

# Business process re-engineering capability based on ECMM: Efficient Configuration Model and Management

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## Abstract

Most business process Companies are interested for new solutions and techniques in organisations. Relating to the big data to achieve that business process must be reengineered. Reengineering of business process can be done based on six sigma activities like Define, Measure, Analyze, Improve, Control and Report. In Business Process Reengineering, the two constants of any organisation are people and process. If individuals are motivated and working hard, here the business process are compressive and organisational process will be poor and posses high failure rate. In order to overcome these effects Business Process Reengineering must have some assessing capabilities which is referred as Desired Organizational Capabilities (DOC) and total quality management (TQM) to increasing the efficiency of reengineering and makes the manufacturing of logistical systems more scientific.

## Keywords:

Six Sigma activities,  
DOC,  
Business Process Reengineering,  
TQM

## 1 Introduction

Reengineering is the fundamental rethinking and radical redesign of business process to achieve dramatic improvements in critical, contemporary measures of performances such as cost, quality, service and speed. The keywords in the preceding to finishing or utilise once. The BPR advocates that enterprises go back to the basic and re-examining their favour routes. Reengineer should focus on process and should not be limited to thinking about the organisation. After all the organisation only aspect as a group of process but it is a single process. Business process is a series and a step design to produce a product or a service.

## 2 How to Reengineer?

Planning and preparation are vital factors for any activity or event to be successful but reengineering is known exception. Before attempting reengineering the question is which business process is necessary there should be a significant process to be reengineered. The justification of this needs marks beginning of the activity. Some of the researchers argue that the original concept of reengineering can be traced back to the management theories of the nineteenth century where people, data and technical logic must be considered.

The main objectives of the BPR to be considered in the present technology are:

1. Customer focus: The main aim is to eliminate the customer complaints.
2. Speed: The dramatic compression of time it takes key business.
3. Processes: For instances if processes BPR every cycle time 5 hours to cut down to half an hour.

4. Compression: The operation level to reduce cost, flexibility, adaptive processes and structures to change conditions and competitions.
5. Quality: A session to the superior service value to the customer and the level of quality is always a scheme control and monitor by the processes and not depend mainly as the person who serving the customer.
6. Innovation: The leadership through imaginative change to the providing organisation for competitive advantage.
7. Productivity: Improve drastically, effectiveness and efficiency.

## 3 BPR project Implementation/Alternative techniques

The six stages of BPR are to be implemented in the drastic change of companies' outcomes:

The Envision stage: The companies' reviews existing strategy and business process and based targeted an IT opportunities are identified.

The Initiation stage: The project team are sign perform goes project planning and employee notification are assigned.

The Diagnosis stage: The documentation process take place of attributes, activities, resources, communication, rules, IT and cost.

The redesign stage: The new process design is develop by device of processing alternatives brainstorming and creativity techniques.

The reconstruction stage: The management technique changes and smooth migration to the new process responsibilities and human resources roles.

The evaluation stage: The new process is monitor to determine goals and methods to examine total quality programs.

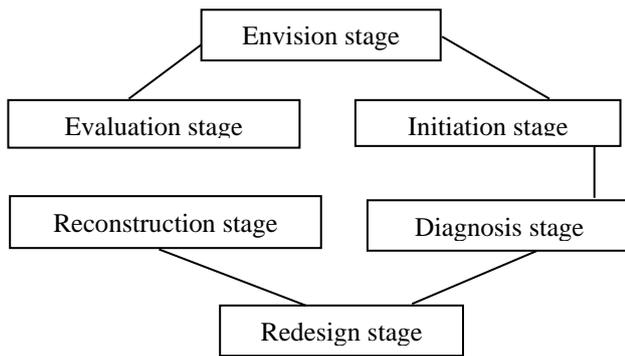


FIGURE 1 BPR Implementation of six stages

The BPR could be implemented to all firms (manufacturing firms, retailers, services etc) and public organisation to satisfy the following criteria:

- Minimum no of employees: 20 (at least 4 in management positions)
- Strong management commitment to new ways of working and innovation.
- Well-formed IT infrastructure.

Business process reengineering could be applied to companies that content problems such as: High operational cost, Low quality offered to customers, high level of "bottleneck" processes at pick reasons, poor performances of middle level managers, Inappropriate distribution of resources and jobs in order to achieve maximum performance etc. The BPR is achieving dramatic process performance improvements through radical change in organisations processes, remodelled of business and management processes. It involves redrawing of the organisational, boundary, the reconstruction of jobs and skills. The use of six sigma to reduce temporary labour expenses are define, measure, analyse, improve, control. The main advantages of business process reengineering are satisfaction, growth of knowledge and increases of proof.

The component that are essential to BPR achieve include:

1. BPR cooperative unit report.
2. Business necessarily synthesise work.
3. Allowable IT infrastructure.
4. Powerful [change management].
5. Current continuous betterment.

The prospect of a BPM attempt that are changed to consider organizational design, Consultant systems, employee duties and execution measurements, motivator systems, attainment development, and the use of IT. BPR can possible affect every look of how business is arranged today. Sweeping changes can cause effect from desirable success to complete failure. If self-made, a BPM enterprise can result in developed character, client service, and aggressive willingness to compete, as well as step-down in cost or cycle time. Even if, 50-70% of redesigning projects are either failures or do not achieve important welfare.

There are many causes for business processes which include:

1. One section may be use best at the sacrifice of another.
2. Lack of time to point on rising business process.
3. Lack of acknowledgment of the extends of the problem.
4. Lack of preparation.
5. People engaged use the optimal tool they have at

their administration which is usually rule to fix problems.

6. Lacking substructure.
7. Overly bureaucratic process.
8. Lack of needs.

More defeated BPR cause may have been due to the confusion surrounding BPR, and how it should be execute. Organizations were well sensible that changes necessary to be made, but did not know which region to change or how to change them. As a result, processes redesigning is a management construct that has been formed by track and error or, in other words, realistic go through. As more and more businesses reengineer their process, knowledge of what stimulate the successes or failures is becoming evident. To draw permanent welfare, companies must be prepared to analyse how scheme and reengineering full complement each other by acquisition to measure system in terms of cost, milepost, and timetables by exceptive property of the strategy throughout the organization, by evaluate the organization's present capabilities and process realistic manner, and by associate strategy to the make a budget process. Other than, Business process reengineering is only a short-term efficiency workout.

#### 4 Literature Survey

Goldstein, D. & Hilliard, R et.al. Proposed that in every organization resources and capabilities are very important because resources can be treated as available factors that are controlled by the firm and capabilities are treated as firm's capacity to deploy resources for a desired result. Basically, Development capabilities and Deployment capabilities are the two types of capabilities which are very important for every organization. These capabilities help to get intent and deliberation and also considered as important elements in routine.

Feline, T., Foss, et.al. Proposed that whenever new organizations or existing organizations are entered into the market they need to develop new capabilities and routine according to the organization or else alter the existing ones. Routine can be stated as an approach for organizational actions in organization and strategic research literature. Normally Observation theory and Theory Based Intervention are two theories that are claimed to be affected by the routine actions. There is integration between routines and individual organization process which termed as Habits. Habits are difficult to change because it is interlinked with the basic knowledge and theme of the organization.

PELAEZ V., HOFMANN, et.al. Proposed that Dynamic capabilities are important for every organization because it helps to provides higher level of competence that makes organizations to best use of their internal and external capabilities and reduce the future difficulties. In order to get this organization must align resources both inside as well as outside. However new organizations are failed to establish routines and capabilities which effects on natural growth rate so, they need to identify where do routines come from and their relationship with capabilities and other forms of behaviours.

Firms or organizations can have various types of capabilities such as managerial and technological based on various situations which can be called as Desired Organizational Capabilities. Much of the empirical investigation and research survey explains that it is difficult

to measure the capabilities that are independent of the result or outcome of filed. Desired Organizational Capabilities help to the organization as long as they build routines in an organization. So, every organization needs to learn how to develop and construct new capabilities over time which will in turn ensure a smooth functioning of the organization. Implementing the routines according to the basic theme of organization also plays a vital role in boosting the efficiency level of organization. Furthermore these routines and desired organizational capabilities helps in investigating or verifying the extensive organizational research in order to identify the vest and beneficial organization in the market.

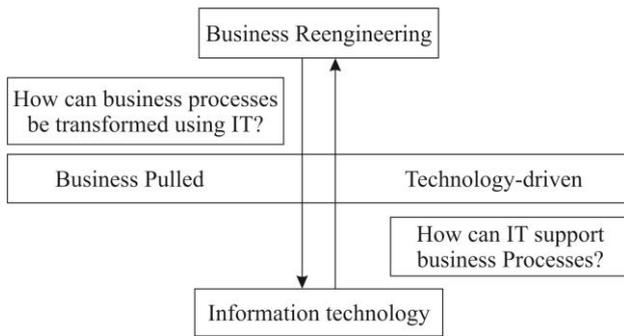


FIGURE 2 Identify enabling IT & generate alternative process redesigns

**5 Risk factors and barriers to process reengineering**

The rope of reengineering business processes has been underscored by the high powered Narshimhan committee on restructuring of Indian banks and also by the vasudevan committee on technology issues. The issues are financial risks, technical risks, general project risk (implementing solution may not perform to the desire level), functional risk (which organisation is engaged), political risk (support and commitment of top management due to change in perception).

BPR in E-business and E-commerce, these two concepts are often mixed up

E-business electronically connects in multiple ways in many organisations internally or externally. There are three types of perspective in BPR

Communication perspective: Delivery of information or payment over telephones lines or computer networks or any other electronics.

Business process perspective: Automation of business transactions workflow

Service perspective: Consumers and managed to art service cost while proving the quality of goods and increase the service deliver.

Online perspective: Buy and sell products through online services.

**5.1 BUSINESS PROCESS REENGINEERING VERSUS BUSINESS PROCESS IMPROVEMENT**

The purpose of both business process reengineering and business process improvement is to make business efficient, effective and flexible. They need to provide the moderate variables where industry type information and intensity of the industry are two moderator variables. The extent to which product and services of divisions are dependent on informative. Data integration and process improvement trust by recognition central management process, data coding

activity often introduces new ways as much as sequential process should be handled.

Desired organizational capabilities are important for BPR because DOC helps BPR in order to fill the gap in the literature on decreasing the risk in BPR. DOC helps to organization combines people and requirements along with resources together in order to complete any kind of work successfully. It also distinguishes the difference between what is good at doing and consequences of bad work effect in growth of organization. DOC is stable and difficult to copy for competitors because DOC can form according to the organization policies

DOC emerges when a company delivers on combined abilities and competencies of its individuals. Whenever an employee will have an ability to show a leadership skill but the company as a whole may not have an ability to maintain the same leadership skill as an individual. So, DOC can be formed and maintained according to the employee abilities towards the organization. In addition to that DOC can enable a company implies its technical activities to run any kind of work effectively and it will show good effect in results of organization.

DOCS are not predefined and suitable for every organization. However, there are some general and basic desired organization capabilities for every organization.

**Capability 1:** Employees must and should have the capabilities to convince a customer according to business project. Committed employees must deploy their skills regularly according to the task. So, this step helps to measure productivity, check static’s and conduct surveys’ through observation.

**Capability 2:** Organization must have an ability to react quickly to grab and recognize opportunities in order to exploit new market and implement changes in product according to the market, must acquire new employees and implement new business process according to the business problem. Managers and important people in organization must have an ability to take decisions according to the market statistics

**Capability 3:** Every employee in the organization must feel free enough to share an idea regarding the changes needed in order to improve the market status. Every team must consider the top three things to implement in future in order to satisfy customers regarding the product. The next step is to take customers feedback on brand identity.

**Capability 4:** Organization must be establish in such a way that it can grab the good performance from employees in order to provide best results in the market. Performance of an employee can be counted as a success measure for every organization. Every employee must consider the goals of the organization and work according to that in order to meet the goals in a less time and provide best results to increase the share in the market.

**Capability 5:** Every organization must set a goal to ensure both efficiency and leverage. Organization must work as a whole to gain efficient results for every business problem. Every task must be completed through pooling of services or some technologies or by sharing ideas to get more efficient output. There must collaboration between organization and the teams working under the organization in order to increase the organization’s strength

**Capability 6:** Organization must respect employees’

new ideas in order to increase the value of organization at market. Organization must ready to do experimenting on the basis of ideas generated by employees and ready to face the risk. Organization must adopt new ideas and leave old practices for solving business problems.

**Capability 7:** Organization must elect best leaders in order to get growth of results because best leadership skills must have a capability get best results. Leaders of organization must have the capability to know how to do and what to do in order to compete with competitors in the market. Organization must track the leadership skills of employees and monitor the pool of future leaders. Organization must maintain a backup for employees and stand in any kind of situation

**Capability 8:** Organization must and should maintain a good relationship with customers and ensure trust for customers. Involvement of customer in solving a business problem by considering requirements for problem. In order to have this capability every organization must maintain a customer service centre and ready to solve their problems at any time. Frequent customer surveys must be conducted to get to know about customer opinion on the process of execution.

**Capability 9:** Every company must and should follow some strategy in order to solve business problems and maintain organization in unambiguous way to deal with problems. Organization must notice how employees respond to customer and make sure employees must follow organization strategy to avoid ambiguity in solving problems for customers. Organization must take suggestions from employees in order to form a default strategy for organization.

**Capability 10:** Organization must innovate something whether in products or in strategy process to possess an effective outcome. Every organization must focus on future success and forget about past results. Efficiency is key to success so leaders must concentrate on costs related to solve problems and try to get efficient results in order to grow the top line in market. Efficiency may be the easy capability for every organization which is linked to employees working in the organization

These are the some of the key capabilities that every organization must and should consider as desired organizational capabilities in business process reengineering. It will helps for every organization to solve any kind of business problem after reengineering and it will acts as a blueprint for new organizations who are ready to compete in the business market.

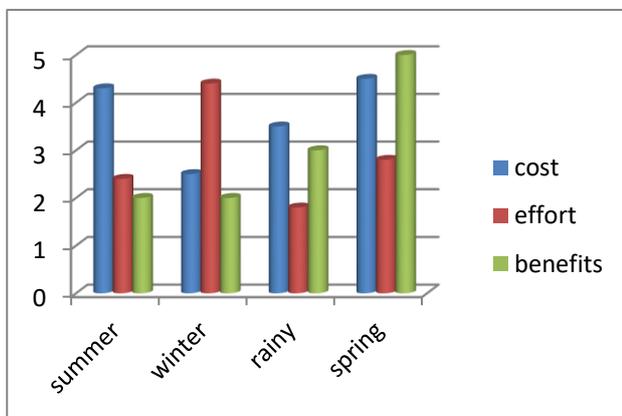


FIGURE 3 Differentiating Individual competence vs Organisation capability

	Individual	Organisation
Technical	An individual functional competence	An organisation core competence
Social	An individual leadership ability	An organisation desired capabilities

**6 Auditing capabilities**

After setting own desired organizational capabilities in an organization, next step is to auditing the capabilities in order to crosscheck how the capabilities are helping to get growth in results as well as in business market. The capability auditing must be done to check leadership behaviours and monitor organizational assets. It will highlight which is more important in given organization history and strategy. It will measure how well company delivers on the capabilities and lead to implementing a plan for improving results based on history.

Next, to evaluate the organizations performance on these capabilities. Performance reflects the results for the business problems and helps to grow in the market. Performance of employees according to working strategy and leaders to get involve in guiding employees to work correctly. Auditing helps to know about capabilities well and have a ability to choose best capabilities that most effect the ability to deliver effective results in market.

The leaders of every organization must discuss about the survey at an off-site meeting. Meetings will help to address the gap between the strategy statements and procedures that focus on services. Before implementing overall improvement plan define the capabilities that would be most important to execute the strategy after completing the auditing. Once the auditing is done don't choose the capabilities with low scores in performance. The leaders are ready to invest in further developing capabilities which would lead to get success. In particular they must focus on marketing skills and hiring employees who will suitable for organization. Effort for creating a leadership brand and forming a new team who will give a high performance is most difficult part after auditing.

While auditing is going on it is important to understand that which capabilities depend on one another. So, even though we target on one capability it will link the depended capability which is important to audit. Most important capabilities must be combined with one another based on any aspect common between both the capabilities. If we do combining it will help to improve two capabilities at same time. A leader must built each capability in organization by considering the main factors of organization so, working on any one of the capability may helps to build leadership in terms of assessing factors which will helps to get success for organization.

Finally, auditing helps to assess strength in support of leaders in organization and starting with the organization with a new essence of implementing plans to get effective results for every business problem based on capabilities. It is not necessary to boost weak capabilities but to identify and build capabilities that will have the strong impact on execution of strategy in

Every organization Auditing also helps to know at what capabilities would essential for future success, and assessing desired capabilities in terms of organization requirements.

TQM=CQI through+ customer focus+ process

improvement +total involvement

Total quality management is continuously improving quality (CQI) by focusing on customer requirements, improving the processes to relate these expectations and involving everyone in the improvement.

TQM is an overall philosophy and management system.CQI can be useful for the organised to access and to enforce TQM.

Auditing for capabilities must be done in every business unit in the entire organization. Every part of strategy must be audited according to the plan. Auditing can be done starting with the core modules of the organization by checking how well a capability will set to a particular module at any situation.

The first step in auditing is to know about the critical areas in the organization which will meet the goals of organization. The audit process started with collection of feedback from multiple sources on critical areas and capabilities involved in organization. Based on above mentioned capabilities which are generic for every organization the auditing can be taken place. Business requirements must be adapted and not to be changed when auditing is going on.

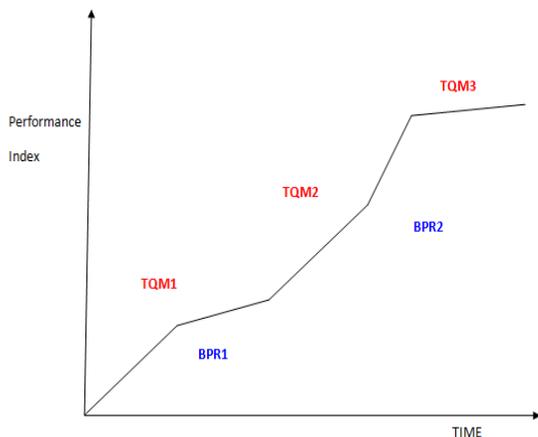


FIGURE 4 TQM and BPR based on performance index and time

**Cost:** Design and implementing the business process, Hire and train employee, develop supporting information system, bought of other instruments and opportunity.

**Benefits:** Customer satisfaction, related goals, performance evaluation, queries.

**Risk:** Modern facilities availability and related goals, time needed for design and implementation, serving curve, cost and time table must be followed.

Why business process management is necessary?

ERP implementations result in significant changes to a business and its organisations.

1. Identifies process and organisational changes.
2. Highlights organisational change management issues.
3. Improve the process based on needs of the company vs the needs of software
4. Business process model is compulsory for all ERP techniques.
  - Reduces overall risk to the project.
  - Increases the return on investment and identifies other cost saving opportunities.

- Ensures key differentiating business processes and logic are not lost during implementation.
5. Protects and maintains company competitive edge.

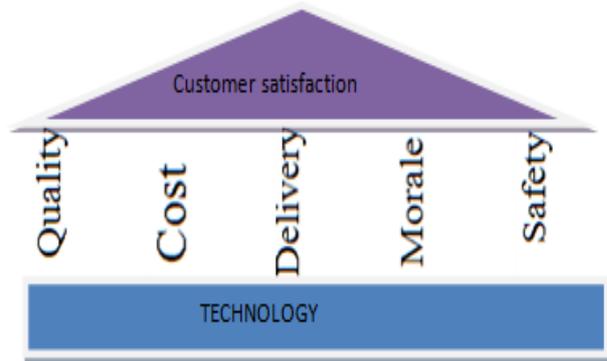


FIGURE 5 Before and After of TQM

Before implementing of TQM	After implementing of TQM
1.Working as an individual	1.Working as team
2.Focus on results	2.Focus on continuous improvement and changes
3.Adhoc decision making	3.Fact based decision making
4.Fixed wages for assigned work	4.Rewards and recognition



FIGURE 6 Stages of ERP at market planning

Profit key is Enterprise resource planning or ERP is a software solution that provides manufacturers with the information necessary to effectively manage their business processes.ERP is a fully integrated real time system giving the information that we need to grow to our business.ERP enables by connecting information for everyone, every department and every process throughout your entire enterprise. It begins up to the movement seamless communication and accurate picture of our valuable resource management and way to use for better project planning & leading company business decisions really in the manufacturing process. This is true business intelligence with complete quote to bill management capabilities and streamlined office automation. A capability ERP solution is a manufacturing execution system or quality management module. Profit key is proprietary for rapid response manufacturing of industries first fully integrated ERP and MES software solution for small to mid-sized manufacturers.

**7 Business Process Reengineering (BPR) and Total Quality Management (TQM):**

The TQM and BPR interfaces a two-sided role level played. The total Quality investigates to explain rapidly changing or growth exchange and gradual increasing of process, while proposed of reengineering often seek to again redesign for radical incremental of process. The quality management related as continuous increasing, means programs and techniques, which evaluate incremental improvement in work process, and outputs over an open-closed period of time. In adding, reengineering also known as business process redesign or process initiation, refers to pretend initiatives intended to achieve radically redesigned and improved work processes in a specific time period. In related to continuous improvement & TQM, BPR implies on a different way of thinking.

The extract difference between continuous process improvement and business process reengineering lies in where start from and also the magnitude and rate of resulting changes. In particular period of time, many derivatives of radical, breakthrough improvement and continuous improvement have emerged to address the difficulties of implementing major changes in corporations. Leadership is most important for effective BPR deployment, and successful leaders use leading styles to suit the particular situation and perform their tasks, giving the importance to both people and hard work. Business process is essentially value engineering applied to the system to bring forth, and sustain the product with an emphasis on information flow. By mapping the functions of the business processes, low value functions can be identified and eliminated, thus reducing cost. The priority of effective responsibility or total quality management did not be disclosed. They should provide the valued resources to work evaluate their active support for the team, set the every stage for reengineering by considering core business techniques, and by identifying the project purpose and problems area. The two techniques of BPR should also give the importance to provide effective findings, set motive standards as well as supported others to be realising to their innovative ideas. More business process projects fail to be succeeded or do not reach end-line business outputs. Because of this, BPR 'success factors' has become an most important area to realise. It is way to think of a particular group structure area in 3 solutions: third parties, relative team, and existing team.

The stakeholders are key business leaders ultimately accountable for the success of the project. Their role is to provide high-level guidance to the team, help remove barriers, and provide funding. The core team is the group responsible for the design and implementation of the solution. Your extended team includes other people in the organization contributing to the project on an as-needed basis. These extended-team members include subject-matter experts. A well-rounded team includes a mix of people and skills. Such a team may include individuals who thoroughly understand the current process, who actively use the process and also work closely with customers, technical experts, and consultants, if necessary. But the main criterion is that the entire team should work together for the project to succeed.

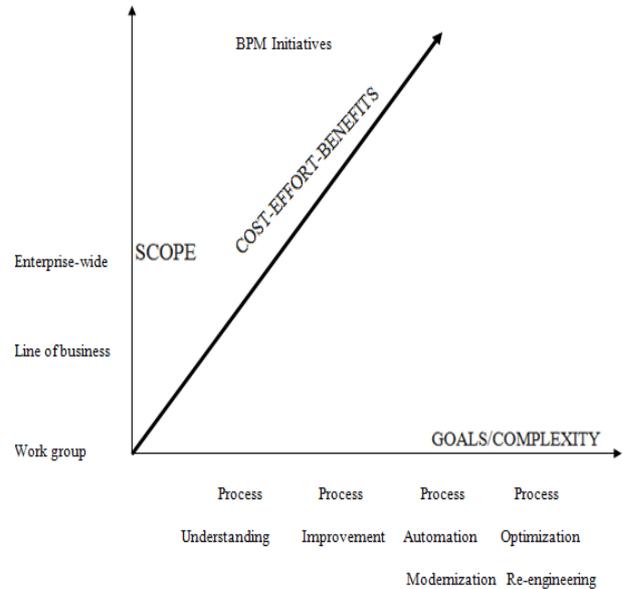


FIGURE 7 The role of consultants in BPR projects

New reengineering teams typically employ the assistance of a consultant for their project. Consultants can play a valuable role in BPR projects. They are objective and immune to internal politics. Having followed the processes before, they provide valuable information and best practices from a wide range of experience. Consultants can also serve as good communication bridge between the team and management, write project documentation, lead the project and facilitate meetings, make presentations to stakeholders and associates, and last but not the least, contribute subject-matter expertise in your organization's work processes.

**9 BPR and IT:**

BPR has quickly formulated toward a recent management belief. The inbuilt business processes preferences modified the position of world-wide management from a functional to that of a process view. The redesigning of business is only way of the management of business process. In specific, the re-engineering of world-wide business processes needs particular tending, because the various structure of multinational entity growing the complexity of business processes, there by examine the choices for reengineering.

BPR has rapidly developed regarding a recent management philosophy based upon forerunner like TQM, Overhead Value Analysis. Business processes can be redesigning by reengineering the steps, by changing the ordered and secular arranged of the steps, or by changing any other feature of the process. Exponent of data systems prefer the view that the recent technology is an enabled of process re-engineering. IT has to be supervising always to check whether it can create new process designs or put up to the performance of a business process. The discovery of BPR is nearly attached with IT, which opens new measurements of process reorganization.

However, those who take the enterprise in process improvement/redesign, regulating the role of IT. If the data processing sections the process change, then IT will have more of a source purpose for new process redesigns. On the other hand, the top management sets off the change process,

then the process will be first redesigned and after optimized through IT. BPR involves the basic redesign of effect business processes to reach spectacular improvements in productivity, cycle times and quality.

In BPR, companies start with a blank sheet of paper and rethink existing processes to deliver more value to the customer. They typically follow recent value system that places rapidly accent on customer needs. Companies shrink organizational levels and transformed unproductive activities in two important areas. First, they rebuild functional organizations into cross-functional teams. Second, they use technology to improve data quality and decision making.

### 10 Companies use BPR to:

Companies use BPR to increase performance well on key processes that strong effect customers.

- **Make less costs and cycle time.** BPR reduces costs and cycle times by reject unprofitable actions and the employees who execute them. Reengineered by team's decreases the need for management levels, speed up information rate of flow, and reducing the errors and rework caused by multiple ways.
- **Improve quality.** BPR improves character by reducing the separating into few areas of work and constitute clear ownership of process. Employees profit responsible for their output and can quantify their performance based on motivate resubmit.
- TQM refers to a constant effort of management along with the employees of a particular organization to improve the quality of goods and services. Businesses need to accent on quality of their products rather than quantity to endure the intense competitor. Recollect in today's extension, there is no famine of competitors in the market. Quality is an important argument for each and every business and should not be avoided at any cost.
- TQM works on a very simple rule: The responsibility of delivering quality goods and services to clients lies on every single individual who is even remote assort with the organization. It is not only the management but also employees regardless of their identification, providers, clients, customers who need to come up with increasing ideas to make unailing systems and process to deliver quality products which meet and exceed the expectations of end- users.

### 11 Results

The two techniques Six Sigma and Total Quality Management are rapid tools for increasing the quality management but very rare line of gap does exist both of them. Consider the methods and procedures involved in between the two appear almost same but there are certain major differences.

**The Six-Sigma is a commonly new concept of Total Quality Management but not exactly its presence.** The major difference between Total Quality Management and Six Sigma is that TQM delivers superior and ordered quality manufactured goods and services where as six sigma on the other hand output in better results. Total Quality management refers to continuous effort by employees to evaluate high quality products to customers. The process of

Six Sigma presences many small changes in the systems to ensure effective results and better customer satisfaction.

Total Quality Management involves redesigning and developing new systems and processes and ensures effective interfaces among various departments. New Processes are developed based on various customer feedbacks and researches.

**The main focus of Total quality management is to maintain existing quality standards whereas Six Sigma primarily focuses on making small necessary changes in the processes and systems to ensure high quality.**

The process of Total quality management does reach to an intensity level after a certain period of time. After reaching the ending stage, no further improvements in quality can be made. Six Sigma on the other hand rarely reaches the saturation stage by originate another level reference process.

The procedure of Total quality management involves regard in present policy and operation to check more quality. **Six-Sigma direction on raising quality by understate and finally eliminating flaws from the system.** The purpose of TQM guarantee that each and every single member relate with the arrangement is functioning near the increasing of existing process, systems, services and work refinement for outlook character of goods/services. Six Sigma, on the other hand focuses on first identifying and eventually removing various defects and obstacles which might come in the way of organization's success. In a business model total quality management underline on raising the present policies and making appropriate changes in the systems to check senior quality goods and services. Organizations practicing Six Sigma are focused on removing errors and flaw to assure high quality intersection.

**TQM is a less complex process than Six Sigma.** Six-Sigma involves particularly disciplined individuals whereas TQM does not expect comprehensive training. The process of Six Sigma creates special levels for employees who are only competent to implement the same. Employees prepared for Six Sigma are often certified as "Green Belts" or "Black Belts" depending on their level of proficiency. Six-Sigma requires involving of only certified professed whereas total quality management can be pertain to a part time activity which does not require any special training. Six-Sigma can be implemented by devoted and well trained professionals.

**Six-Sigma is famous to present improved and efficient results as liken to total quality management.** The process of Six Sigma is established on customer feedback and is more exact and result destined. Customer feedbacks play a measurable part in Six Sigma. Experts predict that six sigma will highlight TQM in overdue course of time.

Clients and their feedbacks are the based of every TQM model. In simplex words, TQM begins with agreement clients, their needs and what they expect from the establishment. Pattern unailing processes and systems to collect customer data, information to further study, synthesize and act accordingly. Such action not only help you understand your aim for customers but also anticipate client behaviour.

As a business marketer, you need to know the age group of your target customers, their preferences and needs. Workers need to know how their products or services can accomplish customer needs and demands.

TQM model needs precise planning and research. Every TQM design incorporate customer feedbacks with relevant information and plans accordingly to design impressive

scheme to achieve high quality products.

Strategies developed to generate better quality products need to be measured and re-examined from time to time. Recollect, clients are fulfilled only when products meet their expectations, action their needs and are value for money. Their overall receive with the organization needs to be pleasing for them to be happy and return to the organization even the next time.

Continuous improvements, changes and adjustments in the existing processes according to customer prospect are necessary to effort higher profits. Processes can't be same always. If a client complaints about a particular product of yours, find out the root cause of problem. Understand and implement necessary TQM frameworks to evaluate the problem, remove the fault for a high quality product.

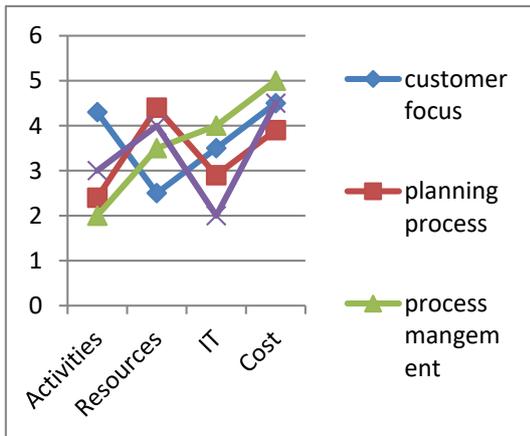
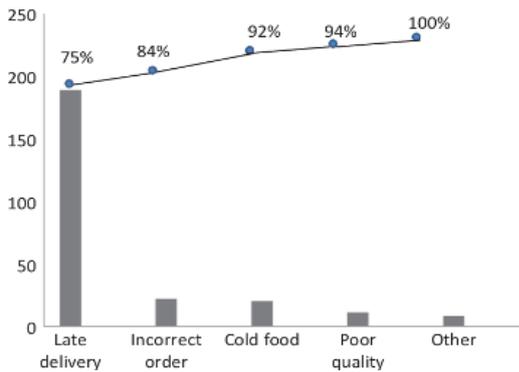


FIGURE 8 Six sigma related to business sector before implementing the TQM

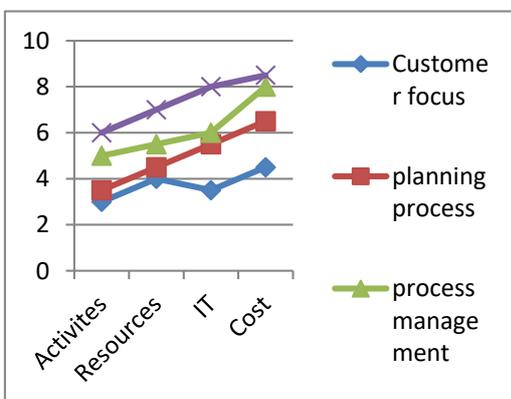


FIGURE 9 Six sigma related to business sector after implementing the TQM

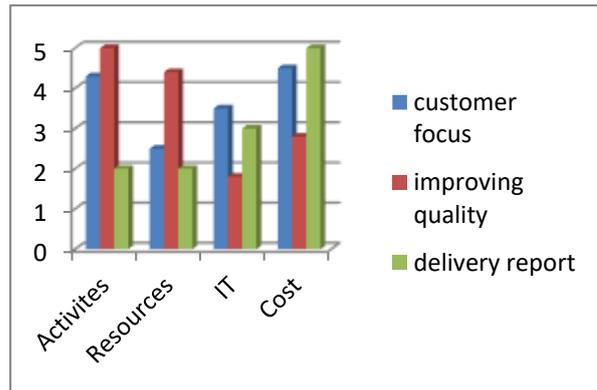


FIGURE 10 Six sigma related IT business sector

According to six sigma activities leading the business sectors now-a-days. In this TQM increases the efficiency of business process based on six sigma where as quality must be improved TQM organizations use the techniques of process management to develop cost-controlled processes that are stable and capable of meeting customer expectations.

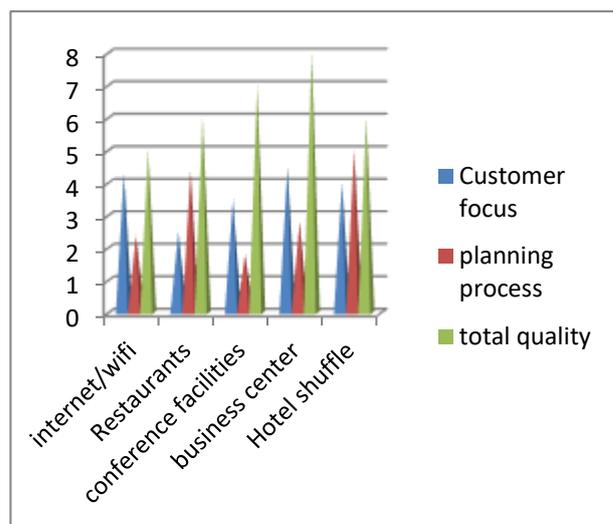
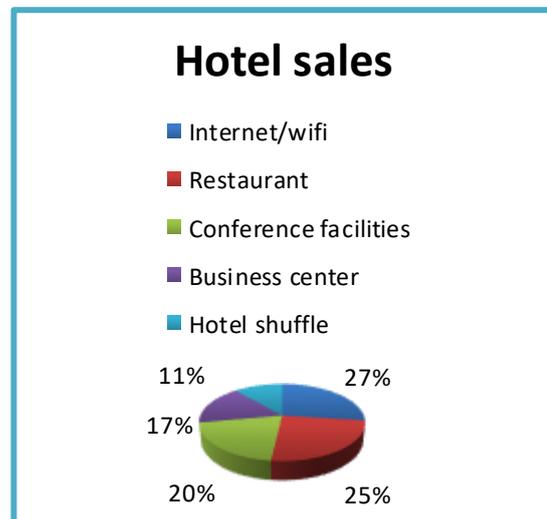


FIGURE 11 six sigma related to TQM in business sector for quality improvement

## 12 Conclusion

In this paper, Business process and data models are extend based on Desired Organization Capabilities. The world wide scale of the economy and the relaxation of the trade markets have developed new rules in the market place which are characterised by imbalance and characterised by a high degree contest in the business process environment. Business Processes are qualified by three elements: the inputs, the preparing of the data materials and the outputs. Planning and preparation are critical factors for any specific

behaviour or even to be successful and redesigning is no exclusion. The strong effect of the environmental changes that serve as the impulsion for the redesigning effort must also be studying in establishing guidelines for the reengineering project based on TQM. The results that we obtained show that our proposed data model is more efficient in terms of management and organization capabilities and we can also extend in a wide manner by using the PQM (process quality management) to meet the demands of your customers and also improve the quality of your deliverables in a useful way.

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