67208

Enterprise Resource Planning

Model Answer

Q 1. (20 Marks)

(a). What is business process modeling?

The fundamental rethinking and radical redesign of core business processes to achieve dramatic improvements in critical performance measures such as quality, cost, and cycle time

(b). How business integration is achieved in ERP System?

Ans - Enterprise Resource Planning (ERP) covers through its modules the different functions of a business. With a single platform catering to multiple processes and needs data integration is achieved along with a single version of the truth. For example in sales the customer master would be shared by the sales, finance and post-sales service module. Hence each department would be dealing with the same data set instead of disparate data sets. Also when a sales invoice is posted the billing, accounting and costing impacts of the transactions is posted simultaneously allowing the departments to be synchronized with the same information.

(c). List advanced tools used for ERP system design.

The tools fulfilling the ERP requirements:

To meet the needs of the above mentioned functional requirements, the following tools and applications are mandatorily integrated into the ERP system.

- -Database Management / Data Warehouse / Information Management Tools
- Applications and interfaces with suitable permission control
- Workflow Management Tool
- Reporting Tool / Dashboard
- Communication Tools
- Analytical Tools
- Resource Allocation & Task Scheduling Tools

(d). What are its important modules in ERP system?

ERP is a cross-functional software that supports all **the** business processes within **the** organization. In an organization,**ERP** helps to manage business processes of various departments & functions through **the** centralized application

- Human Resource
- Inventory
- Sales & Marketing
- Purchase
- Finance & Accounting
- Customer Relationship Management(CRM)
- Engineering/ Production
- Supply Chain Management (SCM)

Q 2.

(a). Explain how businesses were run before the ERP systems and how the ERP improves Business operations? (10 Marks)

Before ERP:

- There was so much documentation and no integrating in all the departments
- work was very time consuming
- There was no level of accuracy and cost was very high as there was more employees as compare to after implementing employees.
- Poor communication.
- Work was not organized.

After ERP:

- Integration
- Organized work
- Proper management
- Inventory managed
- Easily collection of information and also proper management of information.
- Work efficiently
- Technology use

Before ERP everything was done manually by employees that include too much errors and all of the documents were filed physically that was very difficult to manage. WHERE AS, After ERP all the departments got integrated and manage all the documents on system that is easy to manage and find this causes less time and accuracy of work . ERP also reduces cost of more employees and manages the inventory and also material requirement planning

(b). Explain Supply Chain Management with respect to design of ERP systems. (10 Marks)

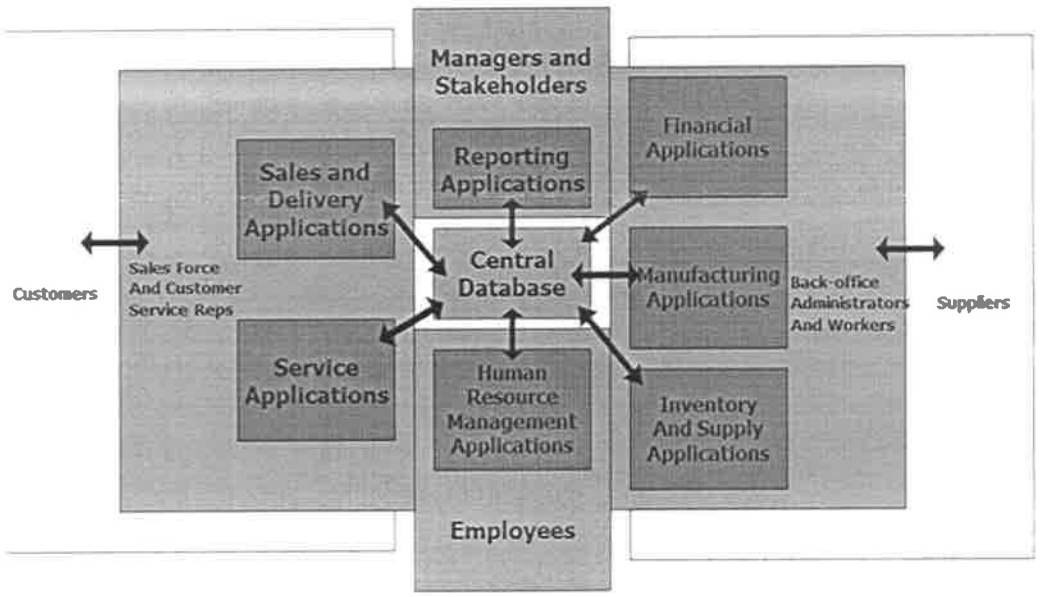
Components of Supply Chain Management Integration

- Planning and control
- Work structure
- Organization structure

- Product flow facility structure
- Information flow facility structure
- Management methods
- Power and leadership structure
- Risk and reward structure
- Culture and attitude

Q 3.

(a). Explain the working of the ERP system. (10 Marks)



(b). Discuss Risk Management in an ERP implementation? (10 Marks)

Change/Risk management

Implementation of ERP necessitates a broad based organizational change which is more disruptive than incremental. Change management effectively deals with the process of managing such changes, and broadly encompasses all major segment of the organization such as:

- People-Employees education and competence.
- Organization- Organizational structure, Business functions and processes
- System-Information planning, Hardware and Software.

Effective change management is interconnected with risk management which minimizes risk of failure and ensures avoidance of unpleasant surprises, both during implementation and post implementation phases.

Processes of change/risk management: Starting with project kick off, following Processes should be beneficial:

1. Engaging a change management agent
2. Risk analysis
3. Communications
4. Dealing with the people factor
5. Training
6. Monitoring of activities during go live

Q 4.

(a). Do the detail analysis of the roles played by ERP in business. (10 Marks)

Roles/Activities of ERP in Organization

- Improving integration, flexibility
- Fewer errors
- Improved speed and efficiency
- More complete access to information
- Lower total costs in the complete supply chain
- Shorten throughput times
- Sustained involvement and commitment of the top management

(b). Explain the implementation phases of ERP systems (10 Marks)

Phases of ERP systems –

Phase 1: Choose the ERP Selection Team
Phase 2: Determine ERP Goals
Phase 3: Selecting the Best ERP System for Your Organization
Phase 4: Planning the ERP Implementation
Phase 5: Preparing for Successful ERP Implementation
Phase 6: Training
Phase 7: Testing the ERP System
Phase 8: ERP Deployment – Going Live
Phase 9: Feedback & Evaluation
Phase 10: ERP Support

Q 5.

(a). Explain the business modules for Human Resources and Material Management (10 Marks)

HR modules –

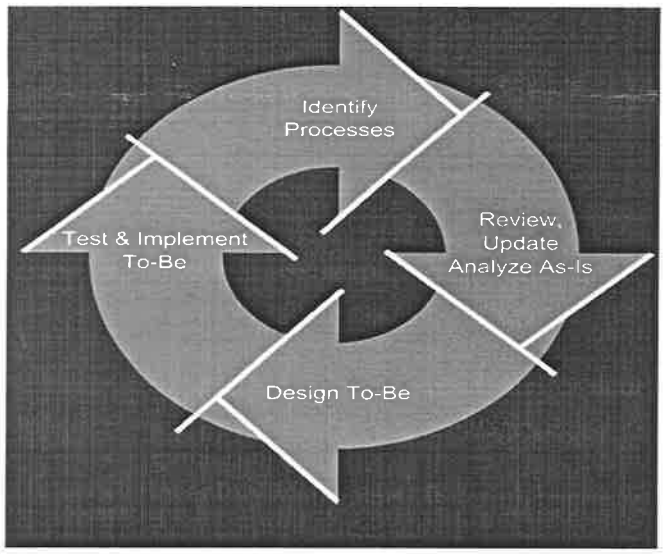
- Produce pay checks and payroll reports;

- Maintain personnel records;
- Pursue Talent Management.

Material Management modules –

- Vendor Master and Material Master data
- Consumption Based Planning
- Purchasing
- Inventory Management
- Evaluation of Materials
- Invoice Verification

(b). Explain with example the Business process re-engineering (BPR) methodology (10 Marks)



Q 6. Write short Notes (20 Marks)

(a). CRM

Customer-relationship management is an approach to manage a company's interaction with current and potential customers. It uses data analysis about customers' history with a company to improve business relationships with customers, specifically focusing on customer retention and ultimately driving sales growth. Few examples of CRM software

(b). Security for ERP Systems

ERP (enterprise resource planning) systems have evolved significantly in recent years. Modern systems can now automate practically all day-to-day business processes, including human resources, sales, stock management, and so on. That's why many organisation are now choosing ERP systems. The advantage of all-in-one solutions like ERP systems is that they remove the need for multiple software applications to improve data consistency and ensure all aspects of daily operations are compatible and accessible. However, as with any sort of fully comprehensive system which covers such a broad spectrum, there are naturally going to be some weak spots and vulnerabilities that are important to keep an eye out for.

7 common ERP system security factors to be considered:

1. Delayed Updates
2. Full Access Rights
3. Inadequate Training
4. Failure to Comply
5. Use of Unauthorised Systems
6. Automatic Trust
7. Single Authentication

(c). In-house ERP implementation advantages and disadvantages

Advantages of in-house development

1. The company has full ownership of the final product as well as its source code and the knowledge gained while developing it.
2. Fits exactly to the business requirements of the company
3. There is a relationship between the development team and the user base which helpsin communication and expectation delivery.
4. It gives you full control over the system and its functionality
5. Allows you to differentiate from your competitors (as the system is developed for your specific needs.
6. Can provide the business with a greater competitive advantage that a bought solution.

Disadvantages of in-house development

1. It can be costly to maintain and improve the system to continuously meet business needs.
2. It requires more IT personnel which in turn lead to High overhead cost.
3. High switching costs: it is more expensive to change to newer technology.
4. It is time consuming to develop an in-house IT system as opposed to buying it
5. High development and maintenance costs (Although it may seem less expensive, in-house development can actually become more expensive as time goes, as there are alot of things that go into the process, such as analyzing requirements, gathering, programming, designing, implementing, testing, user training and maintenance).
6. If the company decides to sell the system, it may suffer from a lack of portability, as itthe system maybe too tightly built into the identity of the company,

(d). ERP for E- Commerce based applications

ERP implementation with CRM & SCM