

BASELINE SURVEY OF ENGINEERING DEPARTMENTS 2015

EXECUTIVE SUMMARY

Motivation for the Baseline Survey

This baseline survey of engineering departments of Kenyan universities was part of the e-readiness survey of universities research series (<http://ereadiness.kenet.or.ke>). The e-readiness of an educational community (e.g., a university or a school of engineering) is a diagnostic assessment of the overall potential of the community to use Information and Communications Technologies (ICTs) to transform and enhance teaching, learning, research and innovation. The assessment is based on an e-readiness assessment framework was developed by the researchers specifically for higher education institutions and universities in developing countries like Kenya. It is based on a set of 17 indicators that are staged on a scale of 1 (unprepared) to 4 (ready). The 17 indicators are in turn derived from over 90 sub-indicators.

In order to conduct an e-readiness survey of a higher education institution or academic department, detailed data is required. These data includes student enrolment, full-time faculty members and their qualifications, institutional financial health data in addition to ICT access and affordability data. This would normally data required by management of a university or by external accreditation bodies. For example, one of the 17 indicators is titled ICT Research and Innovation and aims to measure the ICT research and innovation output of a university. Over the years, the researchers have observed that the data required was not easily available from senior administrators such as the DVC for Academic Affairs or the Academic Deans or Directors of ICT.

The engineering departments' baseline survey therefore collected detailed data from the heads of the departments that could be used to measure the research and innovation of the departments. The heads of departments were directly responsible for the educational and research outcomes of their respective department and were expected to collect and have access to relevant data. The engineering departments survey was combined with a survey of ICT departments (i.e., departments of computer science, information systems or business IT systems). The data collected was similar to the data required by the Commission for University Education that regulates university education or by Engineers Board of Kenya, the professional body - that is also mandated by Kenya to accredit engineering degree programs.