

# Application of Information Technology and Business Process Management (BPM) to enhance organizational process

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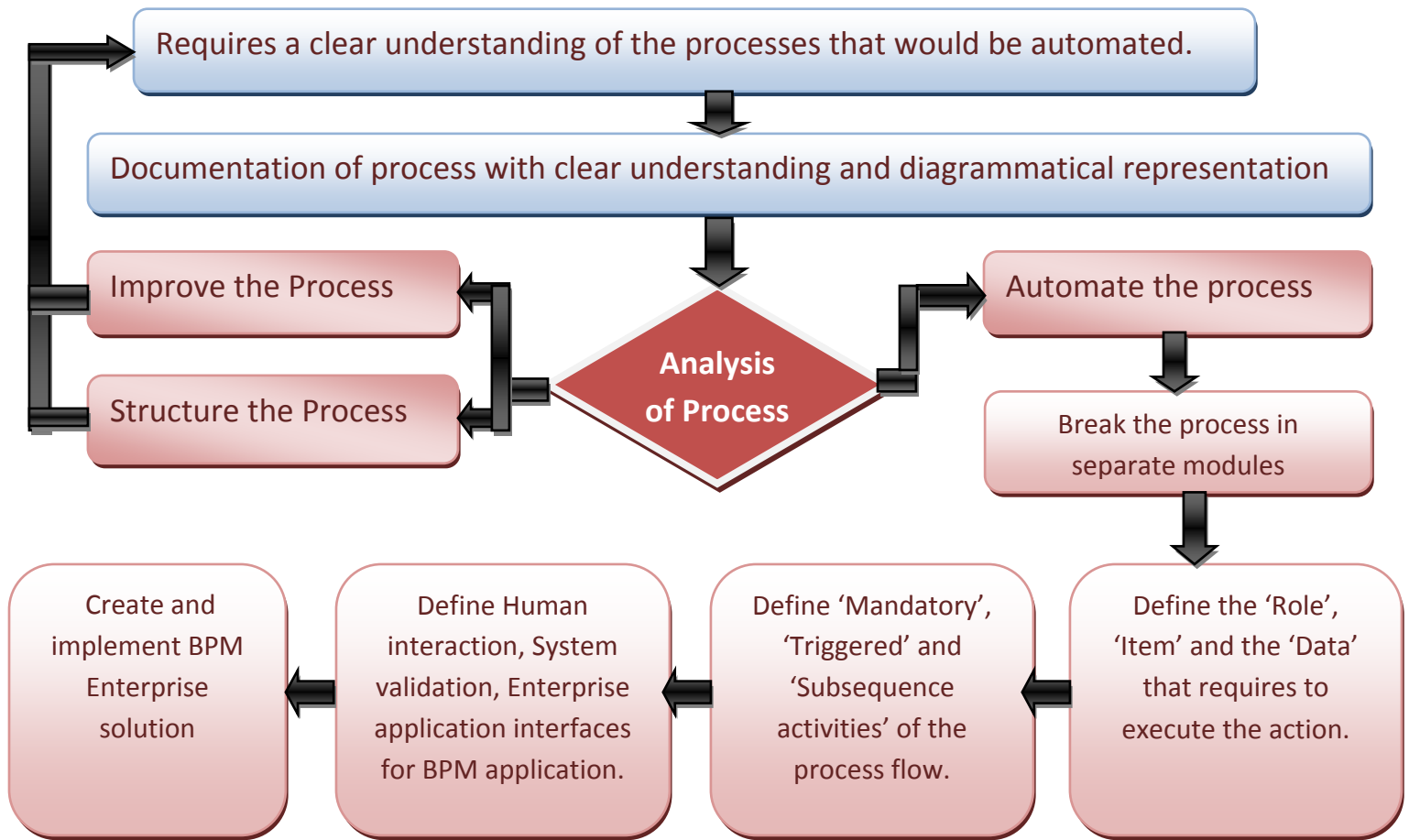
## **Abstract:**

As the business scenarios are changing rapidly, it is the time to automate all the process management especially in IT/ITES sector. The automation will help an organization to find out optimal and effective business process. It also help to improve process, restructure process and make the entire process so robust that it can manage the conflict and according to market or economical changes it can trigger some subsequence process which will be effective to survive in such volatile environment. The automation of BPM provides lots of benefit to organization. It helps to i) Increase the revenue ii) Reduce the operational cost iii) Eradication of Data Entry Errors iv) Critical Failure Avoidance v) Higher Customer Satisfaction Levels etc.

## **Introduction:**

Business Process Management is once again a pressing senior management concern. Today, a successful BPM strategy can power an enterprise's full business process cycle and help achieve innovation, differentiation, and bottom line growth. The importance of BPM lies in its ability to enable companies to quickly adapt to changing circumstances, meet critical regulatory compliance, and rapidly improve critical business processes. In short the Business Process Management can be describe as Business process management (BPM) is a systematic approach to improving an organization's business processes. BPM activities seek to make business processes more effective, more efficient, and more capable of adapting to an ever-changing environment. BPM is a subset of infrastructure management, the administrative area of concern dealing with maintenance and optimization of an organization's equipment.

The significance of "Business Process Management" is-- Business processes are a fundamental building block of organizational success. Even though effectively managing business process is a key activity for business prosperity there remain considerable gaps in understanding how to drive efficiency through a process approach. Building a clear and deep understanding of the range process, how they function, and how to manage them is the major challenge facing modern business.



**Steps of evaluating BPM approach**

## **Detail description of steps of Business Process Management:**

Business Process Management requires a clear understanding of the processes that would be automated. For those organizations which are contemplating implementation of Process Automation. For those organizations which are contemplating implementation of Process Automation.

### **1. Pick up the process that best addresses corporate objectives, current problems, and feasibility concerns**

You must be able to facilitate conversations about goals, responsibilities, problems, and, of course, processes. And these conversations must ultimately result in prioritization of projects and processes that everyone agrees have the biggest impact for your business. This is called process discovery. It is a crucial capability for your organization. In fact, process discovery is most crucial for companies that have committed to BPM as the question quickly evolves to – what do we do next? Answering that question is essential to on-going success with process management. Until now, the BPM software industry has not

helped customers answer these two basic questions. Process discovery has either been made overly complex and inaccessible to the core audience of business users or it has been ignored entirely.

Note: Risk free approach: it would be best to initially take up any transactional process that requires the involvement of many people in a sequential (though not necessarily) fashion with approvals and possible movement of paper from one desk to another. While calculation heavy processes which are single step are not good candidates, interfaces of such processes and add-ons lend themselves greatly to automation.

## **2. Create the complete understanding document of the process:**

Once a process is identified, it needs to be documented accurately with a definite beginning and an end. This is an important step and often determines the success of the implementation. While the documentation can be done by any one, it is best that this be done by somebody who is familiar with the process.

## **3. Analysis and decision making on process flow diagram:**

At this point of time, the organization could also take a decision on whether to automate the process as is or to introduce improvements. The documentation also needs to be structured so as to answer questions that would come up during implementation. A flow chart is best for an easy graphical representation, but various elements and decision points need to be clearly marked out and noted.

## **4. Modularize the process:**

Once processes are broken into activities, each activity needs to be taken up in detail, defining the 'role' that will execute the action, the 'items' that need to be captured in the activity, whether the data will be manually entered or electronically picked up.

## **5. Define “Data Structure” and “Execution Methodology” for process:**

Processes can trigger sub-processes, other super processes and can initiate/ be initiated by triggers from Enterprise applications. Some activities could be mandatory for the commencement of subsequent activities while some may not and some branches of a process may need to trigger exception reporting.

## **6. Insert “Interface”, “Validation Process”, upgrade the application to “Enterprise Application”:**

BPM can also drive validations, control authorizations and be used to log data at a micro level. There could be a mix of human interaction, system validation, Enterprise application interfaces orchestrated by the process builder so that the organization moves in harmony. On the other hand, Process Management tools can also be used to simply pump data from one Enterprise application to another and back.

## **Benefits of Business Process Management**

BPM allows tremendous efficiency gains as the technology does much of the hard work. No longer an invoice be hidden in someone's in-tray and no longer a staff expense claim is lost. There are three key advantages that BPM can bring to the table:

### **1. Transparency**

BPM makes a business process absolutely transparent, greatly improving visibility and efficiency. Bottlenecks can literally be seen, and removed. It can show where the most delays are occurring, and where is each transaction stuck as it passes from one stage to another.

### **2. Process refinement**

The initial configuration and design exercise coupled with the data that emerges after running processes for some time can allow refinement.

### **3. Centralization of Data**

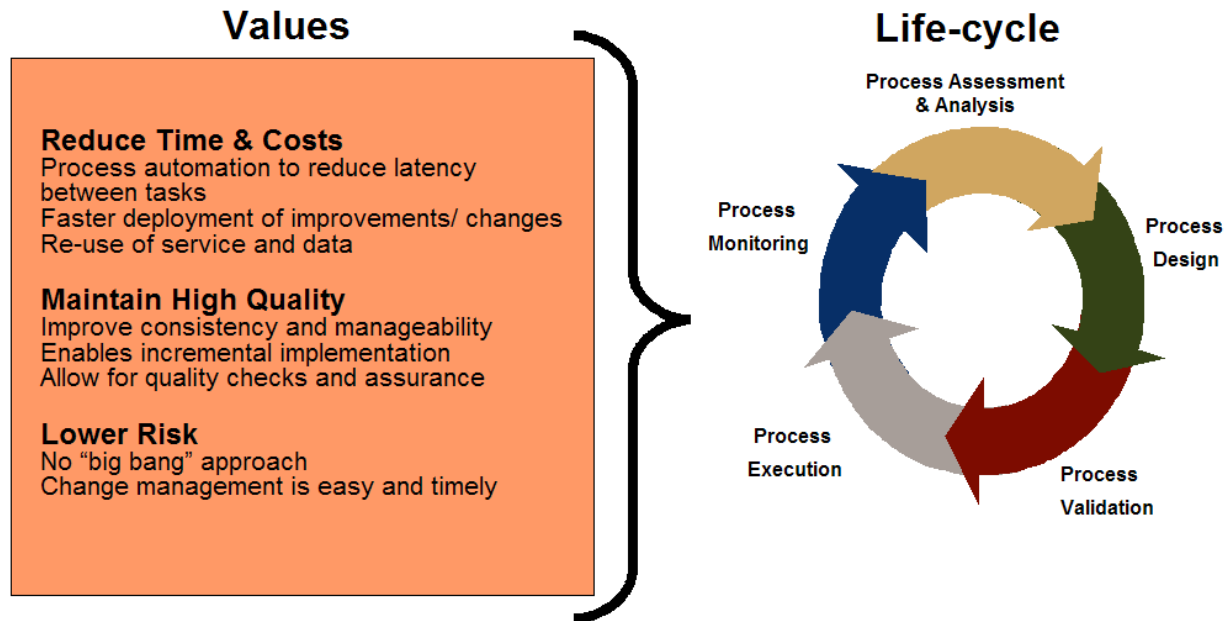
Data about each and every transaction is logged and can be retrieved as and when required. Therefore, it is possible to analyze accurately what happened. Referencing is also easier as embedded searches allow for data to be picked up as required for study.

### **4. Agility**

The final key benefit BPM provides is agility. In the era of the Service Oriented Architecture (SOA) and On-Demand, agility is a well-understood concept. In the world of Process Management, the ability to change quickly is essential. Our customers change their key processes 4-7 times per year. The driver for change can be internal or external.

New opportunities can arise. New partners or customers need you to support a different way of doing business. Federal or international regulations can require you to change your processes. BPM provides the platform you need to be able to change your processes – faster and in a more controlled fashion than any other option. Agility benefits typically include supporting federal regulations faster – eliminating chances of fines or delays in approval.

Another example includes the ability to change a process to accommodate unforeseen events. An insurance agency can quickly adjust its claims approval threshold upward when a natural disaster happens in a specific part of the country. It can be difficult to calculate hard returns from agility, although most organizations recognize that the ability to quickly adapt processes is a critical competitive capability.



**Life Cycle of BPM Process**

## **Challenges that forced organization to look forward to BPM**

Smooth BPM is no longer an option. Companies face business challenges that need to be addressed immediately. The challenges at the top of the list are the following

- **Increasing operating margins to meet competitive pressure:**

In such a competitive any drawback in business process may cause the failure of project flow and it divert the solution group to away from solution. Operating margin is an important measurement of management's efficiency, and also the profitability and performance of a company. A company having a higher operating margin on average than its industry competitor's, tends to have better gross margins and lower fixed costs, thereby giving management more flexibility in influencing prices. To face and win against competitors client require a "Business Process" which will implement a way to solution flow where it will show the way to reduce the cost for "Sales and strategy", "Goods cost" etc.

- **Reinforcing innovation to expand or tap into new markets:**

To catch the competitive client market vender should have to insert the innovative ideas in the "Enterprise Business Process". The ideas can be execute either in trigger methods or it will be bind with data. Here the process monitoring system uses to see the changes happening in market and implement or sense the system about the changes. For example, if any firm changing their marketing policies or increase their practice on any vertical, the system should catch and reflect on board.

- **Complying on schedule with mandatory regulations:**

Some time some known regulation may happen in business line. This regulation use to have an impact on “Enterprise Business Process Flow”. From client perspective they want when this regulation will be implemented by on trigger process one or more subsequence module contains client policies will be executed and entire process flow will be reschedule along with the required changes in “Business Application”.

## **How BPM software provide optimize process for “Business Support”:**

Businesses are a collection of connected processes and that to be agile, those processes must frequently be realigned or reconnected so they can address changing business environments, redefined business objectives, and newly imposed regulations. These processes must frequently be realigned or reconnected so they can address changing business environments, redefined business objectives, and newly imposed regulations.

Adaptable business processes result in increased operational margins and therefore in true competitive advantage. An agile enterprise can continuously improve key business processes and adapt them to changing circumstances. effective business process management has again emerged as a core business asset. As BPM increases in importance, the business process layer within the technology stack has also gained increased attention.

- Business process-driven applications—as opposed to business function packaged applications—follow the latest IT paradigm: service orientation architecture. Together, BPM and SOA define a new IT world, which drives innovation and efficiencies using existing IT assets and producing results within months. The new paradigm promotes loosely coupled IT systems that replace the previous tightly integrated, hardwired packaged applications. Packaged applications are broken down into services of different granularities. These services are orchestrated on the process level and are simply consumed in a way that supports optimized business processes. For example ORACLE implemented The industry-leading modeling and simulation engine—Oracle Business Process Analysis Suite—which shares the same metadata format with the process execution engine and helps business and IT to seamlessly collaborate. Similarly, Oracle BPEL Process Manager—for human workflow- and application- driven integration tasks with BPEL; part of the Oracle SOA Suite.
- An open, standards-based SOA accelerates BPM to a new level of process focus by emphasizing metadata. This heightened level of process focus defines a platform with BPM in its core, integrated with business intelligence, security, and business service registries. These platforms enable software services to support business processes. Thus

a business service repository can provide for the management and correct use of those services and data.

- Business Process Management is a management discipline that affects the organization of an enterprise and is supported by technology. More than with other technologies, business managers are as involved in evaluating and using BPM tools as IT staff.

The increased level of business user interest stems from the fact that processes are the “setscrew” for lines of business staff to manage their success. Business people drive BPM projects and funding for these projects often originates in business departments rather than in IT. BPM’s value proposition reaches far beyond IT efficiencies and reveals immediate benefits to business users, such as:

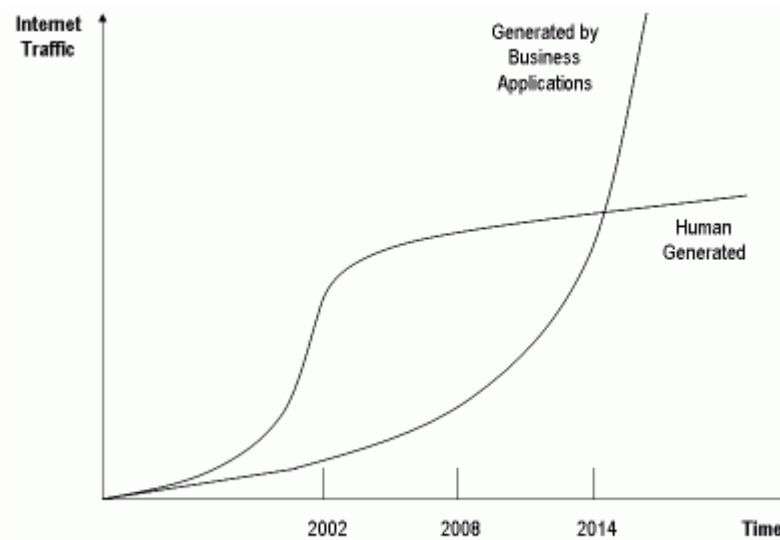
1. Reducing the on boarding process by one week, by automating various tasks.
2. Reducing the error rate when closing the books by setting up optimized review tasks.
3. Increasing the invention cycle by introducing new product or services offerings more frequently.
4. Responding to nonstandard customer requests faster by involving the right people immediately.
5. Responding to regulatory mandates fast preventing impact on your ongoing business

In the current market condition, organizations will look to streamline processes even further, utilizing products such as BPM to manage compliance, risk and corporate performance.

## **Need of software to support “Business Process”:**

Business Process Management Software, as a technology, can deliver endless benefits to any-sized organization but more importantly these benefits will be unique to your company.

- A. Through automating repetitive employees business processes, such as report creation and distribution or the monitoring of or reporting on company KPI's, Task Centre reduces your operational costs and frees-up employees to concentrate on activities that are important to the success of your business.



### **Growth of BPM automated process according to time**

- B. Business Process Management Software works by 'loosely coupling' with a company's existing applications which enables it to monitor, extract, format and distribute information to systems and people; in line with business events or rules.
- C. By leveraging the processes and information of existing applications, automated business processes can be configured and re-configured without having to alter the underlying configuration of a company's applications. Task Centre merely uses these applications as information services and workflow trigger points.
- D. Creating or re-creating an automated business process is achieved via any PC on which Task Centre is installed through its intuitive and logical Graphical User Interface (GUI). This GUI enables an administrator to automate common employee-driven processes, such as creating and sending end-of-week sales reports.
- E. Stronger Revenue Streams: Increase revenue by providing implementation and deployment services to BPM software customers and also increase in services revenue: Partners can get more services revenues by expanding their offerings to their existing customers
- F. Operational Savings: BPM focuses on optimization of processes. The processes that are repetitive are optimized and lead to reduction expenses which translates to immediate cost savings.



- By automating a task ROI of BPM that requires six hours of manual intervention, one can expect to cut that time to half. Thus, three hours multiplied by the number of times the process is completed in a cycle will yield significant cost saving.
- BPM implementations often result in numerous intangible benefits that translate into tangible savings in costs and increased revenues in the long run.
- Automation of processes reduces errors due to human intervention. The reduction in errors saves the time of rework and improves quality of processes as well.
- BPM automation of processes that impact revenue generation has an immediate and significant impact on revenues.
- Application integration which is one of the most powerful phases of BPM leads to reductions in IT management and administration time, development time and costs, and lower support costs.

- G. Reduction in the Administration involved with Compliance and ISO Activities: The need for compliance and governance plays a major role in modern corporations. Be it a quality assurance initiative such as the ISO standards, a financial audit law, or an IT systems best-practice implementation, companies worldwide are seeing the need to manage compliance as part of their everyday business activities.

Regardless of the program, clarifying and reengineering business processes is the basis for improvement. The BPM is ideally suited to help support companies in their quest for process improvement and compliance/governance certification. BPM gives full control over process and document change, clarity of inherent risks, and the ease with which process knowledge is communicated across the company, organizations can instill the disciplines necessary to successfully complete these programs.

- H. Higher Customer Satisfaction Levels : Achieving high levels of customer satisfaction is a core issue for any business. A number of common factors have been identified as critical drivers of customer satisfaction. It proposes a positive linear relationship between staff satisfaction, service quality and customer satisfaction leading, ultimately, to profitability.

Some researchers have suggested that Business Process Management (BPM) may have an important role to play in driving customer satisfaction.

- I. Freeing-up of Employee Time: While the euphuism “time is money” is often over-used, it is very germane to this topic, because in business, for each additional hour it takes to

complete a manual business process, there is a hard cost associated with employee time as well as soft costs associated with losing business or lowered productivity. Another area where time comes into play is in opportunity costs.

- J. Eradication of Data Entry Errors: BPM provide tight integration with conflicts and practice management systems, reference systems and applications such as finance, client relationship management, and document management and This integration promotes data reuse, reduces duplicate entry, and eliminates data entry errors.
- K. Critical Failure Avoidance: BPM reduce the probability of a risk and/or the impact that an occurrence of the risk may bear.
  - Risk limitation strategy of Risk management module of BPM aims at the implementation of controls that dampen the effects of risk occurrences, while not completely alleviating them.
  - Risk avoidance strategy of Risk management module eliminates the probability of a specific risk before its occurrence. This strategy is normally realized by trading the risk for other risks that are less threatening or easier to deal with.
  - Risk transfer strategy of Risk management module shift risk or the consequences caused by the risk from one party to another. Also called “risk sharing”. Risk transfer may involve the purchase of an insurance policy, or the outsourcing of risky project parts.
  - Risk Acceptance strategy of Risk management and Assumption adapt to the risk when it becomes a problem. The enactment of a risk contingency plan is required in this strategy.

## **Conclusion:**

In order to face challenges and beat the economic downturn, not all enterprises are putting their IT updating plans in cold storage. In fact, there is a higher demand for solutions that help enterprises to become more cost effective and utilize its resources in an effective way. BPM adoption was initially done by banking, financial services and insurance sectors. However, we have seen some tremendous growth in healthcare, telecom, automotive, manufacturing and government sectors over the last few years.

"Business Process Management (BPM) solutions helps enterprises, large and mid-sized ones, to improve revenue growth and productivity by 30 to 40 percent. Analysts estimate that the BPM global industry is set to grow to USD 12 billion by 2011.

Industry analysts project that BPM is one of the strongest growth areas within the IT industry. All IT publishers have Business Process Management in their table of contents and CIOs name BPM in their top three priorities.<sup>1</sup> Packaged application projects, dominant in the past decade, are now being complemented by middleware technologies to deliver much needed enterprise agility. In this arena, Oracle's BPM solutions and service-oriented architecture (SOA) are leading the charge and making the goal of highly sought after business agility a reality.

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