refuse to allow the grey-suits to conduct an analysis, write a report and recommend strategies for change that involve more consultants. He would appreciate that black-box consulting takes knowledge out of the system.

People are the competitive weapon. BPR often sets out to simplify and increase the flexibility of processes. To operate such processes, you need a culture that enables people to bring their brains to work. Not only should the solution be cognisant of this fact but the method employed in any change will help or hinder according to its inherent assumptions about people. Are they to be told how to work in the new order? If so, will this and other command and control assumptions stand in the way of effective change? For example, what measures will be used to run the new system and who will use them? Will their use result in learning and improvement or controls which dampen morale?

While people in the work processes do have first-hand information about what is currently going on, they usually lack a framework or perspective within which to organise and articulate their experience. To turn such experience into knowledge a framework against which they can theorise and test their theories in action is required (for example, how would sales be affected if billing enquiries ceased?). If the future belongs to knowledge-workers, the analysis of the current system must be performed by them.

Many managers of command and control organisations would be terrified at the thought of workers getting involved in analysis of their organisation. They would argue that their people wouldn't have the ability or motivation. They often fail to recognise that what they see in their people today is the product of years in the prevailing system. It is simpler and cleaner to engage consultants to conduct an analysis, but if that means others developing knowledge, it is a step in the wrong direction. The role of the consultant should be to catalyse change through giving people a different perspective, to create knowledge in the system, not take it away.

Changes as a consequence of BPR

If we do change our systems in a way that demonstrates our belief in people as the greatest asset, the human resource management processes will need to be aligned to create and

maintain the new order. A learning organisation needs the means and conditions for learning.

An organisation of knowledge-workers relies on a sound infrastructure to work in such a way as to be able to control and improve performance. Knowledge-workers don't only work in the system, they act on it. For example, highly flexible processes require quick decision-making with the quality of decision-making enhanced by measurement. The right measures need to be in the right hands to take action for improvement.

Other aspects of the system are beyond the workers' control: pay, training, development and so on are determined by policy-makers. It is critical to ensure that such policies are contributory to a change in the system and not an impedance. The thinking of the policy-makers needs to start from the same assumption - that the organisation is a system. It raises profound challenges for traditional human resources processes in organisations.

Pay

If the majority of variation in performance is governed by the system why have differentials in pay? There is no doubt that a beginner will not be as proficient as an experienced worker and there is a case for developing pay systems that reflect contribution. As people learn more and contribute more, they should be paid more. Pay policy should value contribution more than status.

Few managers appreciate the damage caused by incentive pay (see below). Kohn(3) provides a thorough summary of the research in this field.

Some of the damage caused by incentives

- poor quality selling, leading to (for example) de-installation, invoice queries, failures in service, customer losses
- win-lose behaviour between departments; anything to make your own numbers
- demoralisation of personnel; if achievement of target is governed by natural variation, success or failure is beyond the individual's control. Failure is taken personally but the person feels (and is) helpless.

It is unlikely that incentives will have any place in learning organisations.

Pay policy should be based on the following assumptions: people should be well paid for whatever they do; there should be a rate for a job, paid to all who have learned to do it and a lesser rate while in initial training; as people learn more and contribute more, they should be paid more.

Development

Appraisals which employ ratings or rankings would have no place in an organisation run as a system. If individual differences in performance did exist, they would be used to improve performance. The main source of variation in performance between individuals is method rather than individual differences (4). The most important focus for personal development is how the place works. How to understand the organisation as a system, its purpose, its processes and how we make judgements about what is going on. Anchoring all development in performance, gives greater purchase to the development of soft skills. Leaders and teams need to know why their behaviour helps or hinders the achievement of a purpose and to see the reason for behaviour as of more importance than the behaviour itself. Such a perspective would lead to a drop in the number of training programmes which disconnect behaviour from the organisational (task) context.

It is true that organisations have achieved performance improvement with BPR and retained traditional (command and control) beliefs. These companies are not learning. In all probability they will carry on in their new form until, once again, the opportunity arises to redesign the system.

Many have failed with BPR, sometimes because of resistance from the receiving (traditional) culture, sometimes because of method. Inherent in method is thinking. Command and control cultures employ command and control methods of change (dependence on external resources, projects, departmental cost analyses, train or tell people, pre-determine the answer, impose a solution).

The challenge facing human resource professionals is twofold: how to develop methods of change which are effective in a continuous (learning) way and how to design support systems which will facilitate and maintain organisations run by knowledge-workers. They recognise that there is significant room for performance improvement but see this opportunity in relation to a wider appreciation of what needs to change to create a learning organisation.

References

1. Juran, J.M - Managerial Breakthrough, New York: McGraw-Hill, 1964
2. Deming, W.E. - Out of the Crisis, Massachusetts Institute of Technology, Centre for Advanced Engineering Study, Cambridge University Press, 1986
3. Kohn, A. - Punished by Rewards, Houghton Mifflin, 1993
4. Gilbert, F.G. - Human Competence, Engineering Worthy Performance, McGraw-Hill,