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## RESEARCH ARTICLE

# Audit of the Basic Education Data Application Information System (Dapodik) Juhut 1 State Primary School

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**Abstract:** Basic Education Data Application (Dapodik) is an integrated national scale data collection system, and is the main national data source, which is part of the National Education planning program in creating intelligent and competitive Indonesian people. This research aims to find out how the information system created by the Department of National Education is right on target and easy to access. The object of this research is the Dapodik Application at SDN Juhut 1 Pandeglang Regency, the sample used in this research is the School Operator as the system user. Based on the survey results, the problems that occurred were still incomplete in the application and network menus at the school. So this problem can result in delays in the input process in the application used by the operator. The implementation of the Dapodik Application Information System at SDN Juhut 1 has followed the stages in the Dapodik Application guidebook.

**Keywords:** Information System Audit, Dapodik Application SDN Juhut

## 1. Introduction

Every year, the Dapodik application is improved by the Ministry of Education to make it easier for school operators to use. This system manages four types of data: PTK (Education and Education Personnel), Education Units, Students, and Education Substance. With Dapodik, schools can integrate their data with the center, helping the government improve the accuracy of education data throughout Indonesia (Hidayat et al., 2019; Rahmat & Supriyadi, 2021).

Evaluation of the Dapodik system is needed to determine the success of its implementation. Through evaluation, the factors that influence the success of the system and the extent of its success can be identified (Sulistiyono et al., 2018; Sari & Kusuma, 2020).

Observations through interviews with School Operators revealed that there were still incomplete features in the Dapodik application. These features are important to assist Operators in resolving errors. These findings will be explained in this research to produce an evaluation of the Dapodik application (Nugroho et al., 2017).

## 2. Literature Review

### 2.1. System Definition

A system can be defined as a unit consisting of components or subsystems that are regularly arranged, interact with each other, depend on each other, and cannot be separated (integrative) to realize a goal (Mulyadi, 2018; Nugroho & Santoso, 2019).



## *2.2. Definition of Information*

Information is a very basic thing that is needed by an activity in making a decision so that errors do not occur. Information can also be interpreted as data that has been processed into a form that is more useful and more meaningful for the recipient of the information (Susanto & Cahyono, 2020).

## *2.3. Definition of Information Systems*

Information systems are a combination of information technology and the activities of people who use technology to support operations and management. In a very broad sense, the term information system is often used to refer to interactions between people, algorithmic processes, data, and technology (O'Brien & Marakas, 2019).

## *2.4. Definition of Information Systems Audit*

Information System Audit, activities carried out to carry out evaluations, the systems used are based on work procedures at the company. work efficiency and effectiveness based on information and asset security procedures and sufficient integrity for user needs (Romney & Steinbart, 2018).

## *2.5. Dapodik application*

The Dapodik application is a web-based application that is installed on a computer/laptop device which is run via a browser such as Google Chrome and Mozilla Firefox. The process of filling in data on the Dapodik application does not require internet access, internet is needed during the online registration process, data withdrawal and synchronization . The process of sending data is carried out by synchronization, namely sending data in two directions from local to the central server or vice versa (Yuniarti & Suryani, 2021).

# **3. Research Methods and Materials**

## *3.1. Data collection technique*

In this research the author carried out data collection where in this method the quality of the research is very dependent on the quality and completeness of the data produced. Questions that are always considered in data collection are what, who, where, when, and how. Qualitative research relies on triangulation of data resulting from three methods: interviews, participant observation, and organizational records (document records). In qualitative research, data collection usually uses observation, documentation and interview methods. Also do not ignore the possibility of using non-human sources of information, such as documents.

### *a) Literature Study*

A literature study was carried out by the author to collect and study various literature in the form of books, e-books, results of previous research in the form of journals, and internet sites which include audit concepts carried out on the Dapodik Application at various levels. The research conducted a literature study to find and provide an overview of audits on the Dapodik Application which could later be used as evaluation material for Operators to be able to provide opinions or input to the Central Government.

### *b) Observation*

Observation is part of collecting data directly from the field. Research observations were carried out at SDN Juhut 1 located on JL. Mount Mauk Kp. Juhut District. Pandeglang, Banten Province. Research has begun to be carried out in May. Data collection through observation is carried out by seeing directly how the data input process is in the Dapodik Application, then knowing the advantages and disadvantages of the Dapodik Application. This activity was carried out under the guidance of Mrs. Maya Amelia, S.Pd as School Operator at the School.

### c) Interview

Interviews are one technique that can be used to collect research data. Interviews were conducted by means of direct questions and answers regarding research at SDN Juhut 1, Pandeglang Regency.

## 3.2. Analysis

### a) Audit Processing.

The following is an audit process flowchart that shows an overview of the audit stages:

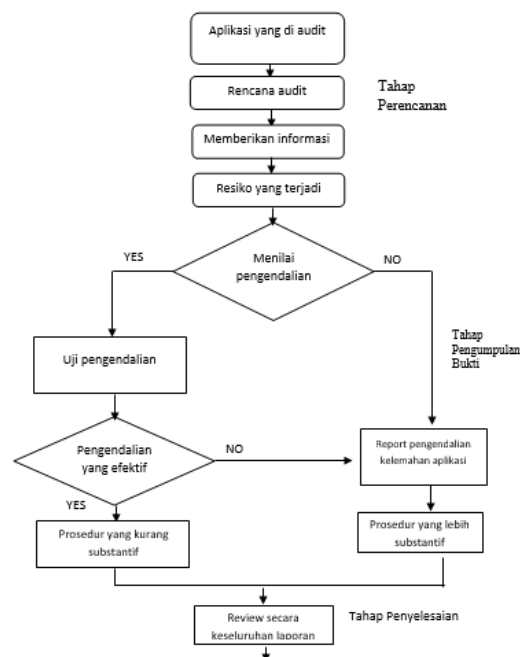
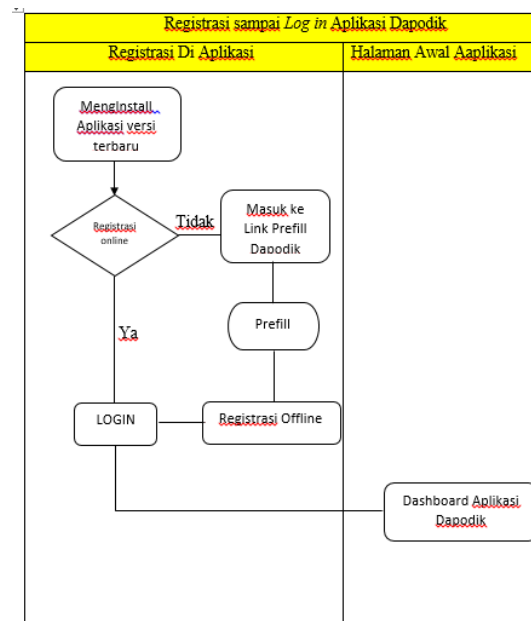


Figure 1. Audit process flowchart

### b) Application Processing



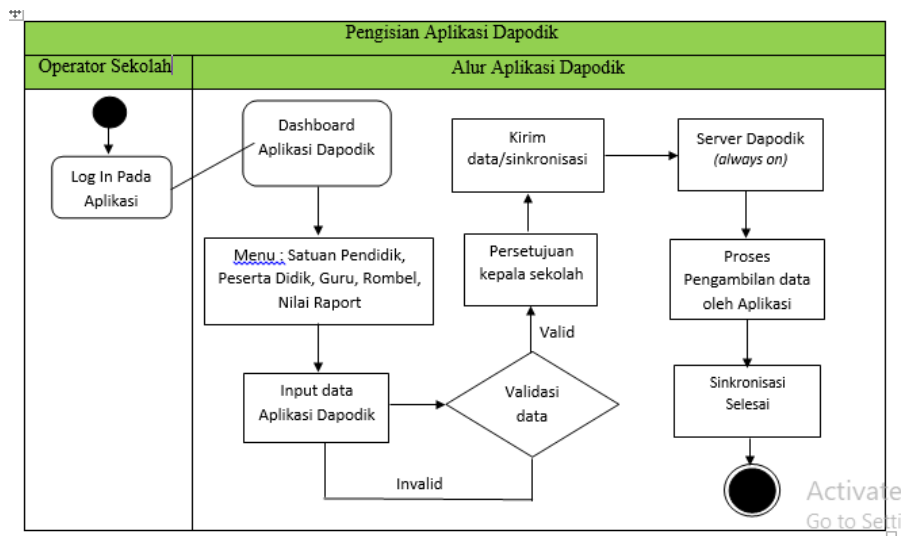


Figure 2. Application Processing

## 4. Results and Discussion

### 4.1. Discussion of Application Audit Results

#### a) Dapodik Application Home Page

This page is the initial display for entering the Dapodik system after logging in, so if you want to manage data on Dapodik, just select which data you want to manage by clicking on the menu in the Dapodik system.

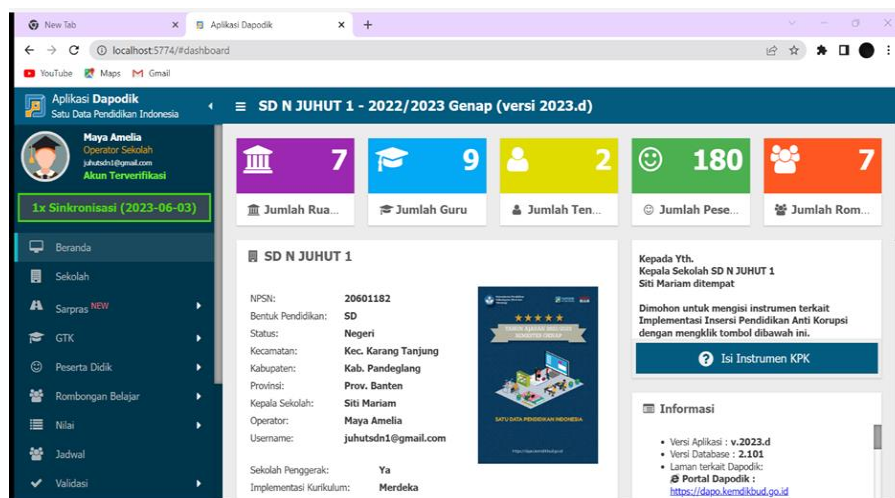


Figure 3. Dapodik Application Home Page

The results of the audit findings carried out by researchers are based on the audit elements on Table 1.

Table 1. Audit findings of the Dapodik Application homepage

Menu	Condition	Criteria	Cause	Influence	Recommendation
Dapodik Application Home Page	The display on the Dapodik Application homepage is very	If it has been validated by the system there should not be any information in	because to find out Sarpas standards in schools that do not have certain	Researchers assume that if the information "not appropriate"	On the Sarpas standard display you can see the statement "not yet appropriate" and a cross (x) at SD

Menu	Condition	Criteria	Cause	Influence	Recommendation
	complete and good.	the application which means that the system has finished inputting.	facilities, this information is used, because this application is monitored by the Government.	means that the input process has not been completed.	Negeri Juhut 1 which does not include the number of Science Labs, UKS Rooms and Principal's Rooms.

b) Student Menu

This menu is for the data input process for new students, transfers and returning to school. Where input must be carried out carefully by the Operator.

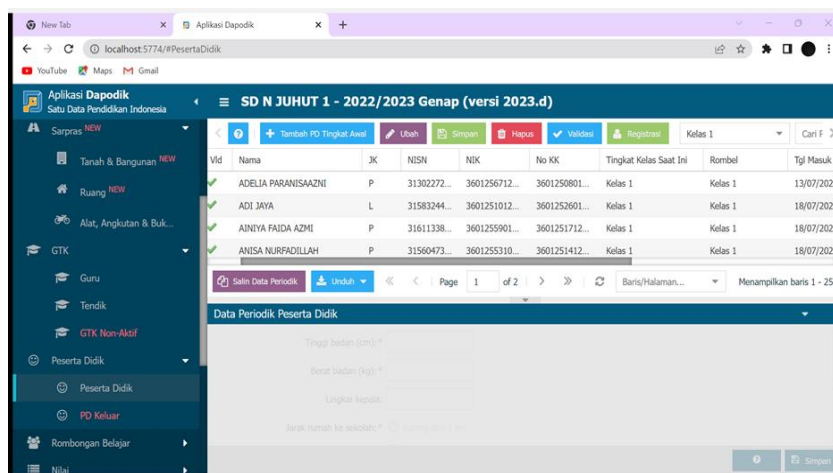


Figure 4. Dapodik Application Student Menu Page

The results of the audit findings carried out by researchers are based on the audit elements on Table 2.

Table 2. Audit findings of the Dapodik Application Student Education Menu

Menu	Condition	Criteria	Cause	Influence	Recommendation
Student Menu Page	In student data, not all parts can be changed once it has been validated	agree with there are buttons that once validated cannot be changed.	The programmer may make a button that, once input and then validated, cannot be changed or is automatically locked, so that there is no repeat process or the data is fixed/final.	If an input error occurs, the operator must report it to the Dapodik Admin at the nearest Education Office, thereby wasting time.	In fact, it is good if there are some things that cannot be changed once they have been validated, but if there is an input error from the operator it will have a very bad impact.

c) Dapodik Active Teacher Menu

The results of the audit findings carried out by researchers are based on the audit elements on Table 3.

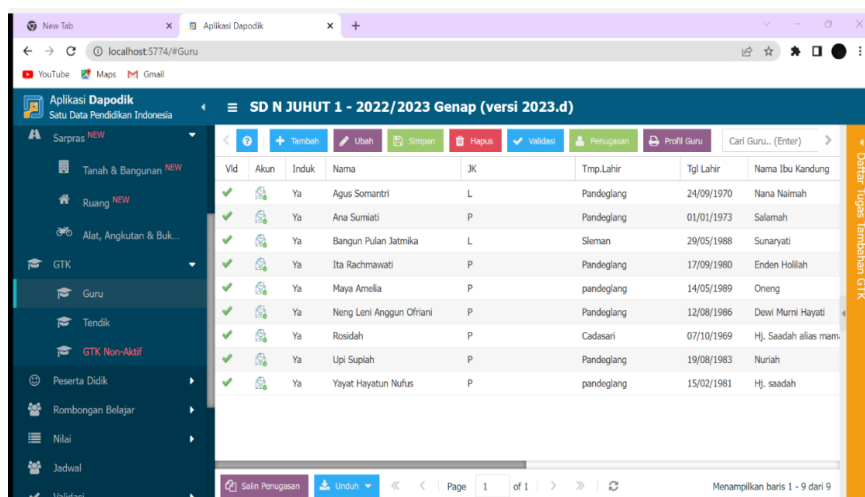


Figure 5. Menu Page Dapodik Active Teacher

Table 3. Audit findings Menu Dapodik Active Teacher

Menu	Condition	Criteria	Cause	Influence	Recommendation
Dapodik Active Teacher Menu	This menu is complete with filter or search features. This makes it easier for operators to search for data.	In the Dapodik application the name of the area should appear automatically.	The programmer does not make the tmp.born button automatically use capital letters..	It will happen that in the picture there are initial letters that are not capitalized, especially if the word is the name of an area.	It is recommended that the city/district appear using a combobox where data input can be done by typing or selecting.

#### d) Dapodik Learning Schedule Menu

This page is a display of the schedule menu, so if you want to manage the learning schedule data for each class, you can do it on this page.

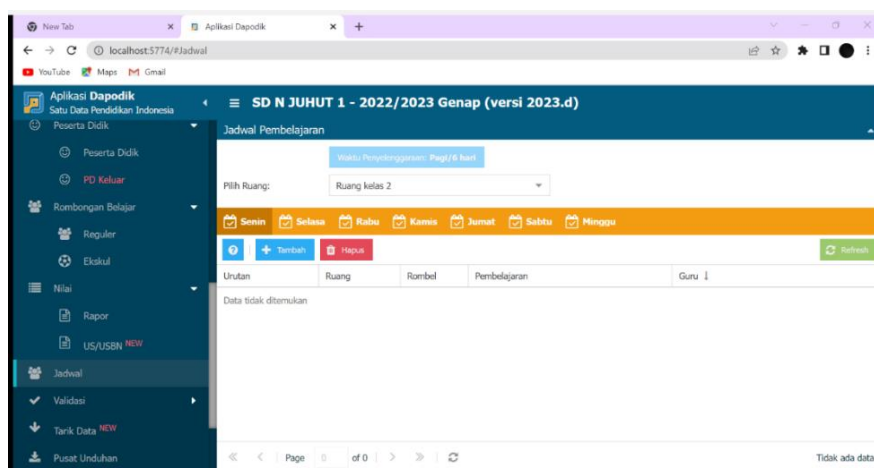


Figure 6. Menu Page Dapodik Learning Schedule

The results of the audit findings carried out by researchers are based on the audit elements on Table 4.

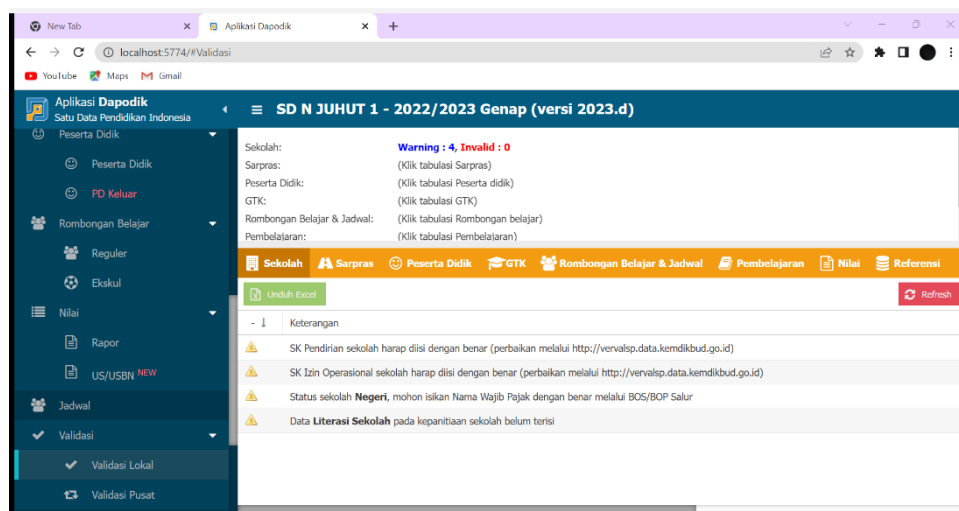


**Table 4.** Audit findings Menu Dapodik Active Teacher

Menu	Condition	Criteria	Cause	Influence	Recommendation
Dapodik Learning Schedule	There is already an automatic room selection, making it easier for operators to make schedules. There are also names of teachers who will be teaching at that time.	Even though they are different, the application must be able to prevent similarities in names or times when inputting the learning schedule.	: no message or information appears on the application that the teacher's name has been used at that time.	if this happens it will result in repetition of names at the same time in different classes.	This application should be able to detect and provide a message in the form of the teacher's name that has been used at that time. If there is the same teacher's name when inputting different schedules.

e) Validation Menu

This menu displays valid/invalid information and also warnings that can help operators find problems and deficiencies when they have finished inputting data.



**Figure 7.** Page Validation Menu

The results of the audit findings carried out by researchers are based on the audit elements on Table 5.

#### 4.2. Audit Findings

a) Update via Patch

The results of observations with the Operator if a problem like this occurs is due to updates via patches.

b) Not clear history all time

It is not uncommon for some operators to ignore things like this even though it can have a bad impact on the application.

c) Using an old browser

It is recommended for Operators to use the latest Chrome browser.

d) Not receiving BOS funds when synchronizing

This is a rare case, but the operator during the interview said that there had been cases throughout the school.

The solution is to reinstall with online registration, if it still fails, just OK and continue synchronizing, then reinstall and resync then check the data progress.

**Table 5.** Findings Page Validation Menu

Menu	Condition	Criteria	Cause	Influence	Recommendation
Validation Menu	The information displayed is clear and accurate on this menu, complete from school to grades. With warning and invalid information, operators can immediately know what commands should be carried out on the system.	Operator awareness needs to be increased and the system. If there is a warning statement, the application should provide a warning, not just in the form of an image or command, but a message. If you want to synchronize, you need to have all the data entered correctly.	Programmers do not create applications with messages like that because it will definitely cause operators to delay their work if, for example, the data that has not been filled in is incomplete.	Other input processes are hampered when filling out the Dapodik application.	If there is a warning, the Dapodik Application should create a warning sign/image in the form of a message which, if you want to proceed to the synchronization stage, you need to fill in completely and correctly so that the Operator can quickly deal with the warning.

#### 4.3. Consequences and Impact of Audit Findings

The following are the consequences of the audit findings which could affect delays in the input process on the Application:

- Delays/errors in the data input process in the Dapodik Application which could have a negative impact on students.
- Some of the menus in the Dapodik Application are incomplete, which will hinder the data input process and require a lot of time to repeat the input process.
- Misunderstanding of some of the information on the Dapodik Application, especially if there is a change of Operator at the School.

#### 5. Conclusion

In this study, researchers conducted an audit of the information system on the Dapodik Application at SD Negeri Juhut 1. Based on the results of the discussion, the conclusions obtained are as follows:

- The procedure for carrying out an audit of the Dapodik Application carried out by researchers includes the process, namely: preliminary examination, follow-up





- examination, examination results, discussion of examination results and recommendations/suggestions, then report on the results of the examination. Then you will get the proof you need.
- b) The results of this research are on the Dapodik Application in terms of assessing the input display, process flow from logging in to producing output. Apart from that, the researcher recommends the results of the findings after looking at the criteria conditions, causes and effects in the application related to incidents and evaluations to prevent similar incidents from occurring. The Dapodik application is in accordance with the research that has been carried out, the researchers concluded that this application is right on target and easy to access by operators even though there is still an incomplete menu.
  - c) The results of the audit findings report are in accordance with the observation qualifications, Minor Nonconformities, and Major Nonconformities. Conclusions can be drawn based on the majority, namely ob (observation), which is why suggestions for improvement are needed not only in performance, but also in related applications.

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