Design of Filing System for Police Investigation Report on the Forensic Document Unit of POLRI Forensic Laboratory Center

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Abstract - The Archiving system of Official Report of Inspection that runs on the Forensic Document Unit of POLRI Forensic Laboratory is particularly inefficient and effective as it still implements conventional filing systems. The recording of Official Report Documents is only in the general ledger. Based on these problems, the authors formulated "How to create an archiving information system that is expected to accelerate the process of searching, packing, storing records in a safe place". The objective of the research is to produce Information Archiving Information Archive Information System on Forensic Document Forensic Unit of POLRI Forensic Laboratory for better, faster, accurate and efficient. With this system archive data processing archives more centralized and can help search and printing files / data quickly without having to search the archives are stacked, can avoid the loss of original archives. This is due to a scan of the original file that can be seen on this system. Based on the results of the test show that the system built successfully build the police investigation report Archive database. Thus it can be concluded that Official Report of Inspection Archiving System has been successful and ready to be implemented.

Keywords— Archiving, Official Report of Inspection

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I. INTRODUCTION

The filing system of the Examination Minutes running on the Forensic False Document unit at the Indonesian National Police Forensic Laboratory center is still not good and slow in searching the archives because it still applies a conventional filing system. Documentation of the Minutes of Examination is only in the form of writing in the ledger and the storage is still hardcopy, so that when searching for the required examination minutes it is difficult to obtain, because first you have to open the ledger and look for it one by one in the archive storage warehouse so that it takes a long time to get Archive of the Examination Minutes.

Based on the description above, it is necessary to have a computer-based system that can help accelerate and simplify the process of searching the completed Inspection Minutes in the fake forensic document unit at the Indonesian National Police Forensic Laboratory. So it is necessary to design an archiving information system that is expected to accelerate the process of searching, accessing, storing files in a safe place and making reports.

The purpose of the study was to produce an archiving information system for the Examination Minutes in the Forensic Fake Document Unit at the Indonesian National Police Forensic Laboratory to be better and faster in the search process of the archive of the Examination Minutes, and the usefulness of the Examining News Archive Information System;

a. There is an information system for filing Inspection Minutes in the Forensic Fake Document Unit at the Indonesian National Police Forensic Laboratory.

b. Archiving of Inspection Minutes is better.

c. The Inspection Event Archive is easy to find when needed.

Definition of Archives

The word "Archival" comes from the word "archive". The term "archive" is derived from the word archief in Dutch or
archives in English and from Greek, “Archium” which means chest to store something. Often the word is written “Archeon” which means City Hall (a place to store documents) about government matters. According to the Dutch word "Archief" means:

1. A place to keep records and evidence of other activities.
2. Collection of notes or evidence of activities in the form of writing, pictures, graphics, and so on.
3. Materials that will be stored as a reminder.

According to Angrrawati (2004) the meaning of archival is an activity or process of regulation, storage of records using a particular system, so that if the archive is needed it can be recovered precisely in a short time. According to Law No.7 of 1971 article (1) which defines the archive as follows:

1. Manuscripts made and accepted by state institutions and government bodies in any form in either single or group conditions in the context of implementing government activities.
2. Manuscripts made and accepted by private and / or individual bodies in any form in a single or group condition in the context of the implementation of the life of the nation.

Whereas according to Gie (1990) Archives are collections of scripts that are stored systematically because they have uses so that whenever needed can be quickly found. From the description above, it can be concluded that what is meant by the archive is a letter that is stored for later retrieval or rediscovered if needed easily and quickly.

**Definition Archive System**

Archival system is a system, method or method used in storing and recovering archives / documents. Filing System is different from Record Management. Record Management includes planning, organizing, actuating and controlling activities. In order for record management to run effectively and efficiently, it must be guided by the characteristics of good record management, namely:

a. Take care of a little script / archive
b. Quality Documents
c. Selective Clearing Items

Archival system is the arrangement or storage of archives logically and systematically, using alphabets, numbers, letters or combinations of numbers and letters as the identity of the archive in question. A good archival system must be in accordance with the conditions of the organization, simple, easy to understand and easy to operate, easy to adapt if there is a system change and flexible and elastic to accommodate developments, cheap, safe, accurate. For institutions, departments or private companies that are not so broad, they can also organize archival organization structures in a simpler and easier way, by not reducing the task of managing archives that are frugal and careful and practical.

**Definition of Examination Minutes**

The Minutes of Examination (BAP) consists of 4 words. The word has related words namely as follows:

1. Examination Minutes (BAP) - Reports on the results of the examination of suspects, witnesses, letters and other evidence in the examination of a criminal act.
2. Case report - An authentic deed, which in the level of investigation made by the investigating officer and in the document is made by the court clerk, which contains information about criminal events that allow prosecution of the suspect.
3. Legal entity - An agency or organization that is treated by law as a person.

So the Minutes of Examination are reports on the results of the examination of suspects, witnesses, letters and other evidence in the examination of a criminal offense. BAP is made by investigators and public prosecutors to be used as evidence in court. BAP serves as the next stage of reference. For example, to be able to prosecute, prosecutors need a BAP from the investigator.

Minutes of forensic laboratory examination are evidence that is in accordance with the provisions of Article 184 paragraph (1), namely legal evidence is witness testimony, expert testimony, letters, instructions and information of the defendant in Article 187 of KUHAP confirms that the letter as mentioned in Article 184 paragraph 1 is a letter, and is signed by an expert and made by remembering the oath and substance regarding the examination of evidence found at the crime scene which is accompanied by an examination of the document. So that the forensic laboratory examination evidence has perfect proof strength because it has fulfilled the formal and material requirements and no one has submitted other evidence that can weaken the evidence of the letter. That the judge checks the evidence, namely the testimony of witnesses, the statements of the defendants, letters and evidence. Consideration of the panel of judges on the evidence of the minutes of the Forensic Laboratory Inspection on the case of falsifying documents related to other valid evidences, can convince and prove the guilt of the defendant legally according to the indictment, so that the panel of judges impose the criminal according to Article 263 paragraph 1 and paragraph 2 of the Criminal Code.

The system created requires input data, output data, and interface requirements. The needs analysis of the Examination News Archive Management System (BAP) in the Central Document of the National Police Forensic Laboratory is as follows:

1. Enter data needs
   Input data needed in this system include: Check Minutes Data. The purpose of input design is:
   a. Making easy and efficient input completion
   b. Ensuring input will meet the expected objectives.
   c. Guarantee the right solution.
   d. Making input that is not complicated.
   e. Make consistent screen displays and forms.
2. Data output requirements
   The output data needed is the Minutes data that can be displayed on the monitor screen or printed, reports on the number of minutes that are completed within a certain time period.
3. Interface requirements
   The need for interfaces on the system is the ease and convenience of the user when accessing the system and adjusted to the analysis of existing problems. In addition, the information collected will be analyzed so as to achieve a better information system design.

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4. Software Requirements

In the making of the Inspection Report Documentation System (BAP) in the Central Indonesian Forensic Laboratory's Documentation Unit, it requires some software that helps resolve this information system, among others, Web Server Application Program, MySql Application Program, Web browser application, Acrobat Reader Application.

5. Hardware Requirements

To achieve a good information system, hardware equipment is needed for users. These hardware devices will connect users who in this case are fake Document Unit staff to the National Police Forensic Laboratory Center with the existing system.

II. MATERIAL AND METHOD

System Planning

The drafting process for Filing an Examination Minutes on the False Document Unit The Center for the National Police Forensic Laboratory is divided into 3 (three) parts, namely the process design, database design and system display design.

Process Design

The process design serves to check the input, process and output of a system to meet the needs of a system. In the design of this process, use the Unified Modeling Language (UML) approach. Process design using UML implements object-oriented system development technology where a computer system / system is constructed from interrelated objects. The design process uses UML with 4 (four) stages, namely Use Case Diagrams, Activity Diagrams, Sequence Diagrams, and Class Diagrams.

Use Case Diagram

Components that make use case diagrams are:
1. Actor, describes the party who plays a role in the system
2. Use case, activity / means prepared by the system
3. Link, which actors are involved in this usecase

Admin Diagram as in Figure 1 there are actors as admin, admin can manage Lab Numbers, manage sprintgas (task orders), manage BAP Archives starting from inputting data, searching, viewing and creating BAP archive reports, and managing users after logging in on the system.

Use Case The user diagram as shown in Figure 2 is an actor as a user, the user can only search and view the Examination Event Archive after logging in to the system.

Activity Diagram

Activity diagrams illustrate the various flow of activities in a system that is being designed, how each flow starts, decisions that might occur, and how they end. Activity diagram on the Archiving Information System of the Examination Minutes (BAP) in the POLICE PUSLABFOR Document Unit is:

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In Figure 3, when the Admin opens the website page, the main page will appear and the admin can see the available information. If the admin wants to see or add lab number data, sprintgas data, manage the minutes of the inspection report and or manage the admin user, they must log in first. At the time of the login process if the data is invalid the admin will receive an error message whereas if the valid data admin can do the BAP and user data processing.

In Figure 4 when the user opens the website page, the main page will appear and the user can see the available information. If the user wants to find data about BAP, the user must log in first. At the time of the login process if the data is invalid the user will receive an error message whereas if the data is valid the user can search or view BAP data.

**Database Design**

Database is one of the important components in information systems, because it functions as an information provider for the users. The database structure of the Examination Newsletter (BAP) Information System in the PUSLABFOR Counterfeit Document Unit is as follows:

**System Display Design**

The last step in designing a program is designing the appearance of the program. At this stage the form and design are explained from the display that will be made. Explanation of the program display design will be explained in detail as follows. The navigation structure used in this web is a mixed navigation structure as a guide to the flow. At this stage it contains a conceptual description of a web about what information is determined to be displayed on the web. This web navigation structure is divided into 2, namely:

In the admin navigation structure is described about several controls:

- Main page
- Perkap (KAPOLRI Regulation)
- About
- Login
- Lab number
- Sprintgas (Task Order)
- BAP
- Examiner

If the above control is selected it will display the intended page according to the contents of the control. Admin can enter checker data, lab number, sprintgas and enter data from the inspection minutes.
In the navigation structure as shown in Figure 6, some controls are described:

a. Main page
b. Perkap (KAPOLRI Regulation)
c. About
d. Login
e. BAP

If the above control is selected, it will display the intended page according to the contents of the control. Users can search or view the inspection minutes.

III. RESULT AND DISCUSSION

Coding is done using a design that has been created, then translated into a form of language that can be understood by the machine. The programming language used for coding in the Archiving Information System Examination Minutes in the False Document Unit of the Indonesian National Police Forensic Laboratory Center uses PHP so that this application can run web-based.

Home Page

The home page or main page is the first page that appears when the BAP Filing System is run as shown in Figure 9.

In Figure 9 there are several menus namely the Perkap menu which contains the regulations of the Chief of the National Police regarding the technical procedures for the forensic laboratory examination which, if selected, changes as shown in Figure 10.

On the Perkap page there is a text area that contains the articles of technical procedures for forensic laboratory examination, to see the user can shift the vertical scrollbar up or down according to need.

Main Page Archive System Admin BAP

The Admin main page is a page that is used by the BAP Filing System Administrator to process data related to BAP as shown in Figure 11. In Figure 11 there are several menus, namely the Lab Number menu, Sprintgas, Berita Acara, Pemeriksa, User Name and Logout menu.

When the Lab Number menu is selected, the page display changes to the Lab Number page as shown in Figure 12.

Lab Number page

This page serves to display a list of lab number data as well as processing data from lab numbers such as searching, adding, deleting and creating sprintgas.

On this page as shown in Figure 12, to find the Lab Number data the user must enter the lab number that will be searched for in the available text input to then press the Cari button, if there is a lab number data then the data will be displayed and vice versa if there is no lab data number then a message will be displayed.

To add the Lab Number data the user must select the Tambah Button, and the page view will enter the Lab Number data add page as shown in Figure 13.

On this page as shown in Figure 13, users can enter data in accordance with the available text input starting with entering the lab number in accordance with the specified format.
filled in with the intent and purpose of the forensic laboratory examination, wilayah is filled with the name of the agency submitting the forensic laboratory examination, gambar is filled with the file name Takah (script manuscript) image from the Administration that was previously scanned by pressing Pilih button to select the scan file, Tanggal is filled in according to the date the inspection file is received by the fake Document unit, and after all the data entered the Save button is selected to save the data into the database, the display returns to the Data Number page as shown in Figure 12 with the change in the Lab Number data list has increased.

The Lab number entered for later can be deleted if the contents do not match with selecting the delete button or created a sprintgas check by selecting the sprintgas button, if the sprintgas button is selected the page view will change to Sprintgas Data Input page display as shown 14.

**Sprintgas page**

The Sprintgas Data Input page display appears if the sprintgas button is selected when the user is on the Lab Number page, this page serves to enter the Data Checking Assignment data in one of the laboratory inspection application cases, as in Figure 14 of the Sprintgas Data Input page.

![Figure 14. Sprintgas Data Input Page](image)

On this page the lab number is filled in according to the selected data, then the user can enter data according to the available text input starting with entering the sprint number according to the specified format, NRP checker is filled by selecting the checker list that appears in the pop-up menu when pressed the pop-up button, Gambar is filled with the name of the sprintgas image file that was previously scanned by pressing Pilih button to select the scan file that matches the lab number, and after all data Simpan button is selected to save the data in the database or Batal button is selected if it does not save the data in the database, the display changes to the Sprintgas data list page as shown in Figure 15.

Sprintgas that is entered can then make changes if the contents do not match with selecting the Edit button or proceed to the next process, namely viewing the sprintgas file by selecting Lihat button or filling in Check Minutes (BAP) by selecting the BAP button, if the BAP button is selected page view will change to BAP Data Input page view as shown in Figure 16.

**BAP page**

The page display of BAP Data Input appears if the button for BAP is selected when the user is in the sprintgas list page, this page serves to enter the Check Minutes data that has been completed, the BAP Data Input page display as shown in Figure 16.

![Figure 16. BAP Data Input Page](image)

On this page the lab number and sprintgas number are filled in according to the selected data, then the user can enter BAP data according to the available text input. Barang bukti is filled in by entering all the evidence data in accordance with those in the BAP, Terperiksa is filled with the name of the person whose signature is examined, Pembanding is filled in by entering all the comparative data used in the inspection process in accordance with the BAP, Hasil is filled in choose Identical, Non-Identical or Spurious according to the results of the examination, Tanggal is filled by selecting the date of the calendar in accordance with the date of BAP, Berkas is filled with the name of the pdf file BAP file by pressing Pilih button to select the file that matches the lab number, Nomor Pengantar is filled the introductory data number corresponds to the existing format, and after all data is entered select Simpan button to save the data in the database, the display changes to the BAP Data List page as shown in Figure 17 with the change in the BAP data list has increased.

![Figure 17. BAP Data List Page](image)
On this page as shown in Figure 17 the user can make changes to the status of the new BAP, whether the BAP has been taken or not by the regional investigator, if the user has taken, the user must select the checklist button (✓) then the BAP data in the take column will change which was cross (x) becomes a checklist (√). To view the BAP file in pdf format the user can select Lihat button, if the BAP button is selected the page view will change to the View BAP File page view as shown in Figure 18.

Select or press Tutup button to return to the Event News page, to see the report from the event news. The user must select laporan button as show in figure 19.

On this page show in Figure 19 users can create reports based on periods according to the needs of whether to make annual reports or monthly reports. If the annual report menu is changed as shown in Figure 20 then select Iya button then BAP data will be displayed as shown in Figure 21.

The BAP data report is displayed on the screen, if the user wants the BAP data report to be printed, the user can select the Print button and to return to the Admin Main Page select Kembali button.

The monthly BAP data report is displayed on the screen, if the user wants the BAP data report to be printed, the user can select the Print button and to return to the Admin Main Page select Kembali button.

IV. CONCLUSIONS

This research has produced an information system and database of filing of the minutes of the examination on the False Document Unit of the Puslabfor Polri. After testing with blackbox testing on the Examination News Archiving System, it can be concluded that the system has been made error free on the existing functions. With this system, archiving data management is more centralized and can help search and print files / data quickly without having to search for overlapping files, it can avoid losing the original archive. This is due to a scan of the original file that can be seen in this system.

REFERENCES

Jake Spurlock, (2013), Bootstrap, O’Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA.