

ABSTRACT

This project is a result of research and database set up to specify an approximate computation of probable project cost especially for the onshore and offshore construction by the Oil and Gas client company and sub-contractor. The research experiment was conducted in Facilities Engineering Department of an oil and gas business and the result has been measured in terms of the degree of achievement process cost reduction on the proposed system process compared with an existing system.

There are two main functions in this research. The first function is to design and set up database for data collection and the second is to calculate probable project actual cost to date and the cost forecast against the budget cost base line for monitoring, measuring, and analysis actual project cost status and currently trend of client and sub-contractor mode in the company. The program could generate various reports upon the filter defined by user to present summary cost and steps in which the indicated actual construction cost.

The result of data calculation and processing of developed system show that the good database management system contains more useful, accurate, reliable, timely information, and better than the conventional type by taking only 5 minutes to generate various types of report when users require. In term of accuracy for data storage and processing, the system can be analyzed to delicate level of the costs required to construct facilitating equipment, manpower, material, consumable, and including transportation service to construction. Database has been gathered and executed under Microsoft Access. The database management software is by keeping shared data among several users under distributed client/server network routing.