Configuration Plan of SAP-ERP Financial Accounting module for a Military Unit in the Philippines

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ABSTRACT

In this time of fast-paced work environment, business entities need to think of ways to properly handle such data and processes to ensure smooth operations and be able to compete in the global economy where change is inevitable. In response, several establishments have used new information systems known as enterprise resource planning (ERP) systems. At its core, an ERP is an application that automates business processes drawing on a central database that collects inputs from sections including accounting, manufacturing, supply chain management, sales, marketing, and human resources. The principal concept of this paper is to present the assistance provided by the Enterprise Resource Planning (ERP) system of a Military institution to its financial department. The SAP-ERP Financial Accounting (FI) was configured to enhance the standard process and unified information in the management. The findings of this study help and promote the institution systematizing the business processes and creating operational competencies. This research study seeks to identify the requirements in the configuration like organizational structure, processes, and financial data. Issues and major challenges related to the implementation were also discussed. ASAP roadmap utilized the configuration plan because it supported project initiation until implementation. The ICT Infrastructure associated with the implementation of the SAP-ERP system was also documented. The configuration targets are organizational structure, processes, and master data. For recommendation, the institution may adopt the configuration plan to hasten the decision-making process, simplify the operations and reduce costs. It also increases the management control over the business activities and secures company data.

Keywords: - *ASAP, Financial Accounting, ERP, SAP*

1. INTRODUCTION

Information technology (IT) is a necessity in an organization and the industry in order to manage usual areas of information difficulties such as budgeting, student records, audit and preparation of salaries, purchase, and supply, examination results, and records. Effective planning and control of an organization require an information system to retain essential information over a long period of effective decision-making.

Implementing an ERP system is a key project needing a substantial level of capital, commitment, and changes throughout the association. Often the ERP implementation project is the sole major project that an organization has ever launched. As an outcome, the subjects surrounding the implementation process have been one of the major concerns in the industry. And it further degrades because of numerous failed cases including a few fatal disasters which lead to the demise of some companies (Moon, Y. 2007).

Now, ERP is generally common in big companies but not every company gets a return from using the ERP system. They are failing to set up the ERP because they cannot reach the predetermined goal. The ERP is not only a technology that supports the management but also a way of management.

On the effect of the ERP system on academic performance (Burtamani & Shatat, 2021), Enterprise Resource Planning (ERP) system is a very influential response for many academic and non-academic institutions case if it has been implemented and used effectively. Otherwise, the structure will disturb several business processes. And for this realization, the institution's financial management team may consider adopting the technology SAP ERP-FI

This study aimed to configure and implement the SAP Financial Accounting module for this military organization. Specifically, this study sought the answer to the following problems: What are the configuration requirements that shall be considered in the Financial Accounting Module in terms of Organizational structure; Processes; and Financial Accounting data? What are the major issues and challenges related to ERP implementation? What ICT infrastructure shall support the ERP implementation?

This study envisioned configuring and implementing the SAP Financial Accounting module for the military organization. Specifically, this study aimed to achieve the following: To recognize the configuration requirements in the Financial Accounting Module: Organizational structure; Processes; and Financial Accounting data? To determine the major issues and challenges related to ERP Implementation? And to identify the ICT infrastructure that will support the ERP Implementation.

2. REVIEW OF RELATED LITERATURE

Shehab, E. M., et. al, (2004) mentioned that in the last decade, ERP systems have received a noteworthy total of consideration from researchers and practitioners from a diversity of functional disciplines Enterprise resource planning (ERP) system solutions are now in high request by both industrial and service organizations because they offer a strongly integrated solution to an organization's information system needs.

The financial accounting module is a business procedure intended specifically for organizations to uphold their financial records efficiently daily, for management to be able to establish their financial position, and for those who need to generate financial statutory reports for external purposes to meet the needs of various stakeholders in real-time (Okungbowa, A. 2015). The FI module consists of other sub-modules, including General Ledger (G/L), Accounts Receivable (AR), Accounts Payable (AP), Bank Accounting, Asset Accounting, Special Purpose Ledger, Travel Management, and so on. FI is integrated into other modules like Sales and Distribution (SD) and Material Management (MM). Postings made in these modules with financial implications are posted in real-time to FI.

According to Callejas and Terzi (2012), the implementation of an ERP system is a drive that entails strong project supervision methods and involves direct and indirect costs throughout the life cycle stages of the system. It needs to grasp that application took over budget and schedule, project planning and management, including the definition of functional requirements, the project's scope, data conversion, and business process re-engineering. Also, organizations need to better follow success factors within the system and enhance inter-agency collaboration for ERP support to achieve more cost-efficient ERP implementation, maintenance, and growth.

In the Philippines, SAP has knotted up with several academic organizations and universities to help figure out the future of education in the country. The objective of these programs was to empower partnerships between various faculty, students, customers, and SAP partners in tapping into the enormous resources of SAP and using them to improve the quality of services and solutions rendered to customers in the future (SAP Brian Online, 2020). Some of the universities include AMA Computer University, Angles University Foundation, Asia Pacific College, Far Eastern University, Jose Rizal University, Mapua Institute of Technology, University of the Cordilleras, University of Santo Tomas, and others.

As stated by Qian, L. et. al (2015), the expenses related to educational institutions continue to surge engaging even great emphasis on the essential to understand and control costs. In response to these needs, many administrations are accepting business management frameworks, procedures, and technologies. With the enlarged business actions, Enterprise Resource Planning (ERP) vendors recognized this new market prospect and quickly stirred in to endorse business solutions at Purdue University. Purdue is one of the first academies to adopt SAP as the solution to improve its growth, advance services, and increase alliance between departments.

3. METHODOLOGY

The ASAP methodology was used for this project for it provided the roadmap for enhancing and nonstop application of SAP systems in business processes. This solution was settled to ensure a positive, cost-effective, and on-time transport of all project phases. This framework streamlines the use of methods, tools, accelerators, and templates that were originally developed for SAP projects (Eshna, 2022.)

Figure 1. The Accelerated SAP Roadmap (STechies, 2022)

A letter was sent addressed to the offices involved in the institution's financial accounting management requesting the approval to conduct a study regarding the agency's logistics management. The researchers conducted interviews to gather the information that is necessary for the analysis of the system and defined the study's goal, objectives, scope, and delimitation.

Business Blueprint. The purpose of this phase is to achieve a common understanding of how the company will run the SAP and to support the business. In this phase, the researchers conducted a meeting with the persons involved like the head of offices and other staff to discuss the existing process, business objectives, and structural process. Business Process Model Notation of as-is and to-be of the processes was utilized.

Realization. The purpose of this phase is to devise all the business process requirements based on the Business Blueprint. The system configuration procedure is provided in baseline; and final configuration.   In   this phase, the researchers configured the Financial Accounting Module based on the result of the provided blueprint.

Final Preparation. This aimed for the ultimate work that includes testing, end-user training, system management, and cutover activities. This phase finalizes to go live. On the successful accomplishment of this point, the researchers tested the configuration of the SAP ERP FI module.

Go Live and Support. This is the last phase of the project where the newly implemented SAP System is acknowledged as live. Data will now be inputted and processed by the users as part of their duties and daily routines. The issues that arise will be documented, supported, resolved, and audit-trailed by a support team on an ongoing immediate basis and all open crucial issues must be resolved as part of this phase.

In this phase, the researchers documented and monitored the issues that need to be resolved.

Scope and Delimitation

This study covers the process of the A/R transactions and posting to G/L accounts. Transactions of the said processes were shown in this paper. It is limited up to Phase 4 of the ASAP Methodology, i.e., the Final Preparation and Testing.

Sources of Data

The main bases of data for this study were hunted from the offices like Finance Office, Accounting Office, and Supply Accountable Officer. Observation of the common procedure with regards to the account receivables was performed.   Additional sources of data from papers such as MS-Excel worksheets, ledgers, logbooks, and acknowledgment Receipt of Equipment were collected and examined during the conduct of this study.

4. DISCUSSION OF FINDINGS

Configuration Requirements of the FI Module

The configuration requirements were divided into three areas: organization structure, process, and FI master data.

On Organization Structure. This covers the as-is organization structure and the to-be organization structure for the FI module. The first part discusses the roles of staff in the FI process and the second part is on organization structures

that are mapped to the SAP FI module. The diagram in figure 2 below illustrates the relationship of the above-mentioned roles that form the functional organizational structure of the organization.
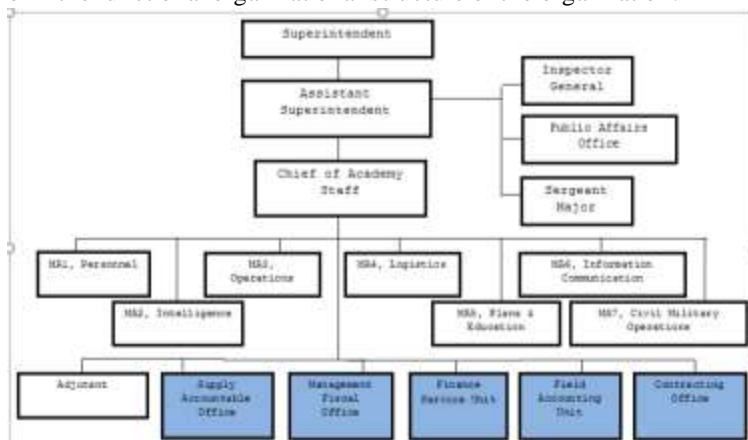

Figure 2. As-is Organizational Structure

User accounts can be created in the SAP ERP to accommodate the said above staff but only user accounts for those who will have direct access to the system should be created. For the organization structure needed to run the SAP ERP FI module, the following were configured: company code, chart of accounts, business areas, fiscal year, controlling area, and the operating concern. The diagram in figure 3 shows the to-be organization structure. Each of these is discussed below.
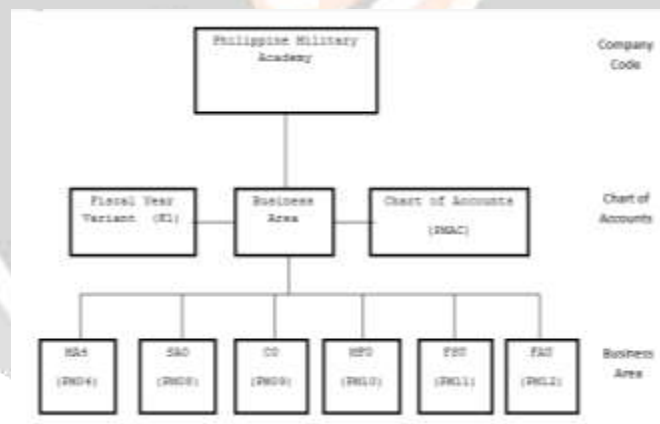

Figure 3 . To-Be FI Organizational Structure

Company Code. The screenshot in figure 4 below shows the definition of company code where all transactions are posted and the making of items for every financial statement. The company code is the center of the organizational unit of external accounting within the SAP system. Every transaction that is applicable for Financial Accounting is encoded, stored, and evaluated at the company code level.

Figure 4. <u>Company Code</u>

<u>Chart of Accounts</u>. Figure 5 below shows the configured Chart of Accounts. A chart of accounts is defined at the client level and assigned to a company code. It also includes a list of General Ledger account's master data that is under different account groups of a company code.
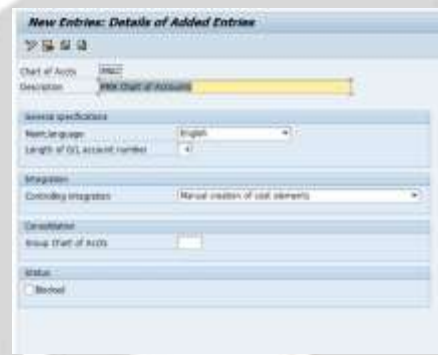

Figure 5. Charts of Accounts

Sample G/L accounts were created after the account groups and retained earnings account had been configured. Sample screenshots that show the creation of specific G/L accounts are shown in figure 6.

Figure. 6. Sample G/L Accounts

Major Issues and Challenges Related to the ERP Implementation.
Implementation for the company may be difficult at first when it comes to technical issues. Servers and workstations will need to be updated and replaced to be compatible with the ERP system. The speed of the Internet of the Company should also be considered. There are also conflicts about data transfer in ERP because basically, almost all depends on the old data stored in spreadsheets and other documents. Old files that have been stored for many years may appear inappropriate or may be unmatched in the requirement of the system. The next issue or challenge is the

cost of implementing ERP even in a small business to medium business or enterprise. It will cost millions of pesos for the software and hardware cost, licensing fees, deployment, annual maintenance fees, consultants fees, and training fees. The bigger the company the bigger it will cost.

ICT Infrastructure that supports the ERP Implementation

To support the SAP ERP implementation, certain ICT infrastructures need to be set up. Primary, the network connectivity has to be configured first.   The proposed SAP/R3 implementation is shown in figure 7. The system will be running on the server and the workstations that are connected thru a local area network. Each computer should meet the minimum hardware and software requirements discussed below for the SAP ERP implementation.

Figure 7. Running on the server and the workstations that are connected thru a local area network (de Assuncao, M. D., & Lefevre, L. 2012).

5. CONCLUSION AND RECOMMENDATIONS

Conclusions

For the configuration requirements, the following were the concluded: On Organization Structure, a user account can be created for the staff who will have direct access to the system and organization structures, which include, company code, chart of accounts, fiscal year, and business areas can be mapped. For the Processes, given the current as-is process in account receivable, the activities have equivalent functionalities in the SAP ERP FI module. And for the Financial Accounting Data, the master data for the FI module can be created in the SAP ERP. In addition, the existing handling of financial accounting is entirely manual, and this can cause a human error, misinterpretation, loss of documents, and lower the speed of the transaction. With the implementation of the SAP FI module, it can provide better data storage, and comprehensive, and accurate data.

The issues and challenges related to the SAP ERP implementation of the organization are its high overall cost, the software, maintenance, and the training of personnel. But the institution can provide when it comes to its technical requirement during the implementation.

The current ICT infrastructure needs to be reconfigured to suit the needs of the SAP ERP implementation as well as the upgrading of the existing hardware and software.

Recommendations

The researcher recommends the implementation of SAP ERP in the organization to be more competitive and to enhance the process of handling transactions, especially on Financial Accounting.

The institution may also include the supplementary module of SAP ERP, such as controlling and materials management, for a more comprehensive SAP ERP implementation. This will also allow the integration of different processes in the institution.

6. ACKNOWLEDGEMENT

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