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Documentation Analysis And Design Of Pospay Deployment Recapitulation System (Case Study: Pt. Pos Indonesia)

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ABSTRACT: *The purpose of this research is to improve the existing system, which at this time PT. Pos Indonesia, especially in the Pospay division, has not been able to fulfill information needs optimally, especially in the service deployment recapitulation process, staff must process data using Microsoft Excel and not use a well-integrated information system, there is no system that has a large storage for storing documents - Minutes of handover system (BAST) documents and the absence of a system that can facilitate employees in the process of recapitulation and search for data deployment for Pospay services. The methodology used in the Analysis and Design of Information System Recapitulation System Deployment of PT. Pos Indonesia is a Prototype methodology. The initial stage begins with an analysis using BPMN to describe the ongoing business processes. This information system design stage uses the Unified Modeling Language (UML) modeling language. This system is built based on web that can be accessed by parties related to the process. This study produces an Analysis and Design document that can be used by companies to develop information systems for recapitulation data deployment service recapitulation. This information system can manage user data, manage service deployment recapitulation data and manage BAST documents.*
Keywords*: PT. Pos Indonesia, Analysis and Design, Information Systems, Human Resources Management, Recruitment, BPMN, Unified Modeling Language (UML), Web, Prototype.*

I. INTRODUCTION

Financial Services PT. Pos Indonesia (Persero) one of which is SOPP (Online Payment Point System) in one month working with approximately ten new partners, namely UN partners, PDAMs, online shopping and others (payment via SOPP counters) where the process after PKS is signed and ratified, partner payments can be live right / transacted at the Postal Counter with several document requirements that must be met in the live process, the documents that must be fulfilled are as follows:

a. Live service letter

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b. System Handover News (BAST)
c. System Test Result Document (HUS)
d. BA of User Acceptance Test (UAT)
e. BA of Operation Test
f. Technical Instructions for Using the Application

These documents will be prepared and sent by the Examining Team (QA) and sent to the Application Operations team as IT officers who will execute the live service so that the UPT (technical service unit) can conduct transactions.

Documents that have been received will be stored in a PC that has been provided by the company and recapitated in accordance with the date and partners that have been live right, the recapitulation process has so far been done using Ms.Excel.

In the process it has an impact on the management of SOPP's new recapitulation live documents such as: the process of searching for documents requires a relatively longer time and documents sent via email and stored on a PC

Companies other than the PC memory will be higher and can not accommodate documents at the time that is running and in the future, if there is data loss caused by other things (PC damaged by natural disasters or other) that makes The document data is lost because there is no backup of storage that can save the document history and recapitulation data.

Constraints faced at PT. Pos Indonesia (Persero), which is when searching for live service data, and the process of storing live documents for SOPP services or other names for SOPP is POSPAY PT. Pos Indonesia (Persero) is relatively long and more prone to errors, as well as storing documents for new inefficient live service requirements. The application that will be made is expected to help in the process of recapitulation and storage of live documents SOPP services of PT. Indonesian post. Based on this background, a "Documentation of Analysis and Design of a Pospay Service Deployment Recapitulation System" was made.

1. Identification of problems

Based on the background of the problem above, it can be identified that the problems that arise are:

a. The absence of a system that helps in the process to provide a better change in the form of managing the recapitulation of the pospay / sopp service live in terms of faster processing.
b. The process of data storage recapitulation of the Pospay service deployment is still stored in the form of doc / file, so the possibility of losing the data due to computer or virus damage or other cases is very high.
c. The process of finding data recapitulation of Pospay service deployment requires quite a long time, because the stored data has not been integrated with each other.

II. PURPOSE

Based on the background of the problem and the identification of the problem above, the objectives to be achieved with the topics to be discussed are as follows:

a. Building an information system that has a data management feature recapitulation for Pospay service deployment.
b. Building an information system that has a data storage feature into the database, so that the stored data will not be lost easily with the computerized data storage method.
c. Building an information system that has a data retrieval feature needed by Pospay staff and managers so that it can facilitate the user in finding back the data that has entered the system.

Scope

Scope problems in this study are:

a. This research only covers the recapitulation of sopp services and BAST document storage at PT. Pos Indonesia (Persero) that is currently underway such as the process of recapitulation and storage of BAST documents.

b. The Pospay Service Deployment Recapitulation Application manages the storage and search of live document services at PT. Pos Indonesia (Persero).

III. LITERATURE REVIEW

2. Definition of Application

Applications according to Dhanta quoted from Sanjaya are software created by a computer company to do certain tasks, such as Microsoft Word. The application comes from the word application which means the application of the application of use [1]. According to Jogiyanto, quoted by Ramzi: application is an application, storing things, data, problems, work into a medium or media that can be used to implement or implement existing things or problems so that it changes into a new form without eliminating the basic values of terms of data, problems, and the work itself

3. Definition of Information System

An information system commonly refers to a basic computer system but may also describe a telephone switching or environmental controlling system. The IS involves resources for shared or processed information, as well as the people who manage the system. People are considered part of the system because without them, systems would not operate correctly. [2]

4. UML

Unified Modeling Language (UML) is an architectural system that works in OOAD (Object-Oriented Analysis / Design) with one language that is consistent for determining, visualizing, constructing, and documenting artifacts (a piece of information used or generated in a software engineering process, can in the form of models, descriptions, or software) contained in the software system. [8]

IV. RESEARCH METHODS

The system design method used by the author is the Prototype method with the following description:

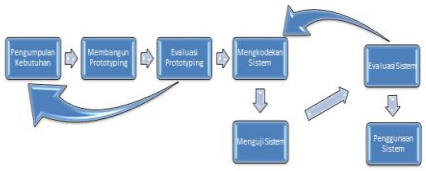

Figure 3.1 Prototype System Development Design

1. Collection of needs

The first step that must be done in the prototype method stage is to identify all devices and problems. A very important prototype method stage is the analysis and identification of the outline requirements of the system. After that, it will be known what steps and problems will be made and solved. Collection of needs is very important in this process.

2. Build a prototype

The next step is the prototype method building step to build a prototype that focuses on customer presentation. For example making input and output system results. While only prototypes first then there will be no further notes that must be done.

3. Protoptype evaluation

Before moving on to the next step, this is mandatory namely checking out step 1, because this is the most important determinant of success and process. When steps 1 and 2 are missing or incorrect in the future it will be very difficult to continue the next step.

4. Encode the system

Before coding or we usually call the coding process, we need to know in advance coding using a programming language. This process is very difficult, because it applies needs in the form of program code.

5. Test the system

After coding or coding it will certainly be tested. There are so many ways to test, for example using a white box or black box. Using a white box means testing the code while black box testing the display functions whether it is correct with the application or not.

PROBLEM ANALYSIS

Systems analysis is a business process analysis describing a set of tasks completed according to existing rules. To illustrate the existing business processes used BPMN and also Usecase Diagrams are used to display the relationships of a number of relationships contained in the system.

Analysis of the Current System

Based on the results of interviews and direct research in the field, it was found that the administrative process carried out in recapitulating the deployment of live postpay services using Microsoft Excel. Pospay employees manually record live service data in Microsoft Excel worksheets which will then be made an official report as a report to the Jaskug Pospay division that the service has been live based on a live request letter from Jaskug Pospay.

Currently the search for recapitulation of the Pospay service live is done by searching data from the hardcopy archive that has been stored in a special storage cabinet for the documents for the recapitulation of the Pospay service live recapitulation.

The following is an illustration of the recapitulation process of the live deployment of the current Pospay service using Business Process Modeling Notation (BPMN).

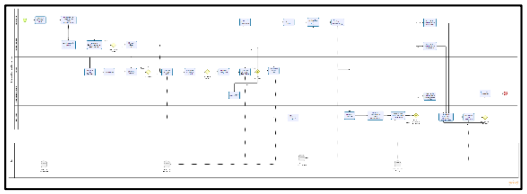

Figure 4.1 Current Business Process

Evaluation of system analysis are ongoing:

Table 4.2 Evaluation P.7 Ongoing Business Processes

Process Evaluation ID	EV-01

Related Analysis	P.7 Recapitulation of Deployment Services
Evaluation	
The recapitulation process of the Pospay service deployment does not yet have an information system that can store new documents and an integrated system that can make it easier for officers to recapitulate new services or services that will make changes to specs. Advantages: - Deficiency: 1. In the process of finding data, the clerk must search one by one in the folder / file that is in the local storage of your personal pc / laptop. 2. The possibility of data loss is high. 3. The recapitulation process is not effective and efficient, so the process of recapitulation and manufacturing of BA requires quite a long time.	
Solution	
From the above evaluation, to overcome the deficiencies in the existing system process, the system built must be able to: 1. Saving BAST document data and recapitulation of Pospay service deployment 2. Looking for BAST data and recapitulation of Pospay services 3. Display BAST documents and Pospay recapitulation documents	

V. ANALYSIS RESULT

The following is an analysis for the proposed administration system. The analysis includes user system analysis, proposed business process analysis and functional requirements analysis.

a. Analysis of Proposed Business Processes

The following is an illustration of the business process recapitulation of Pospay service deployment that is proposed using Business Process Modeling Notation (BPMN).

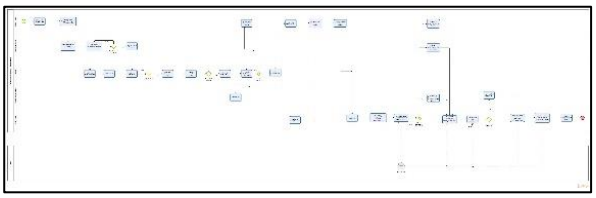

Figure 4.2 Proposed Business Process

b. Analysis of the Proposed System Description

The following is a description of the process of recapitualization of the Pospay new service deployment system at PT. Pos Indonesia Pos.

Table 4.3 Description of Proposed Business Processes

No	Business Process Name	Description
P.1	Preparation of BA Deployment	The Pospay team can make news of the Pospay service deployment in the system, then the minutes will be automatically saved in the BAST document in accordance with the services that have been deployed by the Pospay team.
P.2	Recapitulation of Deployment Services	Documents that have been sent by the QA and Jaskug Pospay teams will then be stored in the system database. Then the officer can make a recapitulation if the verification of the requirements of the documents that must be collected has been fulfilled.
P.3	Validasi/ Manager approval	The process of approval of BA deployment and recapitulation of deployment by the Application Operations Manager (Pospay division).

c. GAP ANALYSIS

Gap Analysis is a comparison of the current system performance with the proposed system / solution offered to improve the old system, the following is a comparison of the old system and the new system for the recapitulation process of the Pospay service deployment recapitulation.

Table 4.4. *Gap Analysis*

No	Analysis	Current Sysem	Proposed New System
1.	Time	In the process of making recapitulation and data search the time required is very long because of the large amount of data from the previous few years.	The process of recapitulation and data search can be done simultaneously in the existing system so that it will speed up the search time.
2.	Flexibility	Currently the process of recap and search for data can only be done on a pc / laptop admin / recapitulation officer.	In data search, because the system is designed with a server and based on the web, all registered users can access to search data anywhere and anytime.
3.	Security	The absence of a system that has a large and integrated storage that has good system security, the	The system is designed with a large capacity database so that old data as well as new and future data can

		service deployment recapitulation documentation system currently still uses the Microsoft Excel and Microsoft Word operating systems that are stored in local storage, so data is vulnerable to loss.	be stored securely in the pospay service deployment management recpitulation database system.
4.	Effective ness and Eficiency	In searching for data, at this time the officer must open in local storage (pc / laptop) and the official news archives in the form of hardcopy (for archives before 2018).	After old data and new data are uploaded in the system, the officer can search the data according to what is needed so that the search process becomes more effective and efficient.
5.	Avaibility	The current system, if the PC is damaged / the laptop runs out of battery then the officer cannot do the data input or data search because the data is stored only in 1 pc only.	The system is designed to be able to manage data 24 hours.

d. Use Case Diagram

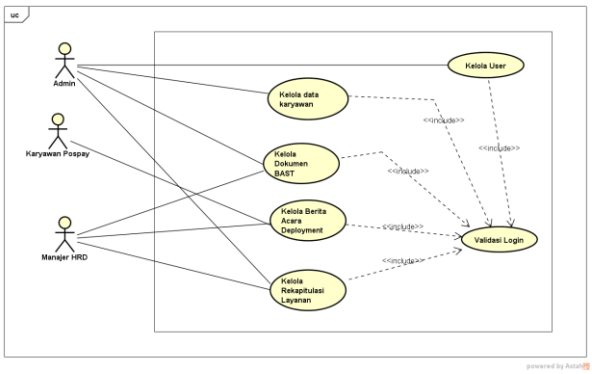

Figure 4.3 Use Case Diagram

e. Class Diagram

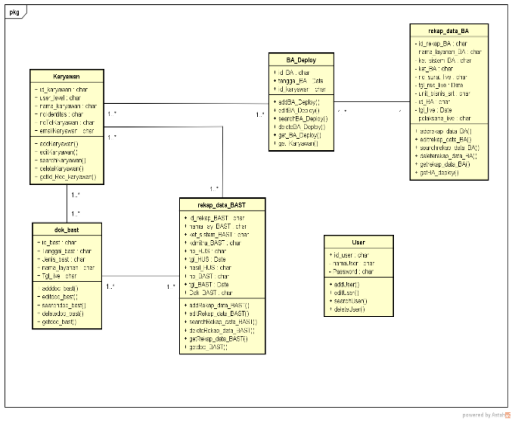

Figure 4.4 Use Case Diagram

f. Interface Design

1.

2. Login Interface

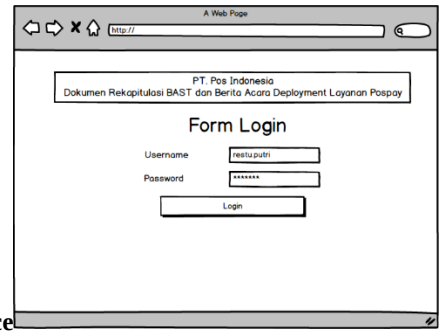

Figure 4.5 Login Interface

3. Dashboard Interface

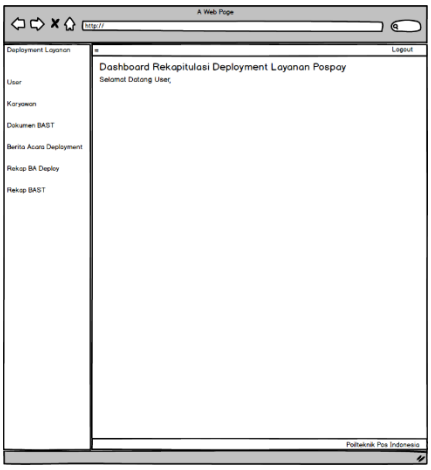

Figure 4.6 Dashboard Interface

VI. CONCLUSIONS

Based on the discussion written in this report, the following conclusions are obtained:

1. Documentation of Analysis and Design of the Pospay Service Deployment Recapitulation System Design that has a draft of employee data management features, BAST data, BAST recapitulation data, and Minutes of Deployment recapitulation data with the hope that it can be applied to replace the process of making and checking data recapitulation of postpay service deployment recapitulation who still uses Ms. Excel so that it improves performance and time efficiency.
2. Documentation has been produced Analysis and Design of the Recapitulation System of the Pospay Service Deployment that has a data storage plan for the postpay service deployment recapitulation.
3. The Analysis and Design Documentation of the Pospay Service Deployment Recapitulation System has been produced which has a data search feature design to facilitate the search for needed data.

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