Enterprise resource planning essay examples

Question 1

ERP has certain advantages over other information systems in several ways. Information can be reliably accessed since there is a common DBMS. This means data is accurate and consistent. Modules in the ERP system access data at from a central database meaning that there are little or no redundancies in data retrieval and operation. The time saved from the efficient system leads to an overall cost reduction. The ERP system can also easily adapt to changes in the business. Extended modules such as SCM enable the system to attain a global outreach. ERP systems are based on client-server architecture and provide a desktop user interface.

However, there are some disadvantages of the ERP systems. The system has very many features, which results in complexity of the system. The installation of the new system is expensive and time consuming. Despite these setbacks, the system can deliver good results, as its name suggests.

Question 2

Business process reengineering (BPR) is the redesign of business processes so as to improve areas such as quality, service delivery and speed. BPR and ERP implementation result in enhancement of quality and improvement in flexibility. It is believed that BPR and ERP are complimentary. An efficient ERP system can lower the operation costs, accurately predict demand patterns and enhance speed production cycles. Theoretically BPR and ERP should exist as separate entities in an organization (Grabot, Mayere and Bazet 187).

An ERP replace an existing system and hence resulting in a delay, in the

execution of the BPR. BPR and ERP implementation are usually at different phases of their development. A BPR project may be started, and an ERP project may be required for support months after the conclusion of the BPR. A business decision to acquire a new IT system may lead the selection of an ERP. A BPR may commence during the implementation process of the ERP if it is recognized that the ERP supports business reengineering.

Question 3

ERP implementation process, also referred to as life cycle, involves thorough analysis of several aspects. The first step is the pre-screening of the chosen packages, which is done by a team of professionals with specialized knowledge. Several tests are carried out to determine the aptness and level of coordination of the software in different departments. The next step is preparation for the venture. This is the main definition of implementation where conditions and regulations to be adhered to are defined. Project planning is then carried out. This is where most of the design is done, together with determination of deadlines and time schedules. The commencement date of the project is also determined at this stage (Khosrowpour 80).

The gap analysis is then carried out. This involves identification of gaps that require to be traversed so as to synchronize the company's practice with the ERP environment. The system is the designed to accommodate for planning and restructuring. Reengineering is done due to changes in the number of personnel and their responsibilities. The employees are the trained on how to use ERP through team training forums. The system is then tested in a real scenario to determine the weak links. There is regular follow up on the

operation of ERP (Leon 203).

The waterfall methodology involves a sequence of activity based processes whereby every step in the SDLC is performed categorically from the initial planning through analysis, design, development, testing, implementation and finally maintenance. ERP can replace all the existing legacies at once or gradually, depending on the decision of the management. This is what happened in the case of U. S. Global Energy Corporation.

Question 4

Is the Demand Level Unstable or Unpredictable?

This becomes crucial since the needs of the customers keep on changing. Implementation of the ERP systems will assist in improving production efficiency since the sales forecast and projections can be linked to the MTO or the MTS.

Are Products Perishable?

In most supply chains, the issue of perishable products becomes a challenge especially in MTO. Adoption of the ERP systems can assist in increasing the product lifecycle.

Lower Inventory Costs

ERP assist in lowering the inventory costs by reducing duplication of information. ERP allows an organization to keep a record of items in storage. Likewise, the company will be able to track personnel responsible for items and the purpose of the items.

Implementation of ERP systems in either MTO or MTS results to organizations

expanding globally. The number of partners using ERP systems in SCM increase since the process becomes more efficient.

Can the ERP system adequately support a combination of human intervention, decision-making, and collaboration with the ERP system in the MTO process?

The ERP systems are designed in such a way that they can integrate different business functions. Various departments in an organization can be able to share and access different information regarding the business operations in the organization. The ERP systems contain various functions. These include human resources, distribution, accounting, manufacturing, sale and marketing. This allows the ERP system to support the MTO process efficiently.

Question 5

Tier 1

Companies under this category have annual revenues ranging from $250 to $500 million. Vendors include JD Edwards, Oracle, Baan, SAP and PeopleSoft. These vendors normally target the Multinational Corporations (Adam and Sammon 17).

Tier 2

According to Adam and Sammon (17), these include vendors that sell ERP software to companies whose annual revenues range between $10 and $500 million. Most of the companies are listed and are large organizations. Examples include Sage, QAD, Ross and IFS.

Tier 3

The vendors in this category sell their systems to companies whose annual revenues fall below $10 million. Most of the organizations in this category are small medium sized industries. Examples of vendors include Exact, Blue Cherry and HansaWorld.

Trends

One of the major trends in ERP products involves customization of the products. The products are customized through packaging and provision of service offerings by the vendors. In addition, the products have a concrete set of services and deliverables (Krigsman). Another trend in the ERP products is the production of user specific products. Thirdly, another trend in the ERP products is the ability to break large projects into smaller and more manageable units. This helps in reducing risks.

Works Cited

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