ABSTRACT

Currently, PT. XYZ has become a pioneer in implementing SAP ERP. PT. XYZ has a complete ERP that connects all the modules needed in PT. XYZ's business processes. Since 2020, PT. XYZ has implemented 6 (six) ERP modules consisting of Finance & Controlling (FICO), Human Capital Management (HCM), Production Planning (PP), Sales & Distribution (SD), Material Management (MM) and Project System (PS). The ERP system can facilitate business by presenting information in real time and accurately, so that it can make it easier for management to make decisions quickly and accurately. In 2022, PT XYZ wants to optimize its operational operations by re-implementing SAP ERP because in its operations there are still several business processes that have not implemented SAP ERP to improve Business Process Improvement, cost efficiency through integrated digitalization and PT XYZ's corporate value. One of them is the relationship between the production and financial accounting departments which requires production plan data which is currently still processed using Ms Excel. The role of the information system is carried out based on the results of BPI.

This study aims to design SAP software based on Business Process Improvement and SAP Activate. Business Process Improvement is used for the smooth running of Real Value Added (RVA), minimizing Business Value Added (BVA) activities, eliminating Non Value Added (NVA) activities. While SAP Activate is used starting from the Discover, Prepare, Explore, Realize stage to design SAP with the Production Planning module.

The results of the research on the existing business process in the production section show an efficiency value of 53% with a cycle time of 965 minutes. After that, a new business process is proposed to improve the existing business process. The proposed business process in the production section shows an efficiency value of 69% with a cycle time of 215 minutes. The proposed business process shows an improvement of up to 13% in process efficiency.

Based on the results of Business Process Improvement, the design of the ERP system using SAP software was made starting from the discover process, namely the initial planning by searching for all data and viewing the ongoing business processes, Prepare, namely the design of the organizational structure, applications, description of existing business processes and company business processes that are applied to the company model-based system for the purposes of GAP analysis and standard improvement, explore, namely by identifying business processes to make adjustments to the designed system, realization, namely customizing SAP based on the needs and business processes to be designed. PT XYZ wants to optimize the use of SAP software by creating reports and forms to facilitate production planning time, designing and processing RKAP and RKK data.

Key Word: SAP *Activate*, *Business Process Improvement*, *software*, SAP, *Production Planning*