

Govt Women Engg College, Ajmer
MCA V Semester II Mid Term Examination – November 2017

Q1. Discuss the Term ROI and Strategic Grid.

Ans 1. Return on Investment (ROI) : When a proposal is put forward for implementing an ERP system, two questions are invariably asked i) How much it is going to cost ii) What is the pay back period. It is always preferable to have a cost benefit analysis before embarking on ERP project. ROI is simply the figure of benefits of an investment Which is divided by sum of the costs, spoken in percentage terms or ROI calculation is made by dividing monetary gain by amount spent.

The strategic grid: is a widely known model proposed by Mcfarlan, which allows the visualization of the relationship between IT strategy and the business strategy, considering both present and future situations. There are four quadrants:

1. Strategic quadrant- Organization in this quadrant are critically dependent on the smooth functioning of the IS activity for both their current and future needs.
2. Turnaround Quadrant- Organizations in this quadrant are not critically dependent upon IS applications for their current operations.
3. Factory Quadrant- Organizations in it are critically dependent upon existing IT support system.
4. Support Quadrant- Organizations in this quadrant are in the lowest-rated quadrant of the grid, suggesting that top-management concern and involvement in IT and IS would not be strongly emphasized.

Q2. What are the key areas where the problem of hidden cost arises (Explain Each)?

Ans : Key Areas are:

- * Training
- * Customisation
- * Integration and testing
- * Data conversion
- * Data analysis
- * Consultants
- * Brain drain (employee turnover)
- * Continuing maintenance

Training

Training expenses are high because workers almost invariably have to learn a new set of processes, not just a new software interface.

Customisation

Customisation of the ERP system happens when it cannot support one or more of your business processes and you decide to make it do what you want. You will have to do it all over again in the new version. The big chunk of costs for professional services is customisation. The cost of customisation can easily out-run the cost of packaged ERP software, but it is the customisation of ERP software that makes an ERP a success or a failure.

Integration and testing

ERP systems will not demonstrate their full potential unless they are properly integrated with other enterprise software applications. There are three main areas that need integration:

- * The integration of the various functional ERP modules
- * The integration of ERP with other eBusiness software applications
- * The integration of ERP with legacy systems

Data conversion

It costs money to move corporate information, including customer and supplier records, product design data and the like, from old systems to a new ERP system.

Data analysis

There is a misconception that the ERP vendors perpetuate that you can do all the analysis you will want within their product. But often, the data from the ERP system must be combined with data from external systems for analysis purposes. Users with heavy analysis needs should include the most of a data warehouse in the ERP budget and should do quite a bit of work to make it run smoothly.

Q3.Discuss the useful guidelines for successful ERP implementation

Ans:

- 1.Strategic Planning
- 2.Procedure Review
- 3.Data Collection and Clean-Up
- 4.Training and Testing
- 5.Go Live and Evaluation

1. STRATEGIC PLANNING

- Assign a project team.
- Examine current business processes and information flow.
- Set objectives.
- Develop a project plan.

Project team: Assign a project team with employees from sales, customer service, accounting, purchasing, operations and senior management. Each team member should be committed to the success of the project and accountable for specific tasks, i.e. developing a timeline, finalizing objectives, formulating a training plan. Make sure you include first line workers as well as management on your team. Base the selection on the knowledge of the team not status of the employee.

Examine current business processes: Have the team perform an analysis on which business processes should be improved. Gather copies of key documents such as invoices, batch tickets and bill of lading for the analysis. To start the team discussion, consider questions such as: Are your procedures up to date? Are there processes that could be automated? Are personnel spending overtime processing orders? Does your sales force and customer service personnel have real-time access to customer information? The team members should also conduct interviews with key personnel to uncover additional areas of improvement needed.

Set objectives: The objectives should be clearly defined prior to implementing the ERP solution. ERP systems are massive and you won't be able to implement every function. You need to define the scope of implementation. Ideally, the scope should be all inclusive. But practically, it is very difficult to implement.

Examples of objectives would include: Does the solution reduce backlogs? Can the solution improve on-time deliveries? Will you be able to increase production yields?

Develop a project plan: The team should develop a project plan which includes previously defined goals and objectives, timelines, training procedures, as well as individual team responsibilities. The end result of the project plan should be a “to do” list for each project team member.

2. PROCEDURE REVIEW

- Review software capabilities.
- Identify manual processes.
- Develop standard operating procedures.

Review software capabilities: Dedicate 3-5 days of intensive review of the software capabilities for the project team. Train on every aspect of the ERP software to fully educate the team on capabilities and identify gaps. Determine whether modifications are needed prior to employee training.

Identify manual processes: Evaluate which processes that are manual and should be automated with the ERP system.

Develop standard operating procedures (SOPs): for every aspect of your business. These procedures should be documented. Make sure that you modify the document as your SOPs change. This is a huge task, but it is critical to the success of your implementation.

Examples of SOPs:

- How do you handle global price changes?
- What are the processes for inputting new customer records?
- How do you currently handle the paperwork on drop shipments?
- How do we add a new product or formula?

3. DATA COLLECTION & CLEAN-UP

- Convert data.
- Collect new data.
- Review all data input.
- Clean-up data.

Convert data: You can't assume 100% of the data can be converted as there may be outdated information in the system. Determine which information should be converted through an analysis of current data.

Collect new data: Define the new data that needs to be collected. Identify the source documents of the data. Create spreadsheets to collect and segment the data into logical tables (Most ERP systems will have a utility to upload data from a spreadsheet to their database).

Review all data input: After the converted and manually collected data is entered into the ERP database, then it must be reviewed for accuracy and completeness. Data drives the business, so it is very important that the data is accurate.

Data clean-up: Review and weed out unneeded information such as customers who haven't purchased in a while or are no longer in business. Now is the time for improving data accuracy and re-establishing contact with inactive customers.

4. TRAINING AND TESTING

- Pre-test the database.
- Verify testing.
- Train the Trainer.
- Perform final testing.

Pre-test the database: The project team should practice in the test database to confirm that all information is accurate and working correctly. Use a full week of real transaction data to push through the system to validate output. Run real life scenarios to test for data accuracy. Occurring simultaneously with testing, make sure all necessary interfaces are designed and integration issues are resolved to ensure the software works in concert with other systems.

Verify testing: Make sure the actual test mirrors the Standard Operating Procedures outlined in step 2, and determine whether modifications need to be made.

Train the Trainer: It is less costly and very effective if you train the trainer. Assign project team members to run the in-house training. Set up user workstations for at least 2 days of training by functional area. Provide additional tools, such as cheat sheets and training documentation. Refresher training should also be provided as needed on an ongoing basis.

Final Testing: The project team needs to perform a final test on the data and processes once training is complete and make any needed adjustments. You won't need to run parallel systems, if you have completed a thorough testing.

5. GO LIVE AND EVALUATION

- Develop a final Go-Live Checklist.
- Evaluate the solution.

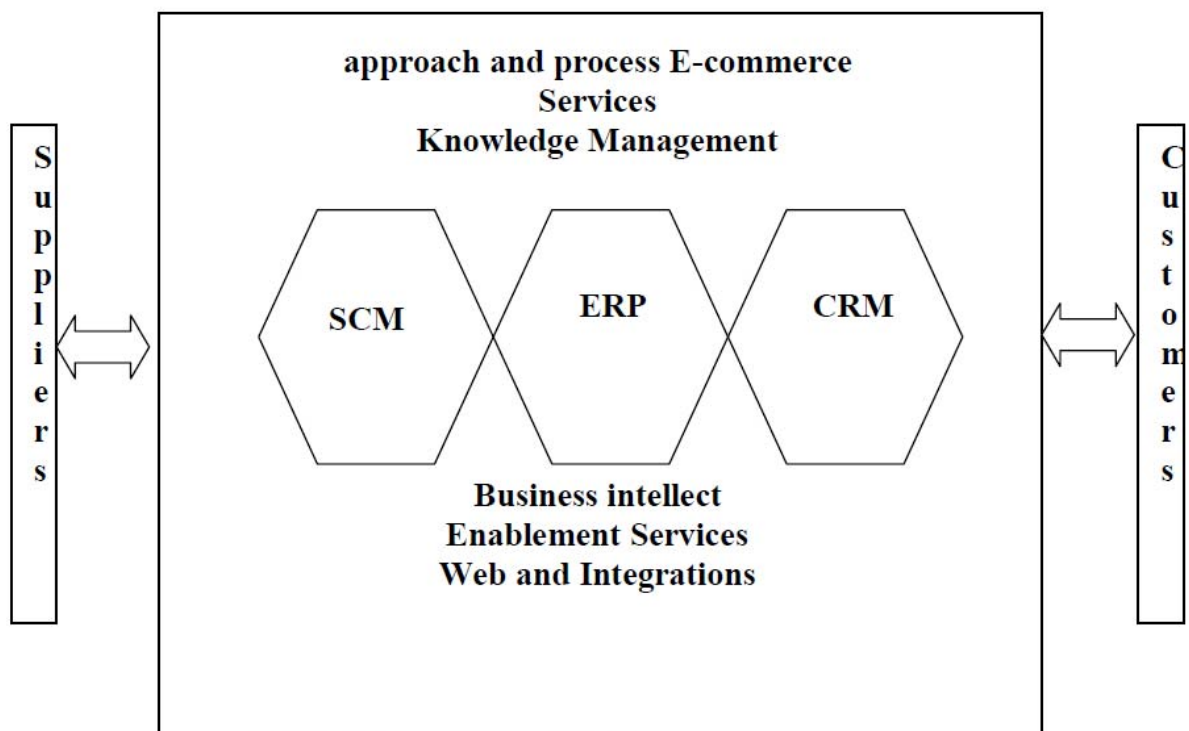
Sample Final Go Live Countdown Checklist Sample

- Physical inventory process is complete.
- Beginning balance entry procedures are developed for all modules.
- Any transition issues are addressed.
- Documents & modifications are tested thoroughly.
- Executives and department heads are fully trained.
- Vendor is available for go-live day.
- Users will have assistance during their first live transactions.

Q4.Explain the Extended ERP components

Ans: Extended ERP components are the extra components that meet the organizational needs not covered by the core components and primarily focus on external operations. The common extended ERP components are :

- a) Business Intelligence Components : ERP systems offer powerful tools that measure and control organizational operations. Many organizations have found that these valuable tools can be enhanced to provide even greater value through the addition of powerful business intelligence systems. Business intelligence describes information that people use to support their decision-making efforts.
- b) Customer Relationship Management Components : ERP vendors are expanding their functionality to provide services formerly supplied by Customer Relationship Management (CRM) involves managing all aspects of a customer's relationship with an organization to increase customer loyalty and retention and an organization's profitability.
- c) Supply Chain Management : It is a systems approach to managing the entire flow of information materials, and services from raw materials suppliers through factories and warehouses to the end customer. SCM is different from supply management which emphasizes only the buyer-supplier relationship.
- d) E-Business :E-business stands for "electronic business", which involve communications and doing business electronically through the Internet.



Q5. Define E Governance and Explain E Governance Framework.

Ans: E-Government can be defined as the use of information and communications technologies by governments to enhance the range and quality of information and services provided to citizens, businesses, civil society organizations, and other government agencies in an efficient, cost-effective and convenient manner, making government processes more transparent and accountable and strengthening democracy.

E Governance Framework

E-Governance facilitates interaction between different stake holders in governance. These interactions may be described as follows:

G2G (Government to Government) – Information and Communications Technology is used not only to restructure the governmental processes involved in the functioning of government entities but also to increase the flow of information and services within and between different entities. This kind of interaction is only within the sphere of government and can be both horizontal i.e. between different government agencies as well as between different functional areas within an organisation, or vertical i.e. between national, provincial and local government agencies as well as between different levels within an organisation. The primary objective is to increase efficiency, performance and output.

G2C (Government to Citizens) – An interface is created between the government and citizens which enables the citizens to benefit from efficient delivery of a large range of public services. This expands the availability and accessibility of public services on the one hand and improves the quality of services on the other. It gives citizens the choice of when to interact with the government (e.g. 24 hours a day, 7 days a week), from where to interact with the government (e.g. service centre, unattended kiosk or from one's home/workplace) and how to interact with the government (e.g. through internet, fax, telephone, email, face-to-face, etc). The primary purpose is to make government, citizen-friendly.

G2B (Government to Business) – E-Governance tools are used to aid the business community – providers of goods and services – to seamlessly interact with the government. The objective is to save time, reduce operational costs and to create a more transparent business environment when dealing with the government. The G2B initiatives can be transactional, such as in licensing, permits, procurement and revenue collection. They can also be promotional and facilitative, such as in trade, tourism and investment. These measures help to provide a congenial environment to businesses to enable them to perform more efficiently.

G2E (Government to Employees) – Government is by far the biggest employer and like any organisation, it has to interact with its employees on a regular basis. This interaction is a two-way process between the organisation and the employee. Use of ICT tools helps in making these interactions fast and efficient on the one hand and increase satisfaction levels of employees on the other.

