Framework for evaluation of effectiveness of integrated financial management information system architecture implemented in public hospitals in Kenya

Integrated Financial Management Information System (IFMIS), is an enterprise resource planning application that captures all functional processes and relevant financial flows within Public expenditure management. IFMIS is being adopted by the Public hospitals to promote efficiency, effectiveness, accountability, transparency, security of data management and comprehensive reporting. However, the Public hospitals are loosing a lot of money through scandals and this has compromised service delivery to the Public. Therefore, the purpose of this study was to investigate the effectiveness of IFMIS as used in Public procurement services in Public Hospitals in Kenya and come up with an enhanced secure technical architecture. The objectives of the study were: to assess the extent to which IFMIS has been implemented in Public procurement services in Public hospitals in Kenya, to evaluate the effectiveness of IFMIS in enforcing logical access and technical controls in Public procurement services in Public Hospitals in Kenya and to develop a framework that will evaluate the effectiveness of IFMIS architecture that is implemented in Public procurement services in Public hospitals in Kenya. The study used mixed method research design targeting users of IFMIS. Stratified sampling was used to select the target population of 132 in 4 hospitals in Kenya. The target population was from 5 homogeneous stratum comprising of 44 Procurement Assistants, 36 Finance Assistants, 12 Audit Assistants, 28 Medical Practitioners and 12 ICT Staff. Proportional allocation method was used to calculate the sample size which was 99 respondents. The data was collected through questionnaires and direct observation. Content validity was done to ascertain the validity of the research instruments. Reliability of the instruments was carried out using test-retest technique. Internal consistence of data was computed using Crochbach Alpha Computation. Analysis of Quantitative and qualitative data was through descriptive and inferential statistics methods and content analysis respectively. The study developed a framework of enhanced technical architecture of IFMIS that would streamline procurement services in Public hospitals and improve provision of quality health care.

Keywords: IFMIS, Technology Architecture, Logical Access Controls