

**UNIT- VI**  
**CONTEMPORARY MANAGEMENT**  
**MANAGEMENT INFORMATION SYSTEM**

**Management Information System (MIS)** is a scientific way of collecting; processing, storing and communicating information relating to the various activities of an organisation to the various levels of management so that management may be facilitated in discharging its functions efficiently and run the organisation in an efficient manner for the betterment of all. Management information system is a system designed in an organisation to provide right information at the right time to facilitate managerial decision making. The need for management information system has arisen because managerial decision making has become very complicated due to fast changing economic, political, social, and technological changes.

**Definition of Management Information System:**

“Management Information system is an approach to information system design that conceives the business enterprise as an entity composed of inter dependent system and sub-systems, which with the use of automated data processing systems attempts to provide timely and accurate management information which will permit optimum management decision making.” — Dickey

**Objectives of Management Information System:** The following are the objectives of a management information system:

1. MIS is very useful for efficient and effective planning and control functions of the management. Management is the art of getting things done through others. MIS will be instrumental in getting the things done by providing quick and timely information to the management.
2. Reports give an idea about the performance of men, materials, machinery, money and management. Reports throw light on the utilization of resources employed in the organisation.
3. MIS is helpful in controlling costs by giving information about idle time, labour turnover, wastages and losses and surplus capacity.
4. By making comparison of actual performance with the standard and budgeted performance, variances are brought to the notice of the management by MIS which can be corrected by taking remedial steps.
5. MIS brings to the notice of the management strength (i.e., strong points) of the organisation, to take advantage of the opportunities available.
6. MIS reports on production statistics regarding rejection, defective and spoilage and their effect on costs and quality of the products.

**Need for MIS:** The following are some of the justifications for having an MIS system

- Decision makers need information to make effective decisions. Management Information Systems (MIS) make this possible.
- MIS systems facilitate communication within and outside the organization – employees within the organization are able to easily access the required information for the day to day operations.
- Record keeping – management information systems record all business transactions of an organization and provide a reference point for the transactions.

**Components of MIS:** The major components of a typical management information system are;

- People – people who use the information system
- Data – the data that the information system records
- Business Procedures – procedures put in place on how to record, store and analyze data
- Hardware – these include servers, workstations, networking equipment, printers, etc.
- Software – these are programs used to handle the data. These include programs such as spreadsheet programs, database software, etc.

## **Advantages and disadvantages of MIS**

### **Advantages:**

- 1. It Facilitates planning:** MIS improves the quality of plants by providing relevant information for sound decision – making. Due to increase in the size and complexity of organizations, managers have lost personal contact with the scene of operations.
- 2. In Minimizes information overload:** MIS change the larger amount of data in to summarize form and there by avoids the confusion which may arise when managers are flooded with detailed facts.
- 3. MIS Encourages Decentralization:** Decentralization of authority is possibly when there is a system for monitoring operations at lower levels. MIS is successfully used for measuring performance and making necessary change in the organizational plans and procedures.
- 4. It brings Co ordination:** MIS facilities integration of specialized activities by keeping each department aware of the problem and requirements of other departments. It connects all decision centers in the organization.
- 5. It makes control easier:** MIS serves as a link between managerial planning and control. It improves the ability of management to evaluate and improve performance. The used computers has increased the data processing and storage capabilities and reduced the cost.
- 6. MIS assembles, process, stores, Retrieves, evaluates and disseminates the information.**

### **Disadvantages:**

1. Require constant monitoring of sensitive data.
2. Quality of output depends on quality of input.
3. Implementation of MIS is costly as requires hardware, software and training of human resources.
4. Increase unemployment
5. Lack of flexibility to upgrade software
6. Effectiveness decreases due to frequent change in top management and their policies

## **MATERIALS REQUIREMENTS PLANNING (MRP)**

Materials Requirements Planning (MRP) is a production planning and inventory control system used to manage manufacturing processes. Most MRP systems are software-based, while it is possible to conduct MRP by hand as well.

An MRP system is intended to simultaneously meet three objectives:

- Ensure materials are available for production and products are available for delivery to customers.
- Maintain the lowest possible level of inventory.
- Plan manufacturing activities, delivery schedules and purchasing activities.

**MRP synchronizes** the flow of materials, components, and parts in a phased order system, considering the production schedule. It also combines and tracks hundreds of variables, including:

- |                         |                      |
|-------------------------|----------------------|
| ➤ Purchase orders       | ➤ Marketplace demand |
| ➤ Sales orders          | ➤ Material           |
| ➤ Shortage of materials | ➤ Inventory          |
| ➤ Expedited orders      | ➤ Data               |
| ➤ Due dates             | ➤ Bill of material   |
| ➤ Forecasts             |                      |

For all companies, MRP has a few goals in common. These include making sure that the inventory level is at a minimum, but high enough to provide for the customer need, and that you plan all of the activities, including delivery, purchasing, and manufacturing.

### **The scope of MRP in manufacturing**

The basic function of MRP system includes inventory control, bill of material processing and elementary scheduling. MRP helps organizations to maintain low inventory levels. It is used to plan manufacturing, purchasing and delivering activities.

"Manufacturing organizations, whatever their products, face the same daily practical problem - that customers want products to be available in a shorter time than it takes to make them. This means that some level of planning is required."

Companies need to control the types and quantities of materials they purchase, plan which products are to be produced and in what quantities and ensure that they are able to meet current and future customer demand, all at the lowest possible cost. Making a bad decision in any of these areas will make the company lose money. A few examples are given below:

- If a company purchases insufficient quantity of an item used in manufacturing (or the wrong item) it may be unable to meet contract obligations to supply products on time.
- If a company purchases excessive quantities of an item, money is wasted - the excess quantity ties up cash while it remains as stock and may never even be used at all.
- Beginning production of an order at the wrong time can cause customer deadlines to be missed.

**MRP is a tool to deal with these problems.** It provides answers for several questions:

- *What* items are required?
- *How many* are required?
- *When* are they required?
- MRP can be applied both to items that are purchased from outside suppliers and to sub-assemblies,

### **Outputs**

There are two outputs and a variety of messages/reports:

- Output 1 is the "Recommended Production Schedule" which lays out a detailed schedule of the required minimum start and completion dates, with quantities, for each step of the Routing and Bill Of Material required to satisfy the demand from the Master Production Schedule (MPS).
- Output 2 is the "Recommended Purchasing Schedule". This lays out both the dates that the purchased items should be received into the facility AND the dates that the Purchase orders, or Blanket Order Release should occur to match the production schedules.

### ***Problems with MRP systems***

The major problem with MRP systems is the integrity of the data. If there are any errors in the inventory data, the bill of materials (commonly referred to as 'BOM') data, or the master production schedule, then the outputted data will also be incorrect (colloquially, "GIGO": Garbage In, Garbage Out).

Another major problem with MRP systems is the requirement that the user specify how long it will take a factory to make a product from its component parts (assuming they are all available).

A manufacturer may have factories in different cities or even countries. It is no good for an MRP system to say that we do not need to order some material because we have plenty thousands of miles away.

This means that other systems in the enterprise need to work properly both before implementing an MRP system, and into the future. For example systems like variety reduction and engineering which makes sure that product comes out right first time (without defects) must be in place.

The other major drawback of MRP is that takes no account of capacity in its calculations.

## **JUST IN TIME (JIT)**

The Just-in-Time manufacturing system is a planning system for manufacturing processes that helps in achieving high volume production using the minimal inventories the system eliminates the inventory of raw materials, work-in-progress, and finished goods by making them available as and when required, The items are picked up by the worker and fed directly into the production process. The finished goods are produce only at the time they are required for sale. The implementation of the JIT system requires complete transformation of methods of designing products and services, assigning responsibilities to workers, and organizing work.

JIT manufacturing, also known as just-in-time production or the Toyota production system is a methodology aimed primarily at reducing flow times within production system as well as response times from suppliers and to customers.

According to APICS (American Production and Inventory Control Society), “JIT is a philosophy of manufacturing based on planned elimination of all waste and continuous improvement of productivity. It encompasses the successful execution of all manufacturing activities required to produce a final product, from engineering to delivery and including all stages of conversion from raw materials onwards”.

**Characteristics of JIT:** The following are the characteristics of a JIT System

- 1. Uniform Workstation Loads:** By using JIT system, firms can maintain uniform workloads at the workstations.
- 2. Small Lot Sizes:** In a JIT manufacturing system, firms maintain inventory in the smallest possible lot sizes. This is done to reduce the cycle inventory, cut lead times, and achieve a uniform workload.
- 3. Closer supplier ties:** JIT firms should maintain long-term relationships with their suppliers as they are responsible for providing the timely delivery of good quality inventory.
- 4. Maintenance of high quality:** In the JIT system, quality control begins from the source where the workers are encouraged to maintain the quality of work.
- 5. Quick and Economic Set-Ups:** Using JIT system experiences a larger number of setups as they produce in small lots. JIT firms engage Specialists and consultants to train their workers to reduce set-up times.

**Advantages of JIT:** Some of the advantages of implementation of JIT concept are listed below

1. Reduced lead time enables meeting customer requirement.
2. Exact delivery schedule is possible with JIT practices.
3. Customers prefer to order from a firm reliable on maintaining deliver schedules.
4. Quality of product is improved by following JIT.
5. JIT enables the management of the operations with lower raw material inventory.
6. Waiting time is greatly reduced by implementing JIT.
7. Satisfying the market demand without delay in deliveries with the help JIT.
8. Flexibility in utilization of manpower is a great advantage of JIT.
9. JIT controls the system variability and helps in quality products and services.

**Disadvantages of JIT:** Disadvantages have been pointed out, some of these are:

1. Cultural differences have been cited as possible limitation of JIT.
2. Loss of individual autonomy is another possible shortcoming of JIT.
3. There is no safety stock to offset inaccurate demand forecasts.

4. JIT production is effective only when the daily demands are fairly stable.

### **TOTAL QUALITY MANAGEMENT**

Total quality management or TQM is an integrative philosophy of management for continuously improving the quality of products and processes. It is used around the world. TQM functions on the premise that the quality of products and processes is the responsibility of everyone who is involved with the creation or consumption of the products or services offered by an organization.

It is a term first coined by the U.S. Naval air systems command to describe its Japanese-style management approach to quality improvement. It is a management approach to long-term success through customer satisfaction.

**The eight key elements of TQM:** Total quality is a description of the culture, attitude and organization of a company that strives to provide customers with products and services that satisfy their needs.

1. Ethics	5. Teamwork
2. Integrity	6. Leadership
3. Trust	7. Recognition
4. Training	8. Communication

**1. Ethics** – Ethics is the discipline concerned with good and bad in any situation. It is a two-faceted subject represented by organizational and individual ethics.

**2. Integrity** – Integrity implies honesty, morals, values, fairness, and adherence to the facts and sincerity. The characteristic is what customers (internal or external) expect and deserve to receive.

**3. Trust** – Trust is a by-product of integrity and ethical conduct. Without trust, the framework of TQM cannot be built. Trust fosters full participation of all members. It allows empowerment that encourages pride ownership and it encourages commitment.

**4. Training** – Training is very important for employees to be highly productive. Supervisors are solely responsible for implementing TQM within their departments, and teaching their employees the philosophies of TQM.

**5. Teamwork** – To become successful in business, teamwork is also a key element of TQM. With the use of teams, the business will receive quicker and better solutions to problems. Teams also provide more permanent improvements in processes and operations.

**6. Leadership** – It is possibly the most important element in TQM. It appears everywhere in organization. Leadership in TQM requires the manager to provide an inspiring vision, make strategic directions that are understood by all and to instill values that guide subordinates.

**7. Communication** – It binds everything together. Starting from foundation to roof of the TQM house, everything is bound by strong mortar of communication. It acts as a vital link between all elements of TQM.

**8. Recognition** – Recognition is the last and final element in the entire system. It should be provided for both suggestions and achievements for teams as well as individuals.

### **Advantages of total quality management**

**1. Emphasizing the needs of the market:** TQM helps in highlighting the needs of the market. Its application is universal and helps the organization to identify and meet the needs the market in a better way.

**2. Assures better quality performance in every sphere of activity:** Adverse and non-participative attitudes of the employees are the biggest obstacles in the organization's success, growth and advancement.

**3. Helps in checking non-productive activities and waste:** Every organization aims at improving productivity as well as reduction in cost so as to result in increase in profitability.

**4. Helpful in meeting the competition:** TQM techniques are greatly helpful in understanding the competition and also developing an effective combating strategy.

**5. It helps in developing an adequate system of communication:** Faulty and inadequate communication and improper procedures act as stumbling blocks in the way of proper development of an organization.

**6. Continuous review of progress:** TQM helps to review the process needed to develop the strategy of never ending improvement.

### **Disadvantages of TQM**

**1. Demands a Change in Culture:** TQM demands an organizational culture that focuses on continuous process improvement and customer satisfaction

**2. Demands Planning, Time and Resources:** A good TQM system often takes years to implement, and that occurs only after significant planning, time, long-term resource allocation and unwavering management commitment.

**3. Quality is Expensive:** TQM is expensive to implement. Implementation often comes with additional training costs, team-development costs, infrastructural improvement costs, consultant fees and the like.

**4. Takes Years to Show Results:** TQM is a long-term process that shows results only after years have passed. It requires perseverance, patience, dedication and motivation.

**5. Discourages Creativity:** TQM's focus on task standardization to ensure consistency discourages creativity and innovation.

### **SIX-SIGMA**

The term "six sigma" comes from statistics and is used in statistical quality control, which evaluates process capability. Originally, it referred to the ability of manufacturing processes to produce a very high proportion of output within specification. Processes that operate with "six sigma quality" over the short term are assumed to produce long-term defect levels below 3.4 defects per million opportunities (DPMO).

**Methodologies:** These methodologies, composed of five phases each, bear the acronyms DMAIC and DMADV.

**DMAIC:** The DMAIC project methodology has five phases:

1. Define the system, the voice of the customer and their requirements, and the project goals, specifically.
2. Measure key aspects of the current process and collect relevant data; calculate the 'as-is' Process Capability.
3. Analyze the data to investigate and verify cause-and-effect relationships. Determine what the relationships are, and attempt to ensure that all factors have been considered.
4. Improve or optimize the current process based upon data analysis using techniques such as design of experiments, mistake proofing, and standard work to create a new, future state process.

**DMADV:** The DMADV project methodology features five phases:

1. Define design goals that are consistent with customer demands and the enterprise strategy.
2. Measure and identify characteristics that are Critical to Quality, measure product capabilities, production process capability, and measure risks.
3. Analyze to develop and design alternatives.
4. Design an improved alternative, best suited per analysis in the previous step.

5. Verify the design, set up pilot runs, implement the production process and hand it over to the process owner(s).

#### **Six Sigma team roles:**

Master Black Belt – This role is filled by an employee who has completed Black Belt training and typically leads between five and ten different Six Sigma projects. This employee must have strong quantitative skills and highly-developed leadership skills.

Black Belt – This professional works full time on quality improvement projects. The Black Belt has completed all Six Sigma coursework and has led several projects.

Green Belt – This professional typically works part time on projects and has been trained in Six Sigma methodology.

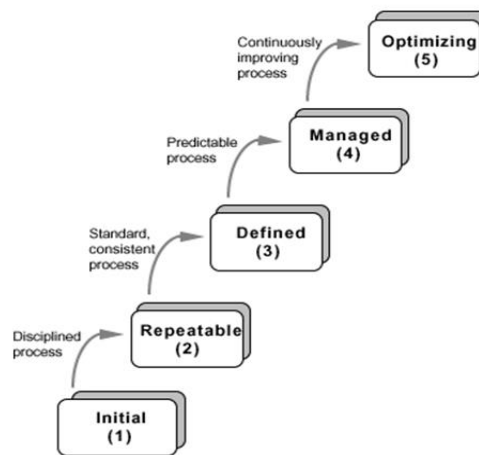
Yellow Belt – This person assists part time on project teams and has received minimal training in Six Sigma.

**Benefits of Six Sigma:** Those organizations that implement Six Sigma correctly achieve significant benefits that contribute to competitive advantage and to changing the culture in an organization from reactive problem solving to proactive problem prevention.

<b>For the organization</b>	<b>For the individual</b>
<ul style="list-style-type: none"><li>• Bottom line cost savings.</li></ul>	<ul style="list-style-type: none"><li>• Improved knowledge and skills</li></ul>
<ul style="list-style-type: none"><li>• Improved quality of product or service as perceived by the customer.</li></ul>	<ul style="list-style-type: none"><li>• Ability to use a wide range of tools and techniques</li></ul>
<ul style="list-style-type: none"><li>• Reduction in process cycle times.</li></ul>	<ul style="list-style-type: none"><li>• A status that is recognized world wide</li></ul>
<ul style="list-style-type: none"><li>• Development of staff skills</li></ul>	

#### **CMM LEVELS**

Capability Maturing Model: Capability maturity Model (CMM) is a collection of instructions an organization can follow with the purpose to gain better control over its software development process. The CMM ranks software development organizations in a hierarchy of five levels each with a progressively greater capability of producing quality software. Each level is described as a level of maturity. Those 5 levels are equipped with different number of instruction to follow.



**Level – 1 - Initial:** At maturity level-1 processes are usually ad hoc and the organization usually does not provide a stable environment

**Level – 2 - Repeatable:** At this maturity level-2, software development successes are repeatable. The organization may use some basic project management to track cost and schedule.

**Level – 3 - Defined:** A maturity level-3, processes are well characterized and understood, and are described in standards procedure, tools, and methods.

**Level – 4 - Managed:** Using precise measurement, management can effectively control the software development effort. In particular, management can identify ways to adjust and adopt the process to particular projects without measurable losses of quality or deviations from specifications.

**Level – 5 - Optimizing:** This maturity level focuses on continually improving process performance through both incremental and innovative technological improvement.

## Benefits of CMM

- 1. Consistency:** It provides a proven approach that has enabled diverse organizations to drive out real benefits in terms of dramatically improved project predictability and consistency.
- 2. Cost Saving:** It driven process improvement also delivers real cost savings such as earlier and more effective error detection, and hence reduced cost of remediation, more effective management of change so you spend less on re-work, reductions in schedule variability and increased cost predictability.
- 3. Self Improvement:** There is also the aspect of self improvement. Companies will be able to use CMM as a way of differentiating themselves locally and by achieving a level of CMM.
- 4. Market demand:** Competing companies are utilizing CMM for industry best practices and reaping the benefit of it. Companies have adopted this approach to best meet the customer demands and competition.
- 5. Performance demand:** The purpose of CMM is to improve upon the performance of the existing organizational standards, processes and procedures.
- 6. Process improvement:** It driven improvement project will deliver a framework to standardize processes, ensuring that business best practices are captured.

## SUPPLY CHAIN MANAGEMENT

Supply chain management encompasses all activities associated with the flow and transformation of goods from the raw material stage to the end user.

**Definition:-** Supply chain management is the process of planning implementing and controlling the operations of the supply chain as efficiently as possible.



Supply chain management is defined as the design, planning, execution, control, and monitoring of supply chain activities with the objectives of creating net value, building a competitive infrastructure, leveraging worldwide logistics, synchronizing supply with demand and measuring performance globally

Objectives of supply chain management:-

- To maximize the overall value generated
- To achieve maximum supply chain profitability
- To reduce supply chain costs to the minimum possible level
- To improve product quality, performance, efficiency, customer relationships, profitability.
- To increase customer satisfaction so loyalty and revenue
- To get the right product to the right place at the least cost

### Components of Supply Chain Management

- **Supplier Management:-** The main function of supplier management is to maintain optimum number of suppliers and make them partners in the business.
- **Inventory Management:-** Inventory management maintains minimum required inventory levels for the raw materials and to shorten the order bill cycle.
- **Distribution Management:-** It keeps records of documents required for transportation/shipping Ex: purchase order, bills of lading etc
- **Channel Management:-** It is responsible for communication among the trading partners. Channel management informs to the trading partners about changing operational conditions.
- **Payment Management:-** It keep track of payments and receivables among suppliers, distributors and company.
- **Financial Management:-** It manages overall resources of finance for the organ, also money in foreign exchange accounts.
- **Sales force Management:-** It keeps co-ordination among production department, marketing department, customer service and payment management by providing necessary information.
- **Logistics:-** Logistics is closely related to supply management. Logistics is time related positioning of resources or the strategic management of the total supply chain.
- **Inbound logistics:-** The management of resources entering an organ from its suppliers and other partners is called in bound logistics.
- **Out bound logistics:-** The management of resources supplied from an organ to its customers and intermediaries such as retailers and distributors is outbound logistics.

### Role / Activities / Functions of Supply Chain Management:-

Supply chain activities can be grouped in to strategic, tactical and operational levels

#### Strategic level:-

- Strategic network optimization, including the number, location and size of ware housing distribution centers, and facilities.
- Strategic partnerships with suppliers, distributors and customers creating communication channels for critical information and operational improvements.
- Product life cycle management, so that new and existing products can be optimally integrated in to the supply chain and capacity management activities.
- Information technology chain operations
- Where - to – make and make-by- decisions
- It is for long term and needs resources commitment

### **Tactical Levels:**

- Sourcing contracts and other purchasing decisions
- Milestone payments
- Focus on customer demand
- Inventory decisions, including quantity, location, and quality of inventory.
- Focus on customer demand
- Transportation strategy, including frequency, routes and contracting.

### **Operational Level:-**

- In bound operations, including transportation from suppliers and receiving inventory
- Outbound operations, including all fulfillment activities, warehousing and transportation to customers
- Production operations, including the consumption of materials and flow of finished goods.
- Daily production and distribution planning, including all nodes in the supply
- Production scheduling for each manufacturing facility in the supply chain

### **Importance of supply chain management**

- The goal of Supply chain management are to reduce uncertainty and risk in the supply chain
- Many companies have to improve their internal and external operations with its customers and suppliers in the supply chain to gain farther improvements in their operations
- The supply chain reduces the material travelling time, cost and better deliveries.

### **Supply chain management Problems**

- **Distribution network configuration:-** Number, location and network mission of suppliers, production facilities, distribution centers, ware house and customers.
- **Distribution Strategy:-** Questions of operating control Ex; direct shipment, cross docking, push/pull strategy.
- **Information:-** Integration of systems and processes through the supply chain to share valuable information, including demand signals, forecasts, inventory and transportation, etc
- **Inventory Management:-** Quantity and location of inventory including raw-materials, work-in-process and finished goods.
- **Cash – flow:-** Arranging the payment terms and the methodologies for exchanging funds across entities within the supply chain.

### **ENTERPRISE RESOURCE PLANNING (ERP)**

Enterprise Resource Planning (ERP) integrates internal and external management information across an entire organization, embracing finance/accounting, manufacturing, sales and service, etc. ERP systems automate this activity with an integrated software application. Its purpose is to facilitate the flow of information between all business functions inside the boundaries of the organization and manage the connections to outside stakeholders. ERP systems can run on a variety of hardware and network configurations, typically employing a database to store data.

ERP systems typically include the following **characteristics**:

- An integrated system that operates in (next to) real time, without relying on periodic updates.
- A common database that supports all applications.
- A consistent look and feel throughout each module.

- Installation of the system without elaborate application/data integration by the Information Technology (IT) department

### **Functional areas**

**Finance/Accounting:** General ledger, payables, cash management, fixed assets, receivables, budgeting, consolidation

**Human resources:** Payroll, training, benefits, recruiting, diversity management

**Manufacturing: Engineering,** bill of materials, work orders, scheduling, capacity, workflow management, quality control, cost management, manufacturing process, manufacturing projects, manufacturing flow, and activity based costing, Product lifecycle management

**Supply chain management: Order** to cash, inventory, order entry, purchasing, product configuration, supply chain planning, supplier scheduling, inspection of goods, claim processing, and commissions

**Project management:** Costing, billing, time and expense, performance units, activity management

**Customer relationship management: Sales** and marketing, commissions, service, customer contact, call center support

**Data services: Various** "self-service" interfaces for customers, suppliers and/or employees

**Access control: Management** of user privileges for various processes

### **Advantages**

The fundamental advantage of ERP is that integrating the myriad processes by which businesses operate saves time and expense. Decisions can be quicker and with fewer errors. Data becomes visible across the organization. Tasks that benefit from this integration include:

- Sales forecasting, which allows inventory optimization
- Order tracking, from acceptance through fulfillment
- Revenue tracking, from invoice through cash receipt
- Matching purchase orders (what was ordered), inventory receipts (what arrived), and costing (what the vendor invoiced)

### **Disadvantages**

- Customization is problematic.
- Re-engineering business processes to fit the ERP system may damage competitiveness and/or divert focus from other critical activities
- ERP can cost more than less integrated and/or less comprehensive solutions.
- High switching costs increase vendor negotiating power vis a vis support, maintenance and upgrade expenses.
- Overcoming resistance to sharing sensitive information between departments can divert management attention.
- Integration of truly independent businesses can create unnecessary dependencies.
- Extensive training requirements take resources from daily operations

## **BUSINESS PROCESS OUTSOURCING (BPO)**

BPO refers to a decision to sub-contract some or all non-core processes. The main motive for business process outsourcing is allow the company to invest more time, money and human resources into core activities and building strategies, which fuel company growth. The global market today is highly competitive and ever-changing. There, a lot of tasks that use up precious time, resources and energy, are being outsourced.

### **BPO is often divided into two categories**

- a) Back Office Outsourcing: This includes internal business functions such as billing or purchasing.
- b) Front Office Outsourcing: This includes customer-related services such as marketing or technical support.

### **Advantages of BPO**

- 1. Productivity improvement:** It enables to the corporate executive to concentrate upon core business areas. Conventionally executives spend more time in management of details and they get very little time to formulate strategies.
- 2. Optimum utilization of the resources:** It enables optimum utilization of resources of scarce resources. Outsourcing helps to capture new efficiencies and reallocate the resources.
- 3. Reduction in cost:** Cost savings can be significant to any business. Cost reduction is possible through process improvements, reengineering, and use of technologies that reduce and bring administrative and other costs under control.
- 4. Improved Human Resource:** Improved HR is another great advantage of outsourcing business processes. Companies today, require productive and efficient human resource that can generate economies of scale.
- 5. Focus on core business areas:** Efficient business strategy is essential to take the business to the top. Outsourcing enables the top management level to hand over critical but non-core activities of the business to the third party.
- 6. Cater to changing customer demands:** It is another great advantage of outsourcing the business processes. BPOs provide the management with flexible services to meet the customers' changing requirements.
- 7. Sophisticated technology at lower cost:** Technology is the leading area of outsourcing. It makes much of the work of modern organization easy. Investing in new technology is very costly and often risky.

#### **Disadvantages of BPO**

- 1. Hidden costs:** Although outsourcing is considered cost-effective, there are some hidden costs. So before signing an assignment make sure to have detailed contract paperwork.
- 2. Slow turnaround times and poor quality:** A single BPO company may associate with multiple organizations at a time. Consequently, providers cannot concentrate comprehensively on assigned tasks. This will lead to slow turnaround times and poor quality.
- 3. Data security:** Even if BPO companies guarantee data security, there are high risks of exposing confidential data mainly associated with human resources, recruitment, payroll, and account services.
- 4. Selection of BPO:** If the right BPO provider is not chosen, it is difficult to get the expected final outcome. There may be issues related to linguistic variations, time frames and classification of responsibilities.

### **BUSINESS PROCESS REENGINEERING**

**Business Process Reengineering** is the analysis and design of workflows and processes within an organization. A business process is a set of logically related tasks performed to achieve a defined business outcome. Re-engineering is the basis for many recent developments in management.

The cross-functional team, for example, has become popular because of the desire to re-engineer separate functional tasks into complete cross-functional processes. Also, many recent management information systems developments aim to integrate a wide number of business functions, Enterprise resource planning, supply chain management, knowledge management systems, groupware and collaborative systems, Human Resource Management Systems and customer relationship management. Business Process Reengineering is also known as Business Process Redesign, Business Transformation, or Business Process Change Management.

**Business process reengineering (BPR)** began as a private sector technique to help organizations fundamentally rethink how they do their work in order to dramatically improve customer service, cut operational costs, and become world-class competitors. A key stimulus for reengineering has been the continuing development and deployment of sophisticated information systems and networks. Leading organizations are becoming bolder in using this technology to support innovative business processes, rather than refining current ways of doing work



Reengineering guidance and relationship of Mission and Work Processes to Information Technology. Business Process Reengineering (BPR) is basically the fundamental rethinking and radical re-design, made to organizations existing resources. It is more than just business improvising. It is an approach for redesigning the way work is done to better support the organization's mission and reduce costs.

Reengineering starts with a high-level assessment of the organization's mission, strategic goals, and customer needs. Basic questions are asked, such as

- "Does our mission need to be redefined?"
- Are our strategic goals aligned with our mission?
- Who are our customers?"

An organization may find that it is operating on questionable assumptions, particularly in terms of the wants and needs of its customers. Only after the organization rethinks what it should be doing, does it go on to decide how best to do it.

Within the framework of this basic assessment of mission and goals, reengineering focuses on the organization's business processes—the steps and procedures that govern how resources are used to create products and services that meet the needs of particular customers or markets. As a structured ordering of work steps across time and place, a business process can be decomposed into specific activities, measured, modeled, and improved. It can also be completely redesigned or eliminated altogether. Reengineering identifies, analyzes, and redesigns an organization's core business processes with the aim of achieving dramatic improvements in critical performance measures, such as cost, quality, service, and speed.

Reengineering recognizes that an organization's business processes are usually fragmented into sub processes and tasks that are carried out by several specialized functional areas within the organization. Often, no one is responsible for the overall performance of the entire process. Reengineering maintains that optimizing the performance of sub processes can result in some benefits, but cannot yield dramatic improvements if the process itself is fundamentally inefficient and outmoded. For that reason, reengineering focuses on redesigning the process as a whole in order to achieve the greatest possible benefits to the organization and their customers. This drive for realizing dramatic improvements by fundamentally rethinking how the organization's work should be done distinguishes reengineering from process improvement efforts that focus on functional or incremental improvement

## **BENCHMARKING**

**Benchmarking** is the process of comparing one's business processes and performance metrics to industry bests and/or best practices from other industries. Dimensions typically measured are quality, time and cost. Improvements from learning mean doing things better, faster, and cheaper.

Benchmarking involves management identifying the best firms in their industry, or any other industry where similar processes exist, and comparing the results and processes of those studied (the "targets") to one's own results and processes to learn how well the targets perform and, more importantly, how they do it.

The term benchmarking was first used by cobblers to measure people's feet for shoes. They would place someone's foot on a "bench" and mark it out to make the pattern for the shoes. Benchmarking is most used to measure performance using a specific indicator (cost per unit of measure, productivity per unit of measure, cycle time of x per unit of measure or defects per unit of measure) resulting in a metric of performance that is then compared to others.

Also referred to as "best practice benchmarking" or "process benchmarking", it is a process used in management and particularly strategic management, in which organizations evaluate various aspects of their processes in relation to best practice companies' processes, usually within a peer group defined for the purposes of comparison.

### ***Benefits and use:***

In 2008, a comprehensive survey on benchmarking was commissioned by The Global Benchmarking Network, a network of benchmarking centers representing 22 countries. Over 450 organizations responded from over 40 countries. The results showed that:

1. Mission and Vision Statements and Customer (Client) Surveys are the most used (by 77% of organizations of 20 improvement tools, followed by SWOT analysis (72%), and Informal Benchmarking (68%). Performance Benchmarking was used by (49%) and Best Practice Benchmarking by (39%).
2. The tools that are likely to increase in popularity the most over the next three years are Performance Benchmarking, Informal Benchmarking, SWOT, and Best Practice Benchmarking. Over 60% of organizations that are not currently using these tools indicated they are likely to use them in the next three years.

### ***Procedure:***

There is no single benchmarking process that has been universally adopted. The wide appeal and acceptance of benchmarking has led to various benchmarking methodologies emerging. The seminal book on benchmarking is Boxwell's *Benchmarking for Competitive Advantage* published by McGraw-Hill in 1994. It has withstood the test of time and is still a relevant read. The first book on benchmarking, written and published by Kaiser Associates, is a practical guide and offers a 7-step approach. Robert Camp (who wrote one of the earliest books on benchmarking in 1989) developed a 12-stage approach to benchmarking. The 12 stage methodology consisted of 1. Select subject ahead 2. Define the process 3. Identify potential partners 4. Identify data sources 5. Collect data and select partners 6. Determine the gap 7. Establish process differences 8. Target future performance 9. Communicate 10. Adjust goal 11. Implement 12. Review/recalibrate.

The following is an example of a typical benchmarking methodology:

1. **Identify your problem areas** - Because benchmarking can be applied to any business process or function, a range of research techniques may be required. They include: informal conversations with customers, employees, or suppliers; exploratory research techniques such as focus groups; or in-depth marketing research, quantitative research, surveys,

questionnaires, re-engineering analysis, process mapping, quality control variance reports, or financial ratio analysis.

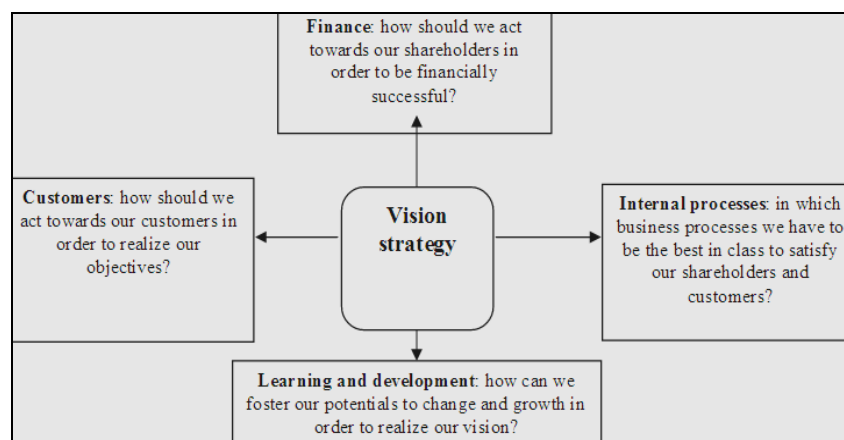
2. **Identify other industries that have similar processes** - For instance if one were interested in improving hand offs in addition treatment he/she would try to identify other fields that also have hand off challenges. These could include air traffic control, cell phone switching between towers, transfer of patients from surgery to recovery rooms.
3. **Identify organizations that are leaders in these areas** - Look for the very best in any industry and in any country. Consult customers, suppliers, financial analysts, trade associations, and magazines to determine which companies are worthy of study.
4. **Survey companies for measures and practices** - Companies target specific business processes using detailed surveys of measures and practices used to identify business process alternatives and leading companies.
5. **Visit the "best practice" companies to identify leading edge practices** - Companies typically agree to mutually exchange information beneficial to all parties in a benchmarking group and share the results within the group.
6. **Implement new and improved business practices** - Take the leading edge practices and develop implementation plans which include identification of specific opportunities, funding the project and selling the ideas to the organization for the purpose of gaining demonstrated value from the process.

### **BALANCED SCORE CARD**

The balance scorecard is used as a strategic planning and a management technique. This is widely used in many organizations, regardless of their scale, to align the organization's performance to its vision and objectives. The balanced scorecard concept was developed to evaluate the financial performance of a business organization, customer concerns, business process optimization, and enhancement of learning tools and mechanisms.

**The Balanced Score Card Framework:** The balanced scorecard is divided into four main areas and a successful organization is one that finds the right balance between these areas. Each area (perspective) represents a different aspect of the business organization in order to operate at optimal capacity.

**The Financial Perspective:** This consists of costs or measurement involved, in terms of rate of return on capital employed and operating income of the organization. The current emphasis on financials leads to the "unbalanced" situation with regard to other perspectives. There is perhaps a need to include additional financial-related data, such as risk assessment and cost-benefit data, in this category.



**The Business Process Perspective:** This perspective refers to internal business processes. Metrics based on this perspective allow the managers to know how well their business is running, and whether its products and

services conform to customer requirements. These metrics have to be carefully designed by those who know these processes most intimately.

**The Customer Perspective:** Recent management philosophy has shown an increasing realization of the importance of customer focus and customer satisfaction in any business. These are leading indicators. In developing metrics for satisfaction, customers should be analyzed in terms of kinds of customers and the kinds of processes for which we are providing a product or service to those customer groups.

**Strategy Mapping:** Strategy maps are communication tools used to tell a story of how value is created for the organization. They show a logical, step-by-step connection between strategic objectives in the form of a cause-and-effect chain.

### **Features of Balanced Scorecard**

1. Objectives - This reflects the organization's objectives such as profitability or market share.
2. Measures - Based on the objectives, measures will be put in place to gauge the progress of achieving objectives.
3. Targets - This could be department based or overall as a company. There will be specific targets that have been set to achieve the measures.
4. Initiatives - These could be classified as actions that are taken to meet the objectives.

### **Benefits from using the Balanced Scorecard:**

1. Strategic initiatives that follow "best practices" methodologies cascade through the entire organization.
2. Increased Creativity and Unexpected Ideas.
3. Helps align key performance measures with strategy at all levels of an organization.
4. It provides management with a comprehensive picture of business operations.
5. The methodology facilitates communication and understanding of business goals and strategies at all levels of an organization.
6. Maximized Cooperation - Team members are focused on helping one another succeed.
7. Usable Results - Transforms strategy into action and desired behaviors.
8. The Balanced Scorecard concept provides strategic feedback and learning.
9. A cross organizational team - More open channels of communications - Enthusiastic People.
10. Initiatives are continually measured and evaluated against industry standards.

### **Disadvantages of Balanced Scorecard**

1. Balanced Scorecard performance is subjective. Unlike quality levels, it cannot be quantified except by surveys or management opinion.
2. Balanced Scorecard does not include direct financial analysis of economic value or risk management.
3. Because Balanced Scorecard can add a new type of reporting without necessarily improving quality or financial numbers.
4. Overly abstract Balanced Scorecard goals are easy to reach but hard to quantify.
5. The goals may be re-interpreted to the current state of affairs to meet success or avoid failure.