

A FRAMEWORK FOR INSTITUTIONALIZATION OF INFORMATION SECURITY MANAGEMENT PRACTICES IN PUBLIC ORGANISATIONS IN UGANDA

By

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ABSTRACT

Institutionalization of information security management practices (ISMPs) in public organisations motivated the researcher to conduct this study. Its main objective was to develop a framework for supporting institutionalization of ISMPs in public organisations in Uganda. To achieve this objective, three specific objectives were framed (i) establish the state of ISMPs in public organizations (ii) design a framework that supports institutionalization of ISMPs in public organisations (iii) validate the developed framework. Institutionalization of ISMPs in public organisations has been characterized by lack of aligned structures, inadequate staffing, inappropriate information security policies, insufficient budgets, lack of support from top management and lack of awareness and training programs. The situation has been exacerbated by findings from studies conducted in the same discipline (ISM) that focused more on technical rather than managerial controls. Despite the challenges faced, embracing institutionalization of ISMPs would help to assess security risks, identify threats and vulnerabilities likely to compromise confidentiality, integrity and availability of information. A mixed-methods approach involving both quantitative and qualitative techniques to collect and analyse data was employed. This approach enabled triangulation of both data and theories related to the phenomenon studied. Results presented shows that requirements to design the ISMP framework were identified, defined, framework designed and validated. Based on the feedback from IT experts and information users, no substantial variations that would warrant any change in the initial designed framework. The major contribution was institutionalization of ISMP framework customized to Uganda's situation by incorporating laws that govern information security. The study recommends realignment of existing human resources and capacity building to handle information security issues, increased budgetary allocations, employment of Chief Information Security Officer and Information Risk Owner among others. It is recommended that an appropriate ISMP framework be implemented at operational and tactical levels before total roll out at all managerial levels. This calls for support from top management to effectively control threats and detect vulnerabilities. Future work should aim at framework validation in multiple organisations, hypothesis testing and establishing relationship between constructs based on Gregor's theory on information security and institution theory with regard to institutionalization of ISMPs in public organisations.

Keywords: *information security, information security framework, information security management practices, institutionalization, securing information, public organisations*