
The increasing role of ISs in the Management of Higher Educational Institutions (HEIs) in Kenya

By

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PREAMBLE

- Days of queuing for *BOOM* at bank
- Long queues to register at Campus
- Long wait for newspaper ad for supps
- Observed significant changes in past 10 years
- Private institutions more pro-active
- Public institutions picking up

This paper will dwell on the increasing role of information systems in the management of higher educational institutions in Kenya.



1. WHAT IT WAS, and may be is?

- Manual systems- pushing paperwork
- Cumbersome but working
- Turn-around time- low?

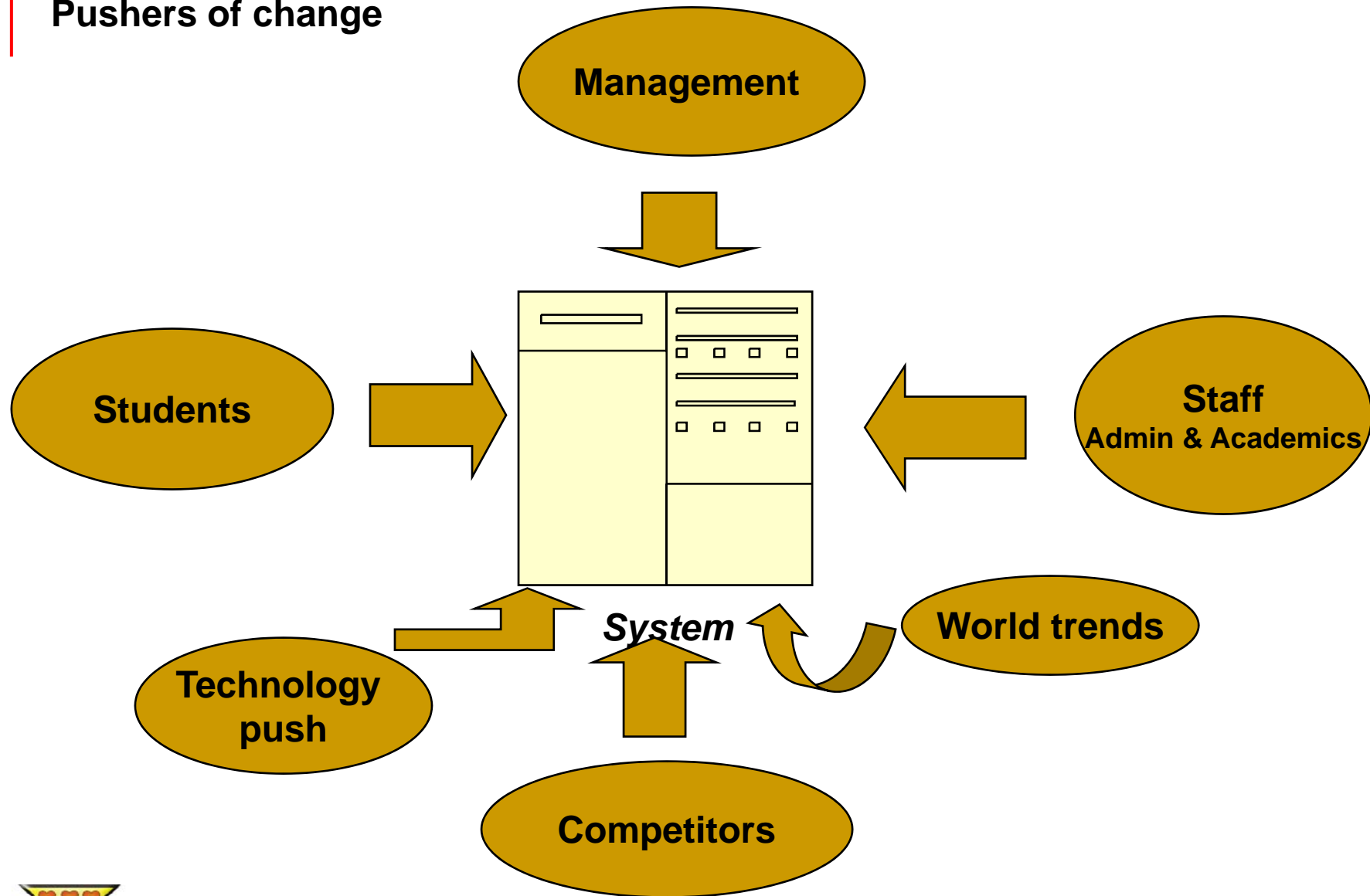


2. WHY CHANGES

- I. Increasing need for management productivity
- II. Competition in the industry
- III. Information seen as important resource
- IV. Demand from students and staff for better service
- V. Technology becoming cheaper
- VI. Changing external environment



Pushers of change



3. WHAT SISs DO...Benefits

- **Increased efficiency:** ISs are increasingly being implemented within universities in order to *modernise back-office, administrative functions through integrated technology platform.*
- Systems are being used as a vehicle for professionalizing and transforming traditional HEIs. Modern systems (e.g. ERPs) replacing existing management and administration **legacy** systems (Allen & Kern, 2001).

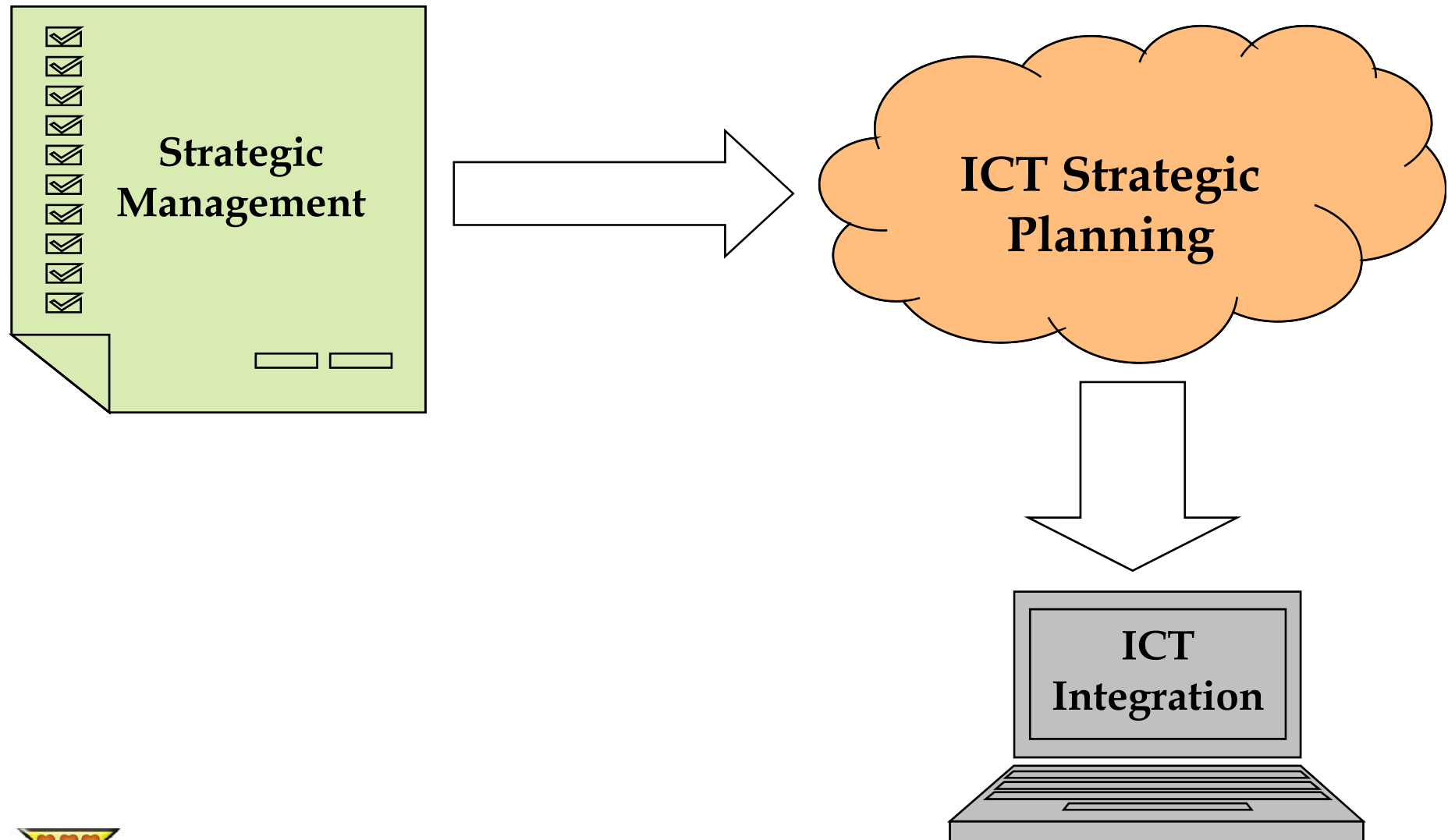


Benefits...

- Lean work force
- ROI- Cost savings- paperwork
- Improved staff morale
- Faster and better decision making- reduced bureaucracy
- Elegance/ Pride- e-learning, online access to records- exam grades



4. SUCCESSFUL IMPLEMENTATION of SIS



Challenges of SIS implementation

- Failure to redesign business processes to fit the IS
- Lack of senior management support-ignorance
- Resistance from some users- old hands...
- Insufficient training and re-skilling
- Inability to recruit & retain qualified IS staff
- Insufficient training of end-users



Challenges...

- Technological complexity for some
- Cost of technology
- Security concerns for the data and the systems
(*case of US student imprisoned for changing grades...*)
- Organisational change- flattening the org structure
- Staff layoffs



How Kenyan HEIs are implementing?

- Internally developed systems
- Off-the-shelf packages (some programs)
- Consultant developers/ Integrators
- Freeware

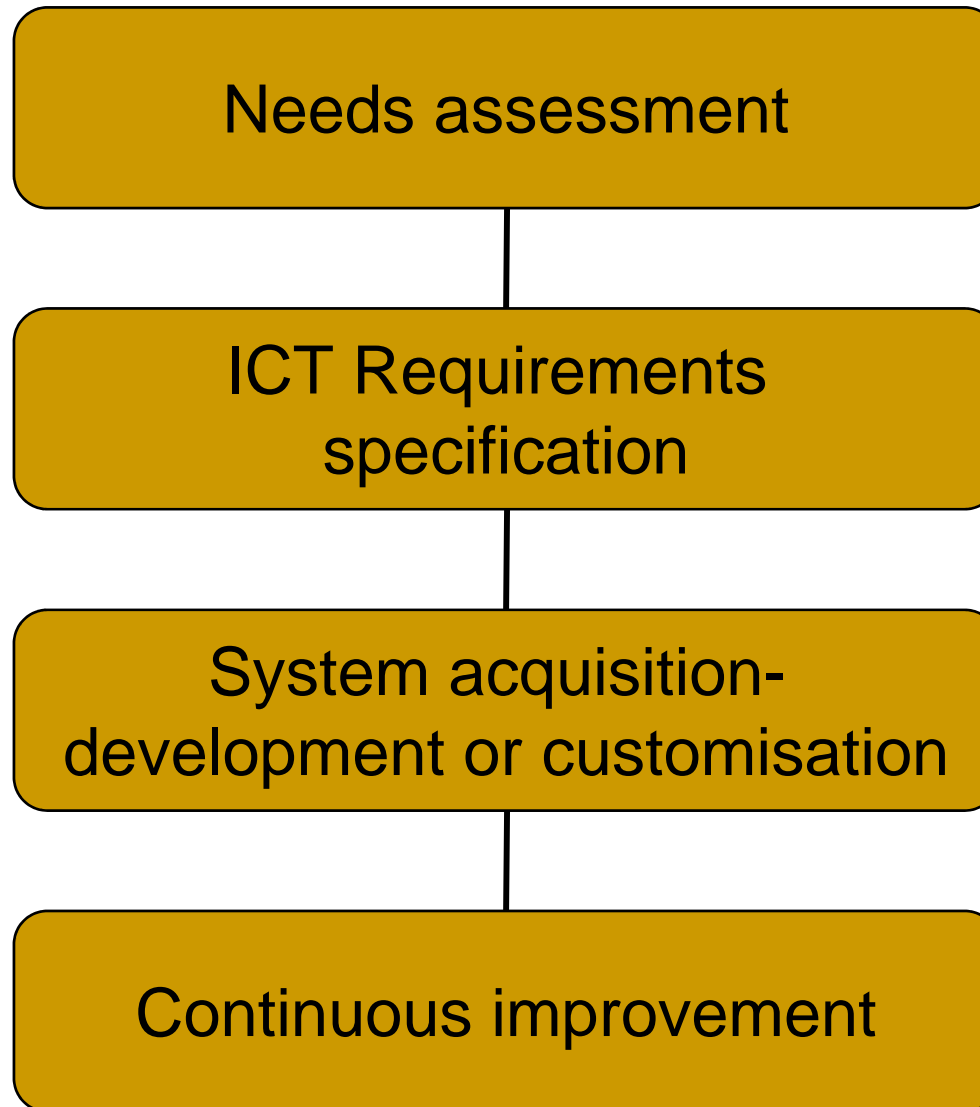


Systems status- desk survey

Institution	System status
UoN	Comprehensive but disparate systems; most internally developed; fairly manual in Finance; library system ; plans to have integrated systems-
JKUAT	Disparate systems; Recently customised solution from local developer ongoing
Strathmore	Customised solution from Navarre (AMS); Library system (open source); finance package
USIU	Full automated and integrated including Library. Customised system from US
KCCT	No comprehensive system; In process of starting implementation process
Kenya Poly	Old legacy system; In process of major overhaul



Good practice



5. CASE 1: SU new system (s)

What led to the new system?

- Main impetus: problems and limitations with current systems which could not handle the expansion of SU
- Administrative efficiency – to improve efficiency of processes – in case of AMS, academic processes.
- Improved information management – better record keeping and availability of information.
- Automate manual processes – e.g. library
- Improve value delivery – e.g. extending interaction and access to info beyond the class using E-learning,
- Management info – improved availability of info for management e.g. academic info on the desktops of managers.



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- Better accountability and performance e.g. up to date info on student debtors, obtain improved financial info with FMS
 - Image - SU has the vision of being a centre of excellence in business and IT. It does not help its image if the systems are not in tune.

How new system will impact on SU:

- The vision is of systems that automate most of the processes of the university. Processes will be paperless, more efficient, faster.
- Key stakeholders able to obtain all info from the set of systems implemented and accessible from a university portal. They will also be able to input info through this portal e.g. pay claims, request for leave, reserve books, approve a purchase, etc.



Case 3 X University survey

- XU - young private university in Nairobi. 1000 students; 100 staff.
- Incompatible systems in place
- University lacked clear policies and management framework for acquisition and replacement of hardware, software purchases and licensing, ICT security.
- Investments in ICT not been coordinated/ no clear plans linked with the XU goals.



Findings from the study

- 17 managers surveyed.
- Saw ICT as a tool which should be at the service of all basic functions at XU.
- ICT should help organize and improve on XU's efficiency especially management of admissions, finance, examinations and library resources



Table 1. Justification of Implementation of Computerized System (N=17)

Indicators	n	(%)
Need to better manage information resource	15	(88)
Innovative ways of doing business	3	(18)
Competitors had implemented similar systems	1	(6)
Industry/World trends in education	11	(65)
User demands	6	(35)
Critical to University's operations	16	(94)
Overwhelming benefits from the system	6	(35)



Conclusions & recommendations

- For XU, ICT is a tool for operations and management support.
- User departments not happy with quality, reliability and accuracy of information provided by the current systems.
- Systems poor in the areas of integration, security features.
- Recommended XU invests in an integrated AMS to facilitate management of academic processes- registration, progression, lecturer management, fees payments and examinations.
- The system implementation is underway!



6. Last word

- Demand on institutions to give quality service likely to continue escalating- public & private
- More and more institutions seeing need to invest in a good info management system (even primary)
- More institutions to invest resources in SIS acquisition; collaboration- to mitigate costs?
- Costs likely to continue in downward trend
- End result: Better management of academic institutions as any other corporate business!

End

Questions?

