

Research Application Summary

Development of a framework to assess completeness of Disaster Recovery Plans in RUFORUM Universities

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Abstract

In Universities and other institutions, Information Communication and Technology (ICT) is critical for today's learning, research, business profiling and institutional management. However, sustainability of systems in place depends greatly on the disaster preparedness and Recovery Plans. Although most African universities have these plans, the implementation procedures are often not followed properly. The objective of this study is to evaluate the implementation procedures of disaster recovery plans in two RUFORUM universities, identify their strengths, weaknesses, and develop a generic framework for scaling up Disaster Recovery Plans and implementation procedures in these and other RUFORUM universities. The pilot study targets Egerton University in Kenya and Makerere University (Uganda) especially ICT Departments and Academic Registrars units.

Key words: Disaster Recovery Plan, Egerton University, Framework, ICT, Makerere University

Résumé

Dans les universités et autres institutions, la technologie de l'information et de la communication (TIC) est essentielle actuellement pour l'apprentissage, la recherche, le profil d'une entreprise et la gestion institutionnelle. Cependant, la durabilité des systèmes en place dépend beaucoup plus de la préparation aux catastrophes et aux plans de récupération. Bien que la plupart d'universités africaines aient ces plans, les procédures de mise en œuvre ne sont souvent pas suivies correctement. L'objectif de cette étude est d'évaluer les procédures de mise en œuvre de plans de récupération du désastre dans deux universités RUFORUM, d'identifier leurs forces, les faiblesses, et de développer un cadre générique pour étendre les plans de récupération du désastre et les procédures de mise en œuvre dans ces universités et d'autres universités RUFORUM. L'étude pilote vise l'Université Egerton au Kenya et l'Université

de Makerere en Ouganda, en particulier les départements de TIC et les unités d'enregistrement des étudiants.

Mots clés: Plan de récupération du désastre, Université Egerton, cadre, TIC, Université Makerere

Background

Higher institutions of learning such as universities are involved in teaching, research and outreach with the end products as degrees, publications and research outputs. They strive to operate as business entities with objectives of producing high quality graduates and other services. They have large data bases to support information archiving on students, research, publication, financial records, etc. Most of these universities have Disaster Recovery Plans (DRP) in place to safeguard their investments in the systems and information accumulated over the years. However, not all these Disaster Plans procedures are adhered to during the implementation leading to frequent systems failures with limited back-ups.

Information Communication Technology (ICT) plays a significant role in the universities operations which include students' online registration, e-learning platforms, Information Management Systems, email, Skype teleconferencing and back up of all data. Other facilities that depend on ICT include Information Management systems, Financial Management and Information System [FINIS], Academic Records Information System [ARIS] and Human Resource Information System [HURIS].

Literature Summary

According to David Atchoarena and Keith Holmes (2004), universities world over are the epicenters of training, research and knowledge creation. Universities play a strategic role in educating and training scientists, teachers and researchers, entrepreneurs and other skilled workers that fuel innovation in high technology and knowledge industries. They generate and keep several databases and other information sources which require archiving, updating and retrieval. These are prone to system breakdown. Thus is important to understand the process involved in Disaster Recovery Plan implementation.

According to Chip Nickolette (2001), the primary objective of a Disaster Recovery Plan is to guide an organization in the event of a disaster and to effectively re-establish critical business operations within the shortest possible period of time with a minimal loss of data. The objective of this study is to assess current and anticipated vulnerabilities at two RUFORUM

	<p>universities, define the requirement of the business and IT communities and provide the two organizations with a plan that enables them to react quickly and efficiently at times of a disaster.</p>
Study Description	<p>The study will be carried out at Egerton University and Makerere University in the faculties of Information Communication Technology (ICT) to identify the different processes that are being carried out during the implementation of the Disaster Recovery Plan both at the ICT units and other units serviced by ICT unit.</p>
	<p>Existing set up will be reviewed and weaknesses in the implementation procedures identified. Dialogue will be held with ICT University manager and others in various units. University documents will be reviewed. Group meetings will be convened to analyze the situation and agree on intervention. Senior university management will be engaged especially since management needs to provide the strategic direction and financial resources for the DRP. Middle management is responsible for facilitating the coordination and effective execution of the plan. Lower management should understand the need for a DRP and provide insights into plan improvements and efficient execution. These groups will be consulted.</p>
Research Application	<p>This research will address gaps in the disaster recovery plan implementation process in the targeted universities and develop a framework that will be used to assess the completeness of their Disaster Recovery Plans. This framework will become a case study to be used to evaluate the strength of the other RUFORUM universities.</p>
Recommendation	<p>It will be important to create clear and simple procedures that can be followed by persons involved in the Disaster Recovery Plans in universities. This creates ownership and accountability in case a disaster should occur. Communication and documentation is important to ensure that all the agreed procedures are implemented. Having a common understanding of each individual or department roles and responsibility, documentation of procedures and important contacts is vital for the success of the implementation process.</p>
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