

ERP IMPLEMENTATION AT UNIVERSITY OF ELDORET: BENEFITS AND CHALLENGES TO THE UNIVERSITY

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DEMOGRAPHICS OF UNIVERSITY OF ELDORET

- ▶ Student population is 19700.
- ▶ Staff population is 1300.
- ▶ Internet bandwidth is 30Mbps
- ▶ Estimated number of desktop computers ~ 500
- ▶ Estimated number of laptop computers ~ 5000
- ▶ Network – flat
- ▶ ICT staff – 10 (Inclusive of Technical & Support)

ERP ACQUISITION PROCEDURE

- ▶ Does your institution need an ERP system
- ▶ Does top management support the idea and especially so the Vice-Chancellor?
- ▶ How do you acquire it.
- ▶ Do you require full integration of all services or do you go for piecemeal implementation of key modules such FMIS and SMIS

UOE ERP ACQUISITION PROCESS

- ▶ Top management had decided that an ERP system was required.
- ▶ Decided to go for full integration
- ▶ Set up a committee to start up the process
- ▶ Involved users to give their requirements – under guidance.
- ▶ Implementation Committee visited various institutions with ERP systems to learn about their experiences and some vendors who had implemented the ERPs .

UOE ERP ACQUISITION PROCESS CONTD.

- ▶ Requested for more staff – got 4 (PC helped)
- ▶ Procured desktop computers ~ 200
- ▶ Acquired servers
 - Windows server 2012 - Operating System
 - Microsoft Soft SQL server – 2014 – ideal for Microsoft products unlike My SQL – open.

Acquired Firewall & Antivirus licenses

UOE ERP ACQUISITION PROCESS CONTD.

- ▶ UOE went for Request for Proposal but there are other six procedures that may be followed.
- ▶ Selected a Microsoft based ERP system to implement the solution – **ABN Unisol**.
- ▶ NOTE: The acquisition process is important and needs to be transparent due to many interests.

CONTD

- ▶ Started with a clear work plan involving the vendor and the University. Clear work flow established.
- ▶ Process to be headed by the ICT Director on the side of the University and a project manager on the side of the vendor.
- ▶ Champions were appointed in the various functional sections
- ▶ Established that student records and financial details were key and hence these, and related modules were to be implemented first.

THE ERP MODEL

The process:

TOP – DOWN PROCESS OR DOWN – TOP PROCESS?



STAGES FOLLOWED TO ACQUIRE ERP SYSTEM AT UOE

The four stages of the model are explained as

EXPLORATION PHASE

- ▶ Becoming aware of the need for an ERP system
- ▶ Searching for outside assistance (a consultant/facilitator) to assist with planning and implementing the ERP system
- ▶ Establishing a contract with the consultant which defines each party's responsibility

PLANNING PHASE

- ▶ Analysed and diagnosed the problem to be solved – user requirements.
- ▶ Established change goals and designed the appropriate actions to achieve these goals – appointment of champions – with clear TORs.
- ▶ Established priorities and sequence requirements for the ERP implementation.
- ▶ Allocated tangible and intangible resources for each of the ERP implementation sequence – server acquisition, computers, staff etc.

ACTION PHASE

- ▶ Identified “all” possible resistances to change and their nature.
- ▶ Evaluated the inertial forces of each resistance.
- ▶ Chose adequate approaches to overcome each resistance.
- ▶ Evaluated the process/progress of ERP implementation.
- ▶ Performed corrections to the initial plan where necessary.

CONTD.

- ▶ Trained management and employees on their roles in the ERP implementation process with unexpected events demanding different responses in varied circumstances
- ▶ **Building the guiding team** - got the right people in place with the right emotional commitment, the right mix of skills and levels.
- ▶ **Communicating the vision** - Involved as many people/users as possible, communicated the essentials of the ERP system, simply, to appeal and respond to people's needs. If not well done, this can lead to serious frustrations among employees especially if individual needs are not taken into consideration.

Beckhard and Harris' Change Formula

For change to happen, the forces for change must outweigh the perceived costs of change (effort, discomfort, exposure, difficulty, risk

$$C = ABD > X$$

C = change.

A = level of dissatisfaction with status quo.

B = desirability of proposed change or end state.

D = Practicality of the change (minimum risk and disruption). NB: A,B,C \neq 0, Otherwise no change.

X = cost of changing.

MODULES IN THE UOE ERP SYSTEM

Integrated Financial Management

- *General Ledger*
- *Students Finance*
- *Accounts Receivable (IGA)*
- **Fixed Assets Management**
- *Accounts Payable.*
- *Imprest Management.*
- *Internal & External Part-time Management*
- *Cash Office Management.*
- *Bank Reconcilliation*
- *Projects Accounts Management*
- *Budgeting & Budgetary Control*
- *Payroll Management*
- **Insurance Expenses Management**

MODULES IN THE UOE ERP SYSTEM CONTD

Academic and Student Management

Students Applications Management

Admissions and Registration Management

Time-Table Management

Examination Processing

Catering Management

Health Services Management

Hostels and Accommodation Management

Students and Staff Portal

Procurement and Stores Management

Procurement Management

Stores & Inventory Management

Library Management

Human Resource Management

SMS

BENEFITS OF ERP SYSTEM TO UOE

- ▶ Ability to generate several reports
- ▶ Ability to plan ahead
- ▶ Ability to know the number of students
- ▶ Ability to know number of staff
- ▶ Check against malpractices which are common in standalone pcs
- ▶ Ability to report final accounts
- ▶ Improved revenue collection
- ▶ Improved fees collection
- ▶ Increased transparency
- ▶ Improved efficiency of service delivery

BENEFITS CONTD.

- ▶ Improved efficiency of service delivery
- ▶ Reduced operational cost
- ▶ Improved service Quality
- ▶ Improved productivity
- ▶ Increased customer satisfaction
- ▶ Enables the University to compete in the current competitive world
- ▶ Improved user satisfaction
- ▶ Improved overall performance for prudent decision making

CHALLENGES OF ERP SYSTEM

- ▶ System is prone to being compromised
- ▶ Vendor support not quite adequate
- ▶ Training challenges – Functional & Technical as well as **end user**.
- ▶ Vendor not giving all details due to proprietary rights
- ▶ Capacity of staff
- ▶ Inability to upgrade system
- ▶ Challenges with integration
- ▶ Resistance to change, backup
- ▶ Sabotage, Cooperation of staff inputting data
- ▶ Inadequate funding
- ▶ Cyber – security
- ▶ Access rights, Integrity

Conclusions

- ▶ ERP systems (automation & integration) are most likely the way to go
- ▶ They improve overall quality of service offered
- ▶ They result to overall revenue and fees collection
- ▶ They lead to increased customer satisfaction
- ▶ NB: ERP are generally integrated and any action or inaction may impact on the performance of another section
- ▶ Pay attention to the procurement process
- ▶ Pay attention to the terms in the signed contract and any service level agreement.