BUSINESS PROCESS RE-ENGINEERING: WORTHWHILE LESSONS FROM QUALITY OF WORKLIFE AND EMPLOYEE INVOLVEMENT

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ABSTRACT

Business process reengineering is changing the way employees work, both collectively and individually. Reengineering is reunfying the tasks into coherent business processes with changes such as adding new tasks to each job, reducing functional specialization of jobs, moving decision making down to the lowest levels of the organization, installing multiple process paths, and organizing workers into teams. Reengineering means that jobs will be more fluid, more complex, and less predictable. Jobs change, roles change, job preparation changes, values change, and compensation and performance measures change (Hammer & Champy, 1993). This blurs the functional structures and concentrates on process driven organization in the hope of aiding effectiveness for breakthrough gains and dramatic performance. Yet many reengineering projects either fail or do not produce the desired results as the people issues are not addressed satisfactorily.

This paper proposes a Bottom Line = Quality Of Worklife / Employee Involvement Model which argues that reengineering can learn from the Quality of Worklife and Employee Involvement paradigm in handling the emerging dissonances from the change initiative. Spea7ically, the paper assesses the Implied shift in mode of performance appraisal, the emerging roles of human resource development and the subsequent implications on training, compensation, and general employee satisfaction for the success of BPR.

Keywords: Business Process Reengineering; Teams; Quality of Worklife and Employee involvement; Bottom Line.

INTRODUCTION

A growing number of senior executives are attempting to boost productivity, quality, customer service, and efficiency by fundamentally redefining what employees do and how they do it. The approach, known as business process reengineering (hereafter BPR), produces breakthrough gains in process performance when implemented correctly (Manganelli, 1995). However BPR programs often fail. Despite its popularity, 4 out of 5 BPR programmes have been unsuccessful.

Hammer and Champy (1993) describe BPR as the *fundamental rethinking and radical redesign of an organization 's business processes that leads the organization to achieve*

dramatic improvements in business performance. This new innovation paradigm, if well implemented, helps organizations achieve orders of magnitude improvements in costs, efficiency, quality, and value. But it has not been smooth sailing for all organizations implementing this management paradigm that began in the early 1990's.

The BPR approach is based or the premise that continuous incremental improvement is not capable of meeting the challenge of the global market place. To succeed, companies need major breakthroughs in performance and to leapfrog their competitors. BPR aims for dramatic improvements, not small steps to achieve slow and steady progress. Rather than 10 percent improvements, BPR expects to cut product development cycles by 50 percent, to cut order to delivery times from a month to one day and take 60 per cent to 80 percent out of cost, white at the same time improving service levels. That is *dramatic* change, different from business improvement and business redesign although for its success it may rely on these total quality management (TQM) tools (Macdonald, 1995).

Figure 1. Differences between improvement, redesign and re-engineering

Source: Macdonald, 1995: 7
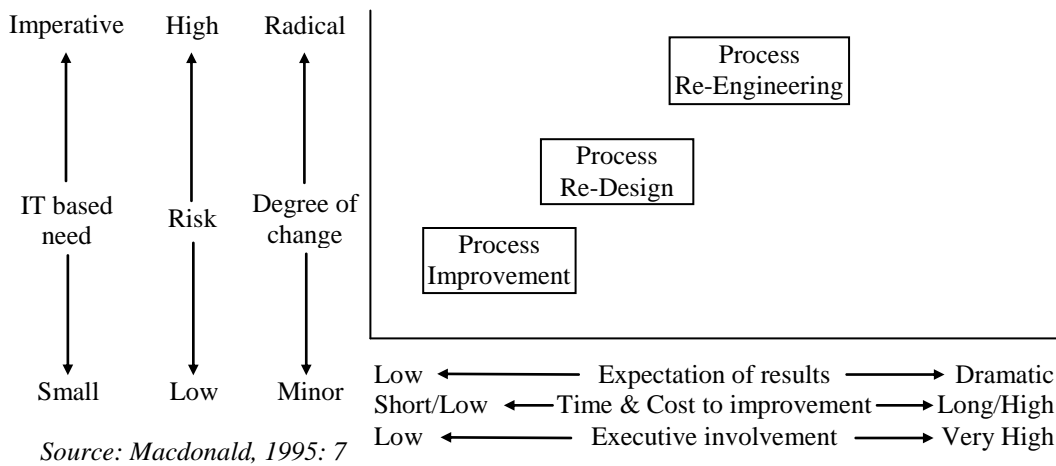
The realization is most organizations are functionally organized in a way that obscures, and often totally hides, the key processes that drive performance and customer satisfaction. Everyone involved in functional departments are focused on their own small part of the process rather than on the real objectives of the business, that is, on the creation and delivery of products and services that will delight customers.

To use elements of BPR to achieve an effective transformation from *where we are* to *where we want to be* is not easy. It requires a *clean slate* or *green field approach* to process redesign. BPR principles include: *customer driven, strategic in concept, concentrates on key business processes, cross functional, requires senior executive involvement, needs dedicated time of the 'best' people, will take time as it is not a quick fix, requires the communication of a clear vision, and should target dramatic stretch goals.* BPR is a radical change in the way we work; aims to provide dramatic changes in performance; utilises the advances in technology; is complimentary to TQM; is customer driven; and is process oriented.

1. People and BPR

Employees have a major stake in change. They will certainly know that it is being planned and is to take place. They may have a number of reactions to the possibilities including the fear of job losses. Senior managers have some difficulty in communicating this issue to employees on the basis that it is liking *asking the turkeys to vote for Christmas.* The purpose of BPR is not *downsizing,,* but it would be foolish in the extreme to pretend that a fundamental redesign of processes is not likely to result in job changes and potential job losses. Whatever happens, it is clear that jobs are likely to change dramatically. Failure to communicate a clear vision that recognizes needs from the employees perspectives will result in non cooperation or, at its worst, substantial obstruction.

2. Change Masters in BPR

BPR change involves change masters : people selected to drive each BPR project. Senior executives' full involvement coupled with the selection of the best and brightest of employees is crucial to the success of the initiative and achievement of dramatic results. Most BPR programmes will require staffing for the following positions or teams: *champion; steering committee; BPR Czar; outsider (consultant); process design teams; sub-process teams; process owner; and implementation teams.* This article delves mainly into the roles of steering committee and the process design team.

Most BPR projects cross major functional boundaries and by their nature will change or eliminate those boundaries. In many cases, BPR will also eliminate whole functions as currently organized-and resistance is likely from many senior managers defending their *turf* A steering committee may help resolve these issues, removing obstacles or inhibitors to team success. Selecting the members and establishing them as a cohesive team is the crucial task in BPR. BPR is not a quick fix and it takes years for the team to complete the design for the new business process. The team need not be composed of representatives from every area or function that is likely to be affected as this may bloaten the team as well as see members retaining their turf loyalties. The team ought to contain *knowledge of the key processes involved, have a diversity of expertise, experience and disciplines.* It is important to include an *IT specialist* and someone with knowledge of BPR techniques.

3. Fears Obstacle to BPR

BPR goes beyond declaring war upon supervisory and middle levels of management to attack head-on the very functional structures that have traditionally provided an identity and a carreer path for the managers that have formed an internal part of the collective worker. For this reason, among others, BPR is likely to encounter difficulties of implementation even where employees overtly espouse its objectives. It is not just that the *process* thinking advocated by BPR is often foreign to those who are being required to apply it. It also poses an immediate or deferred threat to job security and conditions of work.

4. Organizational Preparation for BPR Success

The early preparatory stages of BPR should make it clear that BPR will have a profound effect on the structure and procedures of the organization. The key areas of change which will require applied thought outside the process redesign are: *restructuring the basic organization and reporting patterns; personnel policies including the whole payment and reward structure; multi skill, leadership, teamwork and empowerment education and training; and, redeployment planning.*

Any organization-wide initiative that involves change in the way of working is likely to

lead to fear and uncertainty among employees. The BPR design team might describe their work as the transformation of existing processes, practices and procedures. The people affected may view transformation as upheaval and chaos. At the very least, the nature of their jobs will change, and for many, their employment may be on the line.

These cultural and personnel issues cannot be ignored. The implications of BPR on personnel policies and people management are often only recognized in a reactive mode in the midst of the change implementation. This can be disastrous as the whole concept of radical change becomes clouded with conflict and compromise (Macdonald, 1995). *The redesign processes and work methods should not be a mechanistic exercise. People work in processes, and process performance depends on* *people. Intelligent reengineering will include the people issues as fundamental elements of the design process.* Successful implementation demands that these factors have been resolved at design stage and form part of the pilot-proving criteria. Reengineering organizations may have to deal with: *changing the roles and responsibilities of existing staff to meet process requirements; anticipating and assessing the full scale of change entailed in reengineering; retraining and reskilling staff to manage and run the redesigned process; rewarding and motivation staff to achieve new goals; and implementing new processes while keeping the business running.* Thus, Quality of work life and employee involvement paradigm has a major relevance for BPR. *We propose a* model of Bottom Line = Quality Of Work Life/ Employee Involvement

(Insert Fig.2).

The realization is that although BPR managers know *what the business is* and *ought to be,* the people dimension has been overlooked. *When all a business is concerned with is the bottom line and culling costs, it can be* *said to embrace a lean and mean policy.* It is headed for trouble. Our model emphasizes the crucial role that Quality of work life can play in a BPR organization. A balance between the bottom line and quality of worklife will ensure

a lean and happy organization that can succeed in a BPR initiative.

QUALITY OF WORKLIFE AND EMPLOYEE INVOLVEMENT

The quality of worklife and employee involvement (hereinafter QWL/EI) paradigm focuses on issues such as *motivation, employee involvement and job satisfaction.* Again, personnel systems such *as training, compensation, selection, and placement* are reassessed but the stress is on change orientation (Mohrman, Ledford Jr., Lawler III., and Mohrman Jr., 1986). QWL/EI programs emphasize high levels *of satisfaction, motivation, involvement, and commitment* that individuals experience with respect to their lives at work. Companies interested in enhancing employee QWL/EI generally try to instill in employees the feeling of security, equity, pride, family democracy, ownership, autonomy, responsibility, and flexibility. They treat employees in a fair and supportive manner, to open up communication channels at all levels, to offer employees opportunities to participate in decisions affecting them, and to empower them to carry through on assignments. QWL/EI programmes focus on: *Equity of Pay, benefits, and other rewards; worker satisfaction; income adequacy; training provided to employees; managers and support staff on their new roles and responsibilities; availability of enjoying skills training; encouragement of multiskills development and job training; and, team building.*

An effective QWL/EI organization needs to change more than just its job design or its communication policy. It needs to change every thread of its fabric, including its human resource practices. The most powerful exemplars of the QWL/EI paradigm are successful new high involvement plants in which numerous congruent human resource practices and other organizational innovations are *installed more or less simultaneously.*

1. QWL/EI and BPR.

The people dimension is of such importance to the success of BPR that it must have a high-level focus. A recommended approach is for the sponsor to form a *personnel policy group at the same time as the processes design teams are established.* The result of the group's work should be the development of personnel policies and procedures that will support the smooth working of the reengineered organization. It pays particular attention to the problems of transition that may include redundancies. Education and training are key elements but training long-term employees for new skills raises motivational issues that must be addressed. *BPR could borrow a leaf from QWL/EI by targeting a few areas such as selection, performance appraisal, reward and other human resource development. Teamwork, education and training should also not be ignored.*

2. Job Design

The QWL/EI paradigm suggests that jobs be *intrinsically motivating.* Employees, as major organizational stakeholders, are entitled to work that is intrinsically rewarding. Highly specialized, tightly controlled, repetitive and low-skilled work has long been held to be unsatisfying. External form of control will fail in BPR initiatives especially because employees must quickly respond to changing conditions. Internal work motivation will be high when there are high levels *of skill variety, tasks identity tasks significance, autonomy, and feedback* from the job.

2.1. Targeted Human Resource Development

Hammer and Champy (1993) posit that recurring characteristics that companies encounter in reengineering core processes include:

•   Combining several specialized jobs into one multidimensional task.

- Planning, decision making and executing are part of one tasks
- The phases in the process are performed in a natural way.
- Processes are no longer standardized but have multiple versions.
- Processes are installed where it makes most sense.
- A broad span of trust is replacing a narrow span of control.
- An empowered process representative provides a single point of contact for the whole process team.

In such a process team culture, human resource development does not indicate primarily off-the job training or climbing up the hierarchy but choosing one of many carrer paths to expand one's breadth of mind and to master challenging processes in the future (Hub, NA). These may be done through: *job rotation (interfunctional/cross functional); Job enrichment (autonomy, responsibility); promotion (transfer, relocation); realignment; outplacement: out sourcing; and project team activity.* These routes advancement are not mutually exclusive and an individual may pursue more than one simultaneously.

BPR could borrow QWL/EI enrichment techniques such as *combining previously separate toss/c, forming natural work units, establishing relationships between employees and clients, vertically loading (i.e. adding management responsibility to) the job, and opening feedback channels (Hackman and Oldham, 1980).*

2.2 Targeted Teams and Teamwork

Reengineering will break down the traditional organization, and redesign the company around processes. Many of these processes will be delivered through multidisciplinary teams designed to provide customers with a single point of access to meet their needs and wants. Thus, the one-stop teams will use technology to share specialist knowledge through generalist workers (Macdonald 1995). Whenever possible, work will be organized and done in teams, and the teams have the authority to make decisions relevant to their work. The team concept usually means that employees must learn how to think conceptually about process innovations and examine them for possible flaws.

According to the QWL/EI perspective these autonomous work groups (self-regulating work groups or self-managing work teams), receive little direct supervision, engage in job rotation, receive extensive training, are paid in innovative ways, often assume responsibility for hiring and firing of members, and so on (Mohrman, et al., 1986). Organizations behaving in ways consistent with the QWL/EI paradigm engage employees in the design or redesign of their own work. This is done mostly as a result of the value placed on participation, and the belief that employee involvement will enhance commitment and improve decision quality.

2.3. Targeted Selection

Vacancies ought to be reviewed to establish the possibility of eliminating the position either fully or in part through: enriching other jobs with important elements; automating as much as possible the routive responsibilities, and, discontinuing the unnecessary portion of the position. BPR can borrow from QWL/EI three innovative selection practices: the realistic job preview, peer selection, and the emergent job description. These practices imply a shift in power, from control by managers and technical specialists to hiring as jointly controlled by job applicants and the organization. Moreover, the organization is often represented primarily by potential peers and subordinates of the applicants rather than by HR specialist. There is emphasis on open sharing of information, individual development, and a participative management style. In

many QWL/EI organizations, selection is a process managed primarily by peers or even subordinates. The rationale is that the ability of work team members to cooperate with one another is critical, and thus membership is a factor over which team members need control. Hiring by team members in it self can be a realistic job preview, since it shows newcomers in a powerful way that the team has a great deal of responsibility. Team members also have the best information about each other's performance, which suggests the need for their involvement in termination decision.

Some organizations have completely abandoned the job analysis or job description since: the description of the job emerges from the interaction of the person and the organization; the nature of the job may change rapidly; and, such a process is especially relevant to organizations facing rapidly changing environments such as reengineering ones. These organizations must stress adaptability over efficiency.

2.4. Targeted Appraisal

An emerging set of practices that is congruent with QWL/EI starts with the appraisee and includes others, including co-workers and managers, who have direct exposure to the appraisee's work. The work group becomes the appraiser. Appraising individuals consequently assesses the performance of the group as a whole. Hammer and Champy (1993) argue that when employees are performing process work, companies can measure their performance and pay them on the basis of the value they create for customers, employees, shareholders and the environment.

The focus of performance measures in BPR has to be based both on objectives (and results) as well as on the added value created for various relevant stakeholders. To measure the performance in a more objective way, appraisal could be carried out from above and from below. In the case of a manager,

contributions for the appraisal come from a variety of sources: senior managers, staff team members, other internal customers and, if appropriate, external customers.

Reengineering organizations could thus borrow from QWL/EI steady elimination of annual performance reviews and appraisal systems and in their stead introduce a continuous review system related to team dynamics. The new emphasis on process and team performance provides a much fairer basis for appraisal. For the sake of maintaining the changes, employees tackle clearly defined processes with specific responsibilities, accountabilities and metrics. Performance is thus open and measurable. Measurement then leads the way to maintaining effectiveness of the changed processes. A process that is not measured and monitored may exhibit the signs of neglect and inertia.

2.5 Targeted Reward and Compensation

Reward systems in organizations are made up of core values, structures, and processes. The principles associated with QWL/EI suggest some specific core values; due process; egalitarian reward; pay rates that are competitive with similar businesses; and emphasis on rewarding individual growth and skill development. These core values support a management style in which the organization moves power, information, knowledge and rewards to lower levels, and which stresses that employees are important stakeholders in the organization. Hammer and Champy (1993), recommend that reengineering organizations reward outstanding performance in the form of bonuses and not pay raises. In line with QWL/EI, and based on performance level, time horizon, and added-value dimensions, variable compensation programs could be introduced in reengineered companies. The higher the level of responsibility, the higher the variable part and the higher the long term part of total compensation. In essence reengi-

neering companies ought to allocate a major portion of their bonus to all process owners and associates. They pay for performance and promote for ability. Pay may be related to team performance but individuals receive extra payments for learning new skills and specific contributions to the team. In addition to pay and reward, it is essential to develop and maintain a continuous communications process throughout the organization.

2.6 Job Evaluation, BPR and QWL/EI

Job evaluation has no meaning if the job description is emergent rather than fixed. When job responsibilities are assigned to a work team rather than to individuals, it be comes more difficult to evaluate the job. Employees may perform any of a number of different tasks depending on current needs and skills of the employee and other team members, patterns of job rotation, and current organizational needs. Finally, when organizational conditions are changing rapidly, job evaluations, job descriptions, and pay rates associated with many separate classes of jobs can act as barriers to needed changes. Employees may see existing evaluations as the basis for deciding what is just and fair, and may resist changes on equity grounds-especially prominent in heavily unionized organizations.

In any major organizational change that includes changing the content of jobs, the relative worth of jobs must be reestablished (Tullar, 1998). Job worth can be assessed through its overall contribution to the organization (mainly job evaluation). Job evaluation can be based on accountability, know-how, problem, solving, and working conditions. Accountability covers freedom to act, job impact on end results, and magnitude. Given the typical reengineering changes of added team work, working in different departments under different set of rules and the additional customer contact, reengineered jobs might give employees somewhat more freedom to act in

order to satisfy a customer. On the know-how, reengineering changes knowledge requirements from practical procedures to more specialized techniques if for no other reason than employees are trained to recognize business process improvement possibilities. Problem solving hinges on environment and challenge. During the reengineering process, which can last for a year or more, employees find that old rules may no longer apply and new ones have not yet been made up. Creativity in problem solving is invaluable in BPR.

2.7. Targeted Training

Training is designed both to facilitate and reinforce the transition to a new mode of operation, and also as a value in itself. Because all members of an El setting identify and solve problems and are given increased responsibility, the distinctions between the kinds of training that are received at different levels in the organization become blurred. In the QWL/EI setting, common training content becomes one tool in the development of a common culture at all organizational levels. Training is an ongoing process-a method of constantly updating the skills and knowledge of employees, and a reminder of the commitment of the organization to high performance and human development.

The work group on department is the focus of training. Training tends to be integrated with the job itself. There is more reliance on employees crosstraining one another. Multifunctional work teams and task teams enable some cross training across functions, and promote much broader familiarity with various aspects of the organization. Training is often done in team meetings and team building sessions using intact units or task teams.

The implication here for BPR is that team members need training in the techniques used in reengineering such as process mapping, simulation, statistical and other measurement methods, and the team decision techniques.

The first priority of the team leader is team building. Investment in a team-building workshop at this stage will prove to be money and time well spent in the months ahead. Practice with the techniques of transactional analysis and development of synergy provides a solid base for the team. The process builds respect for the individuals disparate skills and a sense of trust in each other. To equip the team to take the helicopter view of the company, new skills have to be developed and knowledge acquired in the following areas: process mapping; opportunities provided by technology development; current market-place, competitors and relevant legislation or other external influences; customer perspectives; and, company's long-term business and product strategies.

The specific BPR educational materials, besides including specific skill training to fit employees for new roles, should also be designed to help change the operating environment. They should be closely aligned to the personnel policies being established for BPR. Adult learning is most effective when it directly relates to the workplace. Employees at all levels are more likely to understand and retain knowledge if they have an easy transition with practice of a new concept and then an immediate opportunity to apply the concepts to their own work.

Technology should not be treated as a set of constraints but as a variable that can be changed in order to make EI/QWL job designs practical. It is a variable that can be redesigned, and should be jointly optimized with the social system.

MANAGERIAL IMPLICATIONS

The change resulting from a BPR programme is dramatic, indeed for many traumatic. It changes the very shape of the organization, it alters relationship both within and without the company and it creates a culture focused on the customer. Work units change from functional departments to process-customer-oriented teams. Employees focus more on their customers, both internal and external, than their bosses. Employees who once did what they were told now make decisions on their own. Jobs change from simple repetitive task to multidimensional work. This has massive implications for retraining and perhaps more importantly, the future attitudes of those employees.

The traditional lines and channels of communication, believed by many managers, are now obsolete. People communicate with those they need to. Traditionally, managers allocated, supervised, controlled and checked work as it moved from one employee or department to another. These are now team decisions and it is clear that we no longer need all those managers. Team process employees are collectively responsible for process results rather than individually responsible for tasks. All employees will be paid based on performance (which may be measured on a team basis) rather than status and will be promoted on ability rather than longevity. Thus, senior management must pay careful attention to the employees' side of change and at the same time remain focused on measuring and monitoring process performance.

Reengineering organizations require new folks, not necessarily from outside the organization but existing employees who have developed new skills, new perspectives and new attitudes. The hierarchically based organization structure will have to be reengineered so that there will be no more worker and managers. Instead, the new team-based organization will be staffed by professionals and entrepreneurs. Those managers that remain will cease to act as supervisors but will instead become coaches. Similarly, the role of the executive will change from one of being a score keeper to a true leader.

Table 1. Dimensions of change affecting HRM

From Added value to the boss	To Added value to the customers, shareholders, human resources and enenvironment
Complex structures	Simple Processes
Hierarchy	Network
Centralist tower organizations	Federalis camp organization of tents
Narrow span of control	Broad span of trust
Supervisor	"COMOACH' (coach + moderator + champion)
Group of Scorekeepers	Team of humanistic entrepreneurs
Team of stars at the top	Top star team with cool heads, warm hearts, and active hands
Simple specialized jobs	Complex team task
Efficiency (activity)	Effectiveness (result)
Top down or bottom up or lateral	Both top-down and bottom-up and lateral

Source: Martin Hilb's BPR: A human Resources management perspective, ….. P. 180.

Reengineering organizations ought to learn from the game of basketball: roles get blurred, play flows uncontrollably from one side of the ring to the other, with players adjusting to new situations almost every moment and think for themselves while looking out for the team as a whole. Everyone tries the three pointer shots, everyone tries the shots, everyone tries rebounds, everyone tries steals, every one tries defense, everyone passes the ball to the most strategically placed-to the ring player. The synergy and the teamwork are for the team. The star knows he can not win unless the team is making the blocks and assists. Roles do not count. At the end of the day, the guy who adapts to the flow of the day's game kisses the trophy. When the other team knows your stars and sucks the power out of them, when they read your roles in advance and you have to win, you blur the roles. All defend, shoot and block as well as assist. When your stars are fouled out, the team still wins.

The implementation of BPR will involve all of the elements of human resource management. For many organizations, the personnel answers will take them into new territory such as gradeless management structures, multi disciplinary teams and team-oriented compensation. The relationships between people and jobs change, jobs becoming more fluid, more complex, and less predictable (Tullar, 1998). There are clearly some managerial functions that are assigned to lower level employees in reengineering. One should expect a substantial change in human relations' know-how during reengineering. Horizontal process changes often mean that employees must work with several people outside their department who report to different supervisors. Teamwork is thus achieved through persuasion and negotiation.

Tullar (1998) argues that jobs should be reevaluated once reengineering is done. His research findings support the view that, inspite of reengineering eliminating some jobs/positions, and creating significantly more valuable jobs, companies do not offer employees whose jobs were changed any pay increase. One possible cause for the failure of reengineering efforts is that employees whose jobs are changed know that the demands of their new jobs are greater, but they have received no

increase in compensation. Even if reengineered jobs are more intrinsically motivating, as Hammer and Champy (1993) alleged, Tullar argues that altered job content seems likely to create a perception of inequity, hence the need for more pay for reengineered jobs.

RECOMMENDATIONS

Although the new jobs created by reengineering may have more motivating potential, the person-job fit may no longer be a good one. More research needs to be done on the changes in content of jobs in reengineered organizations.

Authors on business process reengineering have focused on horizontal process redesign, and largely reglected the importance of a top-down direction and bottom-up performance improvement (Davenport, 1993; Hammer and Champy, 1993). Fundamental change in complex organizations can only be effectively initiated, managed and sustained by considering all the there forces of change: top-down direction setting, horizontal process redesign and bottom up performance improvement A combination of these three phases of the change process can be the basis for an effective BPR.

Effective business process reengineering will have to borrow a lot from the QWL/EI paradigm targeting a lean and happy organization. The move from a functional bound organization to one adopting a process management approach cannot ignore the quality of work life and employee involvement aspect.

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