Enterprise resource Planning system such as Systems Applications and Products in data processing is a good example of a system that allows organizations to adopt integrated systems in the running of their businesses in form of automated systems. The main aim of integrated systems is to offer a good storage of information from all business departments in the entity, with the aim of improving organizational performance. Employing SAP system is an expensive undertaking as it involves time input and the human aspect, business organization are therefore required to understand factors to be considered that might affect putting SAP system in to study used the Delone and Maclean Success model based on the Information Systems (IS) theory. The general objective of this study was to investigate factors that affected the implementation of Systems Applications and Product in data processing at plan international. This study adopt a descriptive research design; with a target population of 141 employees working at Plan International. A sample random sampling method was used to select 42 respondents. Data was collected by use of questionnaires which were distributed via e-mail and analyzed through the use of statistical package of social sciences (SPSS version 21). Analysis was done through descriptive and inferential statistics. Regression analysis was used to determine the relationship between the dependent and independent variables. The study found the relationships the implementation of SAP for data processing and user skills was insignificant. In the study found that infrastructure support and budget allocation were found to be key determinants of SAP implementation at Plan International. The study recommend more focus on improvements of systems support infrastructure and all inclusive budgeting processes for SAP implementation