Enterprise Resource Planning (ERP):

By:

Dr. John K. Tarus

School of Information Sciences
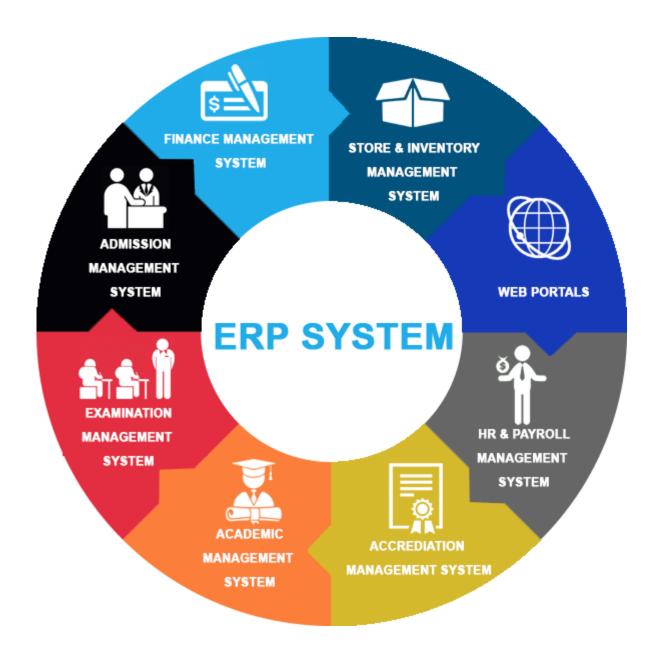
INF 411/CMM 213: MANAGEMENT OF ICT

Enterprise Resource Planning (ERP)

- ***Enterprise resource planning (ERP)*** is a type of ***integrated software system*** that helps organizations automate and manage core business processes for optimal performance.

- It is an integrated software system for managing organization's core processes such as finance, human resource, procurement, academic, sales order processing, inventory management and control, production etc. under one central database.

- Different ERP packages have different scopes.

- Most Industry ERPs include modules such as finance, manufacturing, inventory control, procurement, customer relationship management, human resource as well as supply chain management.

Enterprise Resource Planning (ERP)

- In a University scenario, the ERP contains key University modules such as Academic (*Admissions, Course Management, Timetabling, Exam Management etc*.), Financial Management, Hostel Management, Human Resources Management, Procurement, Payroll Management and Web portals (*students and staff portals*).

- ERP systems are integrated around a common database.

- Some well known ERP vendors are ORACLE, SAP, Microsoft (*Microsoft Dynamics 365 formerly Microsoft Dynamics Navision*), and PeopleSoft.

Contents of a University ERP System

Reasons for Embracing ERP

Why Organizations embrace ERP Systems:

1. Business integration and automation.
    - ✓ Linkage between all core business processes and easy flow of integration.

2. Better analysis and planning capabilities.

3. Competitive advantage - significant and long-term benefit to a company over its competitors.

4. Use of latest technologies.

Advantages of ERP

The advantages of ERP are:

1. Planning and Forecasting - ERP improves the quality of planning by Managers by providing relevant and factual information.

2. Increased customer/user satisfaction.

3. Increased efficiency, flexibility and quality of service.

4. Improved information accuracy.

5. Improved resource utilization.

6. Reduced operational cost.

7. Quick and prudent decision-making capability.

Advantages of ERP

8. Ability to generate several relevant reports.

9. Increased transparency and accountability – ERP checks against malpractices which are common in standalone systems.

10. Improved overall performance and productivity.
    - ✓ *Productivity is a measure of output achieved divided by input required. Higher level of output for a given level of input means greater productivity.*

11. Improved overall revenue collection.

12. Competitive advantage - significant and long-term benefit to a company over its competitors.

Challenges of ERP:

1. ERPs are expensive and implementation takes time.

2. Difficulty in integration with other existing systems.

3. Risk of implementation failure.

4. Difficulty in implementing change.

5. Risk in using one vendor.

ERP Success

From research, it is widely accepted that successful implementation of an ERP is:

- ✓ **20%** dependent on selecting and configuring an appropriate ERP application and IT services.

- ✓ **30%** dependent on understanding and interpreting the institution's business processes and user requirements.

- ✓ **50%** dependent on people (users) - where change management and training will ensure acceptance and effective use.

ERP Implementation: Case Study of Organization XYZ

1. Project charter forms the basis of project implementation framework.
   - ✓ *Project charter is a document that officially starts a project and describes your project in its entirety: scope, objectives, stakeholders, risks, benefits and budget.*

2. Project Initiation, Planning & Signing of Project Charter.
   - ✓ *Formation of Project Steering and Implementation Committees.*
   - ✓ *Change Management Training for key users of the organization.*

3. Business Processes Analysis (Requirements Specification).
   - ✓ *Users from the different departments are engaged on their functional requirements and a Functional Requirements Document (FRD) developed.*

4. Development or Customization of the ERP system.
   - ✓ *Development or Customization is done.*

5. User Acceptance Testing (UAT).

6. Training (Management, Technical & User training).

7. Data Cleaning and Migration.
   - ✓ *Data from user departments is cleaned and migrated to ERP.*

8. Go Live – *begin operations with new system.*

9. Post Go Live Support.

END

Thank You

Q & A ?