

Nanda Suba Meriska Putri, 2016, *Sistem Informasi Pengelolaan Permintaan Material Konstruksi Proyek Kalisogo-Waru Gas Distribution Pipeline Pada Kantor Proyek PT. JFE Engineering Corporation Indonesia*. Tugas Akhir ini dibawah bimbingan Dra. Rini Semiati, M.Si dan Army Justitia, S.Kom, M.kom. Program Studi Diploma Tiga Sistem Informasi, Fakultas Vokasi, Universitas Airlangga.

ABSTRAK

PT. JFE Engineering Corporation Indonesia adalah perusahaan terkemuka yang bergerak dibidang rekayasa teknik, pengadaan dan konstruksi yang mampu melaksanakan proyek besar di Indonesia. Permasalahan yang dialami oleh PT. JFE Engineering Corporation Indonesia berada pada kantor proyek dimana belum efektifnya proses permintaan material konstruksi proyek ke kantor pusat. Tujuan dari Tugas Akhir ini adalah membuat Sistem Informasi Pengelolaan Permintaan Material Konstruksi Proyek Kalisogo-Waru Gas Distribution Pipeline Pada Kantor Proyek PT. JFE Engineering Corporation Indonesia yang mencakup 9 proses, meliputi proses permintaan material konstruksi proyek, proses persyaratan dokumen vendor, proses list persyaratan dokumen vendor, proses persyaratan inspeksi, proses proforma daftar kemasan, proses daftar penyimpangan, proses dokumen pengiriman, proses dokumen terlampir, proses *generate* laporan.

Sistem Informasi Pengelolaan Permintaan Material Konstruksi Proyek Kalisogo-Waru Gas Distribution Pipeline Pada Kantor Proyek PT. JFE Engineering Corporation Indonesia dibangun melalui empat tahapan. Tahap pertama adalah mengidentifikasi proses saat ini yang dijelaskan pada diagram *docflow* kemudian merumuskan permasalahan yang terjadi yang digambarkan dengan diagram *fishbone* sehingga dapat menganalisa kebutuhan yang berkaitan dengan proses-proses tersebut untuk mendesain sistem dan database. Tahap kedua adalah mendesain database, proses yang dilakukan adalah membuat *Conceptual Data Model* (CDM) yang terdiri dari 23 entitas, kemudian di-*generate* ke *Physical Data Model* (PDM) yang terdiri dari 24 tabel. Sedangkan desain proses digambarkan dengan *hierarchy chart* dan *Data Flow Diagram* (DFD) menghasilkan lima proses besar. Tahap ketiga adalah mendesain form input dan output. Tahap terakhir adalah mengimplementasikan desain input dan output sistem yang telah didesain ke dalam program dengan menggunakan bahasa pemrograman berbasis web kemudian melakukan uji coba sistem dimulai dari proses *login*, proses pengelolaan data master, proses pemesanan, proses *Check-In*, proses *Check-Out*, proses pembatalan pemesanan, proses pengelolaan data kamar, dan proses *Generate* Laporan.

Berdasarkan hasil implementasi dan uji coba sistem, Sistem Informasi Pengelolaan Permintaan Material Konstruksi Proyek Kalisogo-Waru Gas Distribution Pipeline Pada Kantor Proyek PT. JFE Engineering Corporation Indonesia yang dibuat telah sesuai dengan kebutuhan fungsional pada proses bisnis PT. JFE Engineering Corporation Indonesia yaitu dapat menangani beberapa proses bisnis secara efisien dan dapat menampilkan laporan secara tepat.

Kata kunci : Sistem Informasi, Permintaan Material Konstruksi, JFEI

Nanda Suba Meriska Putri, 2016, *The Information System of Construction Material Request Management of Kalisogo-Waru Gas Distribution Pipeline at Project Office of PT. JFE Engineering Corporation Indonesia*. This Final Project is under guidance of Dra. Rini Semiati, M.Si and Army Justitia, S.Kom, M.kom. DiplomaThree of Information System Study Program, Faculty of Vocational, Universitas Airlangga.

ABSTRACT

PT. JFE Engineering Corporation Indonesia is a leading company that engaged in an engineering fields, procurement, and construction that able to control the big project in Indonesia. The occurred problems on this company are focused on the office itself where the project of construction material request has not been effective to the central office. The purpose of this final project is to create The Information System of Construction Material Request Management of Kalisogo-Waru Gas Distribution Pipeline at Project Office of PT. JFE Engineering Corporation Indonesia which has nine process, such as the request process of material construction project, the process of document requirements from the vendor, the process of document requirement listing from the vendor, the process of inspection requirement, the process of packaging list performance, the process of deviation list, the process of document sending, the process of attached document, and the process of generate reports.

The Information System of Construction Material Request Management of Kalisogo-Waru Gas Distribution Pipeline at Project Office of PT. JFE Engineering Corporation Indonesia was built in four steps. The first step is identifying the current process that described in the *docflow* diagram, then formulate the occurred problems that illustrated by *fishbone* diagrams so as to analyze the necessary which related on those process to design the system and the database. The second step is designing the database. The process is to create the *Conceptual Data Model* (CDM) that consist of 23 entities, then generate it to *Physical Data Model* (PDM) that consist of 24 tables. Meanwhile the design process is illustrated by *hierarchy chart* and *Data Flow Diagram* (DFD) which produce five big process. The third step is designing the input and output form. The last step is implementating the input and output system that already designed to the program using web programming language, and then doing the trial system that started from login process, master data management process, booking process, check-in process, check-out process, cancelled booking process, room data management process, and generate report process.

Based on the implementation results and trial sytem, The Information System of Construction Material Request Management of Kalisogo-Waru Gas Distribution Pipeline at Project Office of PT. JFE Engineering Corporation Indonesia which already created are exactly same as the functional necessary on the business process of PT. JFE Engineering Corporation Indonesia, that compatible to do some of business process effeciently and able to display the reports properly.

Keywords : Information System, Construction Material Request, JFEI