**BPR VS CPI**

**BUSINESS PROCESS REINGINEERING**

Business Process Reengineering is a method used by an organisation to radically redesign its business processes and redirect resources in order to achieve dramatic improvements in service and customer satisfaction. This often results in reduced cost, reduced time, or improved quality.

**CONTINUOUS PROCESS IMPROVEMENT**

A continuous improvement process (CIP or CI) is an ongoing effort to improve products, services, or processes. These efforts can seek "incremental" improvement over time or "breakthrough" improvement all at once. Delivery (customer valued) processes are constantly evaluated and improved in the light of their efficiency, effectiveness and flexibility.

**DIFF BPR VS CPI**

|  |  |  |
| --- | --- | --- |
|  | CPI | BR |
| **Level of change** | Incremental | Radical |
| **Starting Point** | Existing Process | Clean Slate |
| **Frequency of Change** | One-time/Continuous | One-time |
| **Time required** | Short | Long |
| **Participation** | Bottom-Up | Top-Down |
| **SCOPE** | Narrow, within functions | Broad, cross-functional |
| **RISK** | Moderate | High |
| **PRIMARY ENABLER** | Statistical Control | Information Technology |
| **TYPE OF CHANGE** | Cultural | Cultural/Structural |

**Why reengineer?**

¢          Customers : Demanding / Sophistication / Changing Needs

¢          Competition : / Local / Global

¢          Change : Technology / Customer Preferences

**Problems with BPR:**

BPR has become allied in managers’ minds with narrow targets such as reductions in staff numbers and cost-cutting measures. BPR shows too little concern for human issues

**Effective BPR steps**

•Senior management needs to develop broad strategic vision • Management must understand and measure performance of existing processes as baseline • Information technology should be allowed to influence process design from start • IT infrastructure should be able to support business process changes

**Information Systems**

**Transaction Processing System (TPS)**

A TPS is responsible for collecting, storing, modifying and retrieving data pertaining to the transactions that have taken place in an organization and finally generate reports which are used by other levels of management. The characteristics of a TPS include performance, reliability and consistency. Transaction Processing Systems are usually used at the **operational level** (by employees who are at the bottom level) of an organization’s hierarchy.

An example of a TSS is a point of sale in a supermarket which is used to record each sale transaction which takes place in the supermarket. At the end of the day, a record of all transactions can be generated from the TPS in order to view which products have been sold.

**Management Information System (MIS)**

A MIS is a system which brings together people (the management), information as well as the systems (both hardware and software). This type of system is important in an organization as it provides information that is essential to operations, management and decision making functions. Some of these functions include planning, controlling, decision making, organizing, and staffing.

Management Information Systems are usually used at the **tactical level** (by employees who are at the middle level) of the organization’s management hierarchy.

An example of an MIS is the University of Nairobi’s Student Management Information System (SMIS) which can be used to generate reports about the registration status of the students in order to determine who is eligible to sit for the end of semester examinations.

**DECISION SUPPORT SYSTEM (DSS)**

A Decision Support System can be seen as a knowledge based system, used by **senior managers**, which facilitates the creation of knowledge and allow its integration into the organization. These systems are often used to analyze existing structured information and allow managers to project the potential effects of their decisions into the future. Such systems are usually interactive and are used to solve ill structured problems. They offer access to databases, analytical tools, allow "what if" simulations, and may support the exchange of information within the organization. Example of DDS : Logistics systems, Financial Planning systems

**Executive Support System (ESS)**

ESS is a system that is used in an organization to provide summarized information in form of graphs or charts that is tailored for the organization’s executives(**top-most (strategic) level** of the organization’s management hierarchy such as senior managers.) They (executives) address non-routine and unstructured decisions which usually require judgment, evaluation and insight. Typical questions for ESSs are:

·          In what business should we be?

·         What are our competitors doing?

·         What new acquisitions should we consider to increase market share?

The ESSs usually draw summarized information from other MISs at the lower level of management such as the Transaction Processing System. An example of an Executive Support System is an expert system or a knowledge based system which can be used for sales forecasting and perhaps lead to review of business strategy.

**The relationship between TPS, MIS and ESS**

The TPS is the major source of data for other systems in an organization. Since they record daily routine transactions in an organization, they aid managers in monitoring the status of the operations and thus help in structured decision-making. MIS usually receive and utilize the data they get from the TPS. DSS manipulate and build upon the information from a MIS and/or TPS to generate insights and new information.The ESS is the major recipient of data from the lower-level systems which is mainly used in unstructured decision-making.

**Why do org invest in IS?**

Business firms invest heavily in information systems to achieve six strategic business objectives:

1.       **Operational excellence**

Improvement of efficiency to attain higher profitability. e.g. Walmart ’ s Retail Link system digitally links suppliers to every one of Walmart’s stores for superior suppliers to every one of Walmart’s stores for superior replenishment system

2.       **New products, services, and business models :**Information systems and technology a major enabling tool for new products, services, business models. E.g Examples: Apple’s iPad and iPad mini, Google’s Android OS, Netflix.

3.       **Customer and supplier intimacy:**Intimacy with suppliers allows them to provide vital inputs, which lowers costs. E.g Walmart’s information system which links sales records to contract manufacturer.

4.       **Improved decision making  :**Without accurate information:  Managers must use forecasts, best guesses, luck. Results in overproduction, underproduction, Misallocation of resource, poor response time. E.g Verizon’s Web-based digital dashboard to provide managers with real-time data on customer complaints, network performance, line outages etc..

5.       **Competitive advantage:**Delivering better performance o Charging less for superior products o Responding to customers and suppliers in real time o Examples: Apple, Walmart, UPS..

6.       **Survival:**Information technologies as necessity of business o Industry-level changes • Example: Citibank’s introduction of ATMs.

**ERP (Enterprise resource planning)**

ERP is short for enterprise resource planning. Enterprise resource planning (ERP) is business process management software that allows an organization to use a system of integrated applications to manage the business and automate many back office functions related to technology, services and human resources.

**Benefits of ERP**

1. **Total Visibility**

ERP allows total access to every important process in your business by making data from every department easily accessible to you and your senior management. Having all of your company’s information available in a centralized location also allows for increased collaboration and more streamlined completion of tasks. This complete visibility also allows for more coherent workflows. ERP allows inter-departmental processes to be easily tracked with maximum

1. **Improved Reporting**

Implementing a single ERP suite across departments means your organization now has a single, unified reporting system for every process. This software gives you the ability to analyze and compare functions across departments without the hassle of multiple spreadsheets and emails. In addition to this, many ERP vendors also offer Business Intelligence services with their software. This BI functionality allows businesses to gain a deeper level of insight into their operations, as well as identify problem.areas that need improvement.

1. **Complete Customization**

One of the biggest advantages of ERP software is its modular makeup. Most ERP vendors offer multiple platforms, and each one contains severalapplications that can be implemented according to business needs. Each application is designed to be able to stand alone or integrate with the suite, so your company can pick and choose which components work best. This means that businesses are able to craft an interface tailored to their company’s needs. Most ERP implementations are designed with the ability to seamlessly integrate into the full suite or to be used as a standalone module.

1. **Customer Service**

Clients also receive benefits from the utilization of an ERP system. Because client information is centralized and streamlined, your sales team will be able to focus on building and maintaining customer relationships, both domestically and globally. Most up-to- date ERP suites support e-commerce integration as well. This means your business will be better able to handle web-based order processing and client interactions.

1. **Data Security**

One of the biggest advantages of an ERP system is data security. Both on-premise and cloud-based ERP offer your organization a higher degree of security. The database system that the ERP runs off of also enables centralized backup of all critical and sensitive data.

1. **Improved Collaboration and Workflows**

ERP systems allow for simpler interdepartmental collaboration. Information from each department is being funneled into one centralized location, which allows for real-time project updates and better communication. The net effect on your business is increased efficiency and reduced operational costs associated with manual data tracking.

**Disadvantages**

1. **Direct Cost**

The up-front cost of the entire implementation process can be prohibitively high, especially for small-to- medium-sized businesses. This includes the full process of planning, testing, configuring and customizing the software as well as the cost of actual implementation.

1. **Indirect Cost**

Businesses must also take into account the opportunity cost of Manpower and time necessary for a successful deployment. Planning out a realistic timetable will give you a better idea of whether or not the cost is worth it for your company.

**3. Customization**

While this is a potential advantage, it can just as easily become a disadvantage if handled incorrectly. Experts like Mr. Kimberling recommend making an honest assessment of your organization’s needs and problem areas and then seeking out an ERP system that will give your business the most potential to improve.

**SCM (Supply chain management)**

Enterprises should maintain good relationships with suppliers and ensure that the product reaches its customers at the right place at the right time. Supply Chain Management (SCM) systems ensure the smooth flow of activities in the supply chain from source through consumption,

**Network of organizations and processes for:**

Procuring raw materials

Transforming them into products

Distributing the products

**Upstream supply chain:**

Firm’s suppliers, suppliers’ suppliers, processes for managing relationships with them

**Downstream supply chain:**

Organizations and processes responsible for delivering products to customers

**Business Value of Supply Chain Management Systems**

* Match supply to demand
* Reduce inventory levels
* Improve delivery service
* Speed product time to market
* Use assets more effectively
* Reduced supply chain costs lead to increased profitability
* Increased sales