

ABSTRACT

This system development project is aimed for developing a computerized information system to support international purchasing functions for an oil company that has total transactions of purchases around 1,000 to 1,500 transactions a year. After the study of the existing system, this project is suggested as a system that can enhance the business functions in terms of capability and control by using a computerized database contains all the necessary information related to the purchases and the historical of all purchase orders.

The expected capabilities from this database system can be clarified as greater processing speed in using the computer's ability to calculate the transactions of currency exchange and total transactions occurred during the period of time; sort, and retrieval details of the awarded order for supporting the procurement officer to make a better decision making in the next procurement. The other aspect is to centralized all the necessary information into the computer storage so that every people related to the system would be able to get faster information retrieval, need not to depend on only the hard copy file as it was used to be in the existing system.

The study for the project started from finding all the processes related to the purchasing transactions and focused for the areas of improvement, both of manual functions and where the automated functions can be replaced. Using the analysis tools such as context diagram, dataflow diagram, data dictionary and process specification, are the main techniques for the developing the environmental model and behavioral model. Besides the area under the structured process, the analyst add more additional technology to let the new system take more advantages from using the internet mail to speed up the process of placing the purchase order to their foreign suppliers. To fulfill the company concerns in authorized purchase order issuance, the system provides the security for limited accessing to the system for only the authorized persons and also the accessibility in the network level. Moreover, it also ensures the authorized access to the process of purchase order issuance and guarantee for the company delegation control by allowing the system to capture the authorized approval. In additional, the management would be able to seek for the company's competitive advantages from this computerized system by capturing on the repetitive needs on item purchased to conduct a better policies or arrangement with the main suppliers.

The outcome of this project is then as the above-mentioned a computer system that design to be a PC-LAN based computerized system using Microsoft Access version 2.0 which is the available software for the case-study company.

