ABSTRACT

In the current digital era, the use of information systems is crucial. With an integrated information system, companies can optimize the use of resources. This is very relevant for companies, such as PT Air Batam Hilir (ABHi). PT Air Batam Hilir (ABHi) as a partner of the Drinking Water Supply System Business Entity (BU SPAM), is responsible for investment and management of spending by the Drinking Water Supply System Business Entity (BU SPAM) or Capital Expenditure (CAPEX) to overcome supply deficits and meet demand growth. Although PT Air Batam Hilir (ABHi) has extensive operational experience, the management of Capital Expenditure (CAPEX) still only relies on spreadsheets. According to PT Air Batam Hilir (ABHi), along with the development of the era and technology, this management has become less relevant to modern digital systems. In addition, capital management using spreadsheets also makes it difficult to store and organize data. Therefore, the researcher took the title "Design and Construction of Capital Expenditure Monitoring Application Using Waterfall Method (Case Study at PT Air Batam Hilir)", this study aims to propose an initiative to design a Capital Expenditure (CAPEX) management application that includes data, such as budget approval, purchase request process, purchase order process, and several other procurement processes at PT Air Batam Hilir (ABHi). This solution not only helps companies in managing large capital, but also provides opportunities for developing practical skills for writers in the company. It is hoped that this initiative will bring PT Air Batam Hilir (ABHi) towards progress by utilizing information technology to improve company performance in managing large capital through applications. This study uses the waterfall method in its implementation and the appearance of the application uses react-Javascript, and Node.js with the express framework for implementing functions to match the designed algorithm. The results of this study are a web-based application for monitoring Capital Expenditure (CAPEX) data that has been tested using blackbox testing to match the functionality expected by PT Air Batam Hilir so that it can be used to facilitate the management of the capital.

Keywords : Application, Capital Expenditure, Management, Waterfall