MONITORING OF DEVELOPMENT APPLICATION PROCUREMENT INFRATEL TELECOMMUNICATIONS IN INDONESIA TBK PT (LOGISTIC UNIT DIVISION INFRATEL)

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ABSTRAK

Unit Logistics Division Infratel PT. Telekomunikasi Indonesia Tbk. is the unit in charge of procurement of goods, therefore Infratel Division Logistics Division PT.Telekomunikasi Indonesia Tbk. should be able to provide needed goods companies in supporting the activities of work, but in reality the process of procurement of goods are still found some problems, among others, each stage in the procurement of goods can not be well understood, less terpantaunya stages of procurement lead in monitoring the duration of the procurement that are not clear, the ever increasing number of purchase orders outstanding, which means indicate that many procurement projects are hampered to the detriment of the company.

To overcome these obstacles, the company tries to establish a Procurement Monitoring applications, but applications built still has some weaknesses, among others, are not capable of monitoring the duration of the procurement so that employee performance can not be controlled properly.

Based on the research and after doing an alpha test and Procurement Monitoring Applications betha against the company should build a Procurement Monitoring Application which can provide information on procurement stages with clear conclusions can be drawn is known that the Procurement Monitoring Applications at PT. Telekomunikasi Indonesia Tbk Infratel Division Logistics Division can provide information on procurement stages with a clear, capable of monitoring the procurement with the appropriate time so as to minimize the number of the Outstanding Purchase Order as well as assist in the process of monitoring the work of employees of PT. Telekomunikasi Indonesia Tbk Infratel Division Logistics Division.

Keywords: procurement dashboard, po outstanding, purchase orders, procurement

1. INTRODUCTION

1.1 Background

That requirement is one computer cans not be separated from daily life are days.Computers Used as a supporting tool to ease the job, especially for agencies thatboth public and private. But in fact the computer is Used by the company cans notes givereliable information, fast, accurate, and timely in the absence of a Suitable informationsystem.

Field Logistics Division Infratel PT. Telekomunikasi Indonesia Tbk. is the field in charge of procurement of goods, therefore Infratel Division Logistics Division PT.Telekomunikasi Indonesia Tbk. Should Be Able to Provide needed goods companies insupporting the activities of work, but in reality the process of procurement of goods are still found Some problems, Among others, EACH stage in the procurement of goods cans not be well understood, less terpantaunya stages of procurement lead in monitoring theduration of the procurement That are not clear, the ever Increasing number of purchaseorders outstanding, the which indicate That means many procurement projects arehampered to the detriment of the company. In addressing these issues the company Trying to build an Application Monitoring ofProcurement, but the information system is built still has Some Weaknesses, Among others, are not capable of

monitoring the duration of the procurement so That employee performance cans not be controlled properly.
With the discovery of problems That cans nearly the pace of the company's performance in the procurement process, then the company Should build aProcurement Monitoring Application the which cans Provide clear information on the procurement stage, Able to monitor the procurement with the Appropriate time so as tominimize the number of the Outstanding Purchase Order as well as assists in theprocess of monitoring the employee's job PT. Telekomunikasi Indonesia Tbk.InfratelDivision Logistics Division. So in writing this final report, entitled "Procurement Monitoring ApplicationDevelopment Infratel At PT. Telekomunikasi Indonesia Tbk (Infratel LogisticsDivision Division)."

1.2 Purpose and Objectives

The purpose of this research is to create a procurement monitoring application thatcan monitor the procurement process from beginning to end and to improv theperformance of the procurement process Infratel Division, Logistics Division at PT.Telekomunikasi Indonesia Tbk. So well controlled.
While the goal to be achieved after the application is realized are:
1. This application is Able to Provide information on procurement stages clearly.
2. This application is capable of monitoring the duration of the procurement of goods.
3. This application is Easier to obtain information on the procurement project.
4. This application cans be Used as an indicator of the outcome to be achieved.

1.3 Limitation Problem

Further to facilitate discussion, so it does not deviate from the issues to be discussedin limitation this research problem, namely:

1.4.1 Procedure

The scope of the company is still in scope invratel division offices only, does not include branch office network consisting of regional and area network. The information system is built based on web and software modeling using structured methods, Data warehouse in this application are available so that applications only need to display the data contained in the database and does not require the transaction process, therefore the application is made for monitoring procurement with a view that is easily understandable and more interesting. This application handles:

1. Procurement
   Process This process is the process of monitoring a number of data and documents according to stages, ie Pre-procurement, Procurement Justification, Final RKS, Invitation RKS, RKS Decision, Explanation Meeting, Proposals Phase 1, Phase 1 Evaluation, E-Auction/Negosiasi, SP3, KMK / Draft Contract, Contract Finalization.
2. Construction
   Construction procurement is the process duration of action after agreeing a contract, then each purchase order given the duration and compared with the duration of the process so that it can be well controlled.

1.4.2 Operating System

This system can be used on all types of operating systems. Example: Windows, Linux, etc..

1.4.3 Software

This system requires only a web browser software. Example: Internet Explorer, Mozilla Fire Fox, Opera, etc..

1.4.4 Brainware

Field Logistics Officer Infratel Division who have access rights to use this application.Among others, Senior Manager of Logistics & General Support, Senior Manager, Logistic Manager Planning, Manager. Below is the rule of every position, among others:

1. Senior Manager of Logistics & General Support (GS LOG SM)
2. Senior Manager
3. Logistics Planning Manager
4. Manager

1.4.5 Netware

Network used this information system is an intranet for this information system for the Field Logistics Division Infratel.

1.4.6 Developer Tools

Tools used in the construction of this information system that is PHP and MySQL as a DBMS (Database Management System) to process the database.

2. MODELS, ANALYSIS, DESIGN AND IMPLEMENTATION

2.1 Model

1. Stage of data collection
   a. Studies Library.
   b. Observation.
   c. Interview.
2. Phase-making software.
   a. Analysis
   b. Design
   c. Coding
   d. Testing
   e. Maintenance

2.2 Problem Analysis

In the normal collection process problems this procurement activities, conducted with 3 (three) approaches, namely:

1. Direct observation of the process of procurement activities in the Field of Logistics and General Support Division Infratel.
2. Conducting a survey by questionnaire to employees in the Field of Logistics and General Support Division Infratel.
3. Conducting interviews directly to the employees in the Field of Logistics and General Support Division Infratel. Of the problems above, we can conclude some things that become major problems in the process of procurement activities are:
   1. Coordination between the executive and field supervisor with the logistics of reporting the implementation of procurement activities less than optimal, so sometimes in the implementation process to be blocked.
   2. Report on progress of procurement activities are not well distributed to all parties concerned the procurement process.
   3. Monitoring the process of procurement activities after the implementation process was not optimal, so it is still possible occurrence of problems in procurement kapaitalisasi.
   4. Dashboard Information System processes of procurement activities have not been functioning as a trigger or trigger in the process of procurement activities, because unable to provide alerts or notification of whether the procurement process is still on schedule (on the track).
   4. Delays and lack of effectiveness of the process of procurement activities, among others, influenced by:
      a. Reference procedures / policies are not well understood by the implementer.
      b. Over load of work.
      c. Work inefficient.

2.4 Model

1. ERD (Entity Relationship Diagram)
   ERD is used to systematically describe the various entities and components of the present system of data and relationships between each entity. To see the connectedness between the existing entities will be described as berkut:

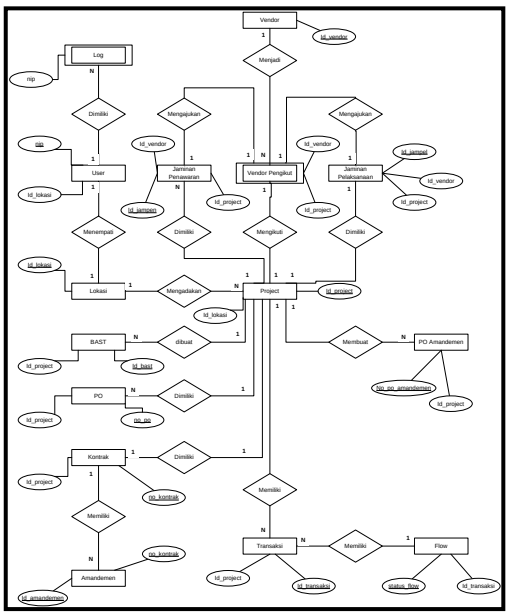


Figure 2. ERD (Entity Relationship Diagram)

2. Relation tables

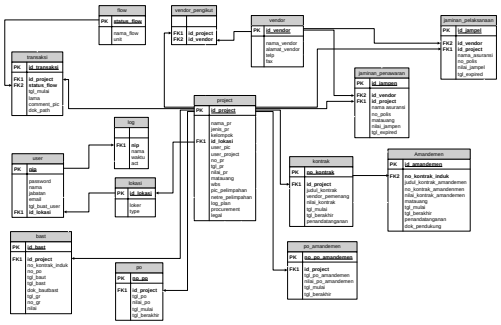


Figure 3. Relationship table

3. Context Diagram

The system built largely described using context diagram.

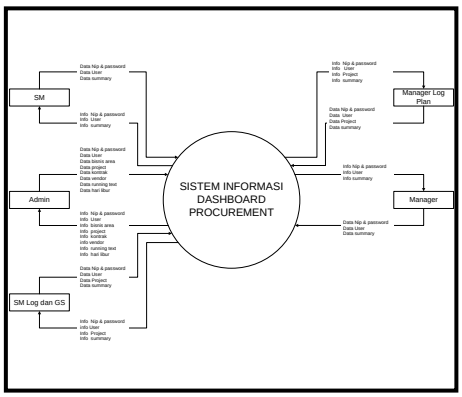
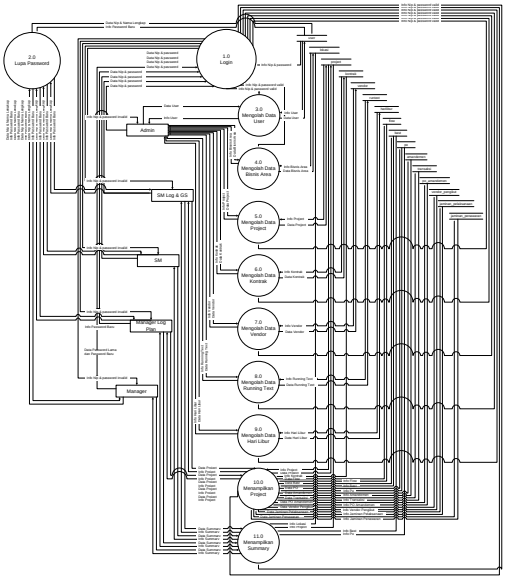


Figure 4. Context diagram

4. DFD (Data Flow Diagram)

From the diagram above context, the flow of data existing in the system is described in more detail using the Data Flow Diagram



2.5 Implementation

The software used on computer systems in building the Procurement Monitoring Applications are as follows:

1. Operating System Windows XP Professional SP 2.
2. Macromedia Dreamweaver MX 2004 for writing program code.
3. Web Browser.
4. WampServer for the local internet.
5. MySQL version 5.0.

6. Navicat Mysql.

1. The initial view



Figure 8. Initial View

2. Display Summary Menu

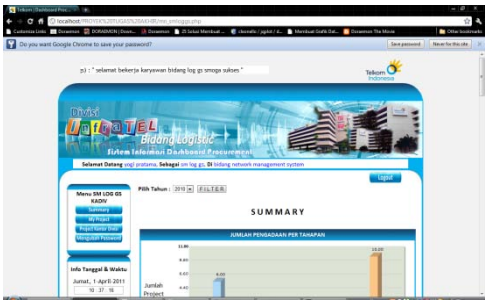


Figure 9. Summary

3. Per Project Display Area

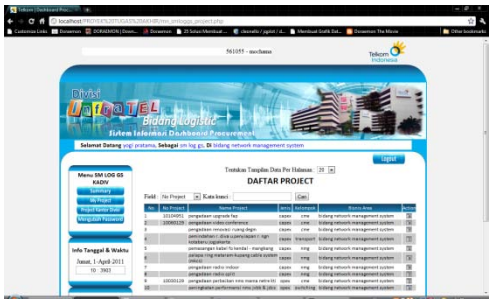


Figure 10. Projects by Sector

4. Display Project Kadiv

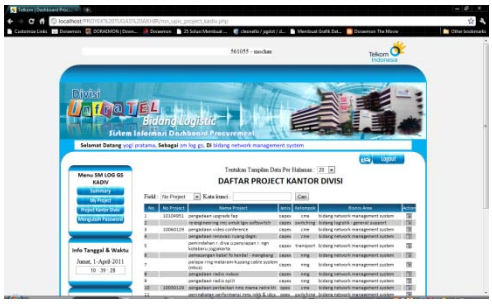


Figure 10. Project Kadiv

3. RESULTS AND DISCUSSION

3.1 Testing

For the implementation actually meets the needs of the testing of the system. Tests performed by black box testing method that focuses on the functional requirements of software

3.2 Alpha Testing

Alpha testing is done by black box testing method which only focuses on the functional requirements only. After testing it can be concluded that:

1. Functionally, the system can already produce the expected outputs.
2. Functionally, the application has to run well in browsers such as Mozilla Firefox, Opera and Comodo.

3.3 Testing Betha

Beta testing is testing conducted objectively where the test by creating a questionnaire on user assessment of the application that was built to further asked directly to the respondent.

Based on test results betha, look for the percentage of each answer by using the formula:

$$Y = P / Q * 100\%$$

From examination of Betha can be deduced that the application is easy to learn, fairly easy to use, this application has a display interface is attractive and in addition the processes contained in the application to run well, but this application still has shortcomings in terms of security .

4. CONCLUSION AND ADVICE

4.1 Conclusion

Based on the discussion that has been done, it can be taken several conclusions, including the following:

1. Make it easier to see every stage in the procurement of goods with clearly.

2. Facilitate in monitoring the duration of the procurement with clear during the procurement phase of the dashboard.
3. Easing the dissemination of information about the progress of each project procurement PT. Telekomunikasi Indonesia Tbk.
4. Application monitoring can be used as an indicator of the outcome to be achieved PT. Telekomunikasi Indonesia Tbk.

4.2 Suggestions

Procurement Monitoring Applications Infratel At PT. Telekomunikasi Indonesia Tbk (Division Logistics Division Infratel) still has many shortcomings in its development.Here are some suggestions for further development:

1. Company needs in terms of procurement of goods will grow faster at each branch office, therefore, necessary that development be done regularly.
2. Monitoring application still requires high security, because of limitations by restricting security system builders used.
3. Need to do training in PT. Telekomunikasi Indonesia Tbk. In order for this dashboard information systems run well as expected.
4. It should be carried out monitoring of this dashboard information systems to avoid mistakes - mistakes.
5. The need for periodic maintenance and scheduled well.

5. REFERENCES

[1]. Bunafit Nugroho. (2004), Dynamic Web Application Programming with PHP and MySQL, Gava Media, Yogyakarta.

[2]. Lukmanul Judge. (2008), Dismantle Trick Secrets of The Master PHP, Lokomedia, Yogyakarta.

[3]. Lukmanul Judge. (2009), Master PHP Tricks Secrets Exposed Again, Lokomedia, Yogyakarta.

[4]. Isak Rickyanto. (2002), Web Design With Dreamweaver MX, Elex Media Komputindo, Jakarta.

[5]. Simarmata Janner, and Imam Paryudi. (2005), Database, C.V Andi Offset, Yogyakarta.

[6]. Abdul Kadir. (2008), Basic Dynamic Web Programming Using PHP, CV Andi Offset, Yogyakarta.

[7]. Bunafit Nugroho. (2007), Professional Development PHP Array Data In Web Applications, CV Andi Offset, Yogyakarta.

[8]. Bunafit Nugroho. (2004), Relational Database With MySQL, CV Andi Offset, Yogyakarta.