

Chapter 11

Implementation Evaluation Metrics for ERP Solution: A Case of Kibabii University

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ABSTRACT

Most institution of higher learning are implementing enterprise resource planning (ERP) in automating various activities. The architecture of most of the ERP is based on the service-oriented architecture (SOA) where each module can be called as service. In most of the contracts signed between the vendor and the university, payment is tied to the level of implementation. The question is how to then measure the level of implementation. This chapter proposes a metric that could be used. The metric was derived based on an acceptance test on each of functionality of module as per terms of reference. The result of a test was rated as a fail; the result was then coded such that a fail was assigned a zero (0), pass one (1), and query a half ($\frac{1}{2}$), from which a metric was derived which measures the level implementation.

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ORGANIZATION BACKGROUND

Kibabii University was granted a charter in 24 November 2015 with his Excellency President Uhuru Muigai Kenyatta becoming the first Chancellor of the University (Webmaster, 2018).

Kibabii University Strategic Directions are (DICT 2019)

1. To promote and maintain excellence in teaching and learning;
2. Support and sustain advancement in consultancy, Research and Extension;
3. Enhanced Administrative, Financial and Human Resource Management systems;
4. Invest in marketing, public relations and linkages;
5. Expand, maintain and improve physical facilities and infrastructure;
6. Develop and implement policies on Health services

Management Structure

The University is managed through a Council, Senate and University management board. The each are defined University Statute, 2017 and the Kibabii University Charter

Setting the Stage

On inception in 2012, the University had incomplete, unfurnished classrooms; laboratories and offices. The ICT infrastructure had been laid in the Administration block and University Library only. Several computers were purchased for student and staff on which basic Microsoft application was installed. The Finance department used Quick Books and payroll software. The University subcontracted for website development that was hosted at DeepAfrica.

The ICT infrastructure was later enhanced by the last mile radio link was to provide internet to the organization at 10Mbps. This was enhanced to 21Mbps then 66Mbps, 82Mbps, then 110 and the present speed is 264 Mbps. The University now receives internet bandwidth through a last mile fibre link. The Campus network continues to be enhanced with campus fibre backbone in place. The radio link is now used as backup. Several hotspots have been installed to allow the students and member of staff access the net. The University has a Directorate of ICT whose mandate are to (Mbuguah SM 2018):

- Establish and maintain ICT infrastructure and services.
- To advance the intellectual and human resource capacity through use of E-resources.

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