



# AUTOMATION SURVEYS – THE RIGHT CHOICE OF APPROACH

Automation PILA -2012:

The First Annual National Conference on Identifying Public Institutions Level of Automation (PILA), Nairobi Safari Club

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# JKUAT Main Campus, Juja



# Brief on JKUAT



- JKUAT prides itself as "*A University of global excellence in Training, Research and Innovation for development*".
- It is host to the Pan African University Institute of Basic Sciences, Technology and Innovation; PAUSTI
- It has a national and international presence:
  - National - Main Campus (Juja), Nairobi CBD, Nairobi Campus (Waiyaki Way), Karen Campus, Mombasa CBD, Nakuru CBD, Kisii CBD, Kitale CBD, Kakamega Centre, Kisumu CBD (*new*).
  - International - Arusha Centre (Tanzania), Kaduna Centre (Nigeria), Rwanda Campus (*new*).
- Core specialties and diversities: Agriculture, Engineering, Technology, Enterprise Development, Built Environment, Health Sciences and other Applied Sciences



# Brief on ICT Directorate



- Established as IT Services Department in 2006 under Institute of Computer Science and Information Technology, upgraded to an independent department in 2008 and to full-pledged ICT Directorate in 2009.
- The Core Business of the ICT Directorate is to facilitate the attainment of the University's Strategic Objectives.
- This is achieved by way of managing the following:
  - Hardware - Network
  - Software - Data/Information
  - People - Processes
- The first 4 constitute IT/ICT and only make sense to ICT gurus.
- The last 2 force IT/ICT to make sense in the whole institution.



# Automation Survey 2011/2012:

## The Challenges



- First time to do it!
  - Previously just reported on commitments in the Automation Policy and as embedded in the Annual Performance contract.
- No standard tool!
  - No knowledge of how this would be done and make results comparable across public agencies.
- Do it or sub-contract it?
  - Customer and employee satisfaction as well as environment surveys are sub-contracted.
- No drive!
  - Yearning by staff and students to get value before facilitating.



# Automation Survey 2011/2012: The Perceptions Approach...



- Focus on students, staff, alumni and other key stakeholders
- A questionnaire was developed on the basis of hardware, network, data/information, software, people and processes (support functions and processes)
- Respondents were required to identify the systems/services they needed for their work/service and out of these indicate which they had access to.



# ...Automation Survey 2011/2012.



## The Perceptions Approach

- To obtain the level of access and use was computed,  $gap = need(k) - access(k)$ , where  $K$  is the system/service provided by JKUAT. The  $gap=0$  if and only if  $need=access$ , meaning that either service is required and can be accessed or service is not required and not accessed. If a system is available,  $gap = -1$  yet not required. If a system/service is not available, yet required  $gap = 1$ .
- Value addition was computed on the basis of whether services had deteriorated or improved since the adoption of automation.
- Management support for ICT systems and services was computed on the basis number of items rated positively to the total number of items considered.
- The aggregate of access and use, value addition and management support was used to compute the overall automation level.



# ...Automation Survey 2011/2012.



## The QMS Process Approach

- The second approach was based on institutional processes based on the QMS based on ISO 9001:2008. The 264 processes of the University QMS were graded on the basis of whether automated or manual.
- The results using the first approach the University's level of automation was 51.37% while second indicated 46.21%. Which one do we choose for reporting on PC targets?
- The analysis based on the QMS processes was found to be a more objective and less complex means of evaluation of the level of automation.
- The QMS approach gained more acceptance than the perceptions.





# Into the Future



- How do we get a unified tool while accounting for institutional diversity and comparability of results?
- How do we embed it in a daily operations? KPIs? Institutional, departmental and individual PCs? Strategic plans?
- Can we automate the process? Why measure automation in a manual way?
- Can we sustain it?



# Rebirth ICT, Make ICT Work



*A foundation for the future of the University*

