

## ABSTRACT

Information systems are created to enable organizations utilize technologies to gather and use information for effective management. Ministry of Education Science and technology (MOEST) is committed to the implementation of Education Management Information System (EMIS) to provide data to improve planning, policy formulation and decision-making. MOEST provides Information Technology (IT) infra structure, trains personnel to manage data collection and it provides funds annually to the District Education Officers (DEO) to facilitate EMIS activities since 2004. Despite these efforts, a survey by MOEST revealed that data capture completion rate had been low at the districts education offices particularly in Nyanza Region, thereby delaying the nationwide data processing. The key factors in data entry are personnel, technological and organizational. Their Impact on EMIS outcomes in Nyanza region were however unknown. Therefore the purpose of this study was to establish the impact of selected factors on EMIS outcomes in Nyanza Region, Kenya. The objectives of the study were to; determine the impact of personnel, technological and organizational factors on EMIS outcomes. The study was based on the concept that personnel, technological and organizational factors impact on information and system quality outcomes. The study employed correlation and descriptive survey research designs. The target population was 34 District EMIS coordinators, 68 Data Capture Personnel, 34 DEOs and the Regional EMIS Coordinator. Simple random sampling technique was used to select 29 District EMIS coordinators, 29 DEOs, 58 Data Capture Personnel and purposive sampling technique for Regional EMIS Coordinator. The data were collected using questionnaires and Interview schedules. Face validity of the research instruments for data collection were determined by experts in Educational Administration were consulted and their input included in the final draft of the instruments. Pilot study was conducted using 3(8.8%) District EMIS coordinators, 6(8.8%) data capture personnel and 3(8.8%) DEOs of the target population. Cronbach's alpha was used to determine the reliability of instruments and their average reliability coefficients were 0.77 and 0.78 for the District EMIS coordinators Questionnaire (DECQ) and Data Capture Personnel Questionnaire (DCPQ) respectively. Quantitative data was analyzed using descriptive and inferential statistics. Qualitative data was analyzed in emergent themes. The study established that personnel, technological and organizational factors contribution of 16.9%, 12.7% and 18.3% respectively towards EMIS outcomes. Job design, gender and age were established as personnel predictors of EMIS outcomes, while Staff competency on EMIS and availability of IT infrastructure were dominant technological factors impacting the outcomes of EMIS. Management support and resources allocation were the best organizational predictors of EMIS outcomes. The study concluded that organizational had higher impact on EMIS outcomes followed by personnel and technological factors. The study recommended that the user satisfaction could be improved by facilitating personnel well to carry out EMIS activities; the transfer of data capture from the DEOs to individual learning institutions to reduce the bulk of work; MOE should consult with stakeholders to avoid duplication of data collection; continuous EMIS staff development programmes for educational managers to improve managerial EMIS/IT knowledge. The findings of this study could be useful in providing recommendations to the MOE that would contribute to the improvement and sustainability of EMIS.

