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Fixed Asset Applications Using Excel as a Supplement of Village Asset Management Systems

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Abstract—The application of village asset management systems used to record village assets. This application has not produced detailed information about fixed assets. The purpose of the study is to describe fixed asset applications using Excel and testing the feasibility of application as a supplement of village asset management systems. The quantitative data used is the assessment of technical and operational feasibility data. Data were collected using a questionnaire. The questionnaire of application feasibility consists of technical and operational feasibility. The technical feasibility consists of 6 item questions, and the operational feasibility consists of 9 item questions. The questionnaire uses 4 Likert scales, from 1 (very infeasible) to 4 (very feasible). The application test subjects are computer experts and accounting experts (10 experts). The analysis technique used is descriptive analysis, which includes descriptions of the parts and functions of the spreadsheet-based fixed asset application as a supplement of the SIPADES application. Description of the test results of the technical and operational feasibility of the spreadsheet-based fixed assets application based on a percentage analysis of the technical and operational aspects of the application. The study results are the fixed asset application using excel consists of village identity, account, village apparatus, list of goods, list of fixed assets, mutation, depreciation (financial and fiscal methods), and the fixed asset reports. The fixed asset applications using Excel serve as a supplement of village asset management systems. The fixed asset application using Excel can receive data exported from village asset management systems and can provide data imported into village asset management systems. The fixed asset applications using Excel are technically and operationally feasible as a supplement of village asset management systems.

Keywords—applications, fixed asset, excel, applications

I. INTRODUCTION

The village is a legal community unit that has the territory and authority to regulate and manage the interests of the community according to Government Regulation Number 72 of 2005 has an important role in development. The village government in managing village assets can use the SIPADES application (Village Asset Management System). The SIPADES application was developed by the Directorate General of Village Government Development

c.q. Directorate of financial facilities and village government assets. The SIPADES application is used to record village property that comes from the village's original wealth, purchased or obtained at the expense of the village income and expenditure budget, or other legal acquisition of things.

The SIPADES has a main menu consisting of files, inventory, reports, and documents. The file menu is divided into several sub-menus, namely village apparatus, list of items, list of users, setup password, export data, reset transactions, and maker matters. The item inventory menu has several features, such as planning, procurement, labeling, and managing goods. The report menu is used by the user to present village asset information objectively. The document menu contains policy documents to make it easier for users.

The SIPADES applications make it easier for village heads to convey the village assets report. It facilitates the implementation of village assets codification according to general guidelines. But in terms of reporting, it is known that the application has not produced detailed information on fixed assets such as the depreciation of fixed assets and a list of the carrying amount of fixed assets. In some cases, it is easier to prepare data input using Excel, and it is easier to modify reports for financial management purposes using Excel. Therefore, it is necessary to develop a fixed asset application to support the SIPADES application in financial management and village assets. The fixed asset application is designed to provide data for importing data from the SIPADES application. The fixed asset application is also made concerning to modify or create reports of the SIPADES application.

The fixed asset application is developed by using excel because Excel is a spreadsheet application that is still widely used together with other software in a more efficient accounting process [1], excel the most common technology skill [2]. Excel can be used as a complementary or standalone tool for financial reporting [3]. Both applications very useful in designing, creating, and processing data quickly. The application is easy to use by the beginner/village level. Besides, The SIPADES application is



created using database Access. Access and Excel are both software that is intended for process databases and spreadsheets on Windows systems so that the process of importing and exporting data becomes easier.

Based on the background of the problem, this study will focus on describing fixed asset applications using Excel and testing the feasibility of application as a supplement of village asset management systems.

II. RESEARCH METHODS

The research uses a descriptive method. The type of data used is quantitative data. The quantitative data used is the assessment of technical and operational feasibility data. Data were collected using a questionnaire adapted from the questionnaire used by Ariana [4]. The application feasibility consists of covering technical and operational feasibility. The technical feasibility consists of 6 item questions elements consist of (1) the ability of the hardware and operating system to support the application, 2) simplicity, and ease of use. The operational feasibility consists of 9 item questions elements consist of (1) application compatibility with user capabilities, (2) the application's ability to produce information, (3) controls that the application has. The questionnaire uses 4 Likert scales, from 1 (very infeasible) to 4 (very feasible). The application test subjects are computer experts and accounting experts (10 experts). The analysis technique used is descriptive analysis, which includes descriptions of the parts and functions of the spreadsheet-based fixed asset application as a supplement of the SIPADES application. Description of the test results of the technical and operational feasibility of the spreadsheetbased fixed assets application based on a percentage analysis of the technical and operational aspects of the application. The feasibility level and revised criteria are presented as follows in Table I.

TABLE I. FEASIBILITY LEVEL AND REVISED CRITERIA

| Value | Level of Feasibility |
|-------------|---|
| 81.26-100.0 | Very feasible, does not need revision |
| 62.51-81.25 | Feasible, no need for revision |
| 43.76-62.50 | Not feasible, need to be revised |
| 25.00-43.75 | Very infeasible, really needs to be revised |

III. RESULTS AND DISCUSSIONS

Village assets are items belonging to the village originating from the original village assets, purchased or obtained at the cost of the village income and expenditure budget or from other legal rights. Village asset Management is a series of activities including planning, procurement, use, utilization, security, maintenance, deletion, transfer, administration, reporting, appraisal, guidance, supervision, and control of village assets [5].

According to financial accounting standards, a fixed asset is a tangible asset that is held for use in the production or inventory of goods or services, for sale to other parties, for administrative purposes, and expected to be used for more than one period. Accounting treatment for fixed assets includes recognition, measurement, presentation, and disclosure. The fixed assets are recognized, measured, presented/disclosed following the statement of financial accounting standards number 16 [6].

The following will be described the fixed asset application to support the SIPADES application and testing the feasibility of the fixed asset application to support the SIPADES application.

A. The Fixed Asset Application

The fixed asset applications are applications created using excel. This application consists of several parts, namely village identity, account, village apparatus, list of goods, list of fixed assets, mutation of fixed assets, fixed asset reports, and fixed asset depreciation cards based on financial and tax accounting standards. The main menu and sub-menu of fixed asset applications are presented in Fig. 1.





PENYUSUTAN ASET TETAP-PAJAK



Fig. 1. Main menu and sub-menu of the application.



The village identity form contains information about village identity. The village identity form is presented in Fig. 2.

| IDENTITAS DESA | | | | |
|-----------------|------|--|--|--|
| Identitas Desa | | | | |
| Nama Desa: | 2 | | | |
| Alamat: | | | | |
| Kota: | 2 | | | |
| Informasi Akunt | ansi | | | |
| Periode | | | | |
| Per | WE | | | |

Fig. 2. The village identity form of application.

The account form contains information about the account. The village identity form is presented in Fig. 3.

| AKUN | | ? × |
|-----------------------|---|------------------|
| N <u>O</u> AKUN: | ^ | New Record |
| N <u>A</u> MA AKUN: | | Ne <u>w</u> |
| NO A <u>K</u> UN: | | Delete |
| KLA <u>S</u> IFIKASI: | | Restore |
| D/K: | | Find Prev |
| H/D: | | Find Next |
| SALDO AWAL: | | <u>C</u> riteria |
| | | Close |

Fig. 3. The account form of application.

The village apparatus form contains information about the village apparatus. The village apparatus form is presented in Fig. 4.

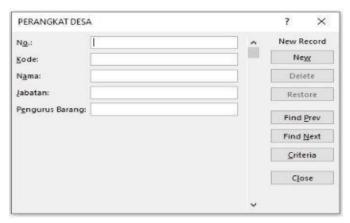


Fig. 4. The village apparatus form of application

The list of goods forms contains information about the list of goods. The list of goods form is presented in Fig. 5.

| DAFTAR BARANG | | | ? × |
|------------------------------------|-----|---|-------------------|
| N <u>o</u> . : | | | New Record |
| <u>K</u> ode: | | | Ne <u>w</u> |
| N <u>a</u> ma barang (Sub Kelompol | c): | | Delete |
| <u>G</u> olongan: | | | Restore |
| <u>B</u> idang: | | | Find <u>P</u> rev |
| K <u>e</u> lompok: | - | | Find <u>N</u> ext |
| | | | <u>C</u> riteria |
| | | | Close |
| | | Ų | |

Fig. 5. The list of goods form of application.

The list of fixed assets form contains information about the list of fixed assets. The list of fixed assets form is presented in Fig. 6.

| N <u>o</u> .: | 1 | ^ | New Record |
|---|-------|---|------------------|
| N <u>a</u> ma Aset: | | | Ne <u>w</u> |
| Kode Aset: | | | Delete |
| [AHUN: | | | Restore |
| <u>B</u> iaya Perolehan | | | Find Prev |
| N <u>i</u> lai Sisa: | | | Find Next |
| <u>U</u> mur Manfaat: Metode Penyusi | utani | | <u>C</u> riteria |
| Metode renyan | | | Close |

Fig. 6. The list of fixed assets form of application.



The fixed asset depreciation cards contain information about fixed asset depreciation. The fixed asset depreciation cards is presented in Fig. 7.

KARTU PENYUSUTAN ASET TETAP METODE GARIS LURUS

Biaya perolehan : Nilai sisa : Estimasi Umur Manfaat (tahun) : Penvusutan aset oer tahun :

Tabel Penyusutan Metode Garis Lurus

| Awal Tahun | Debit Penyusutan | Kredit Ak. Penyusutan | Total Akumulasi Penyusutan | Jumlah Tercatat Aset |
|---------------|---------------------|--------------------------|-------------------------------|-------------------------|
| Tanun | 1 enyusutan | Ak. Tenyusutan | Tenyusutan | Terental 213et |
| | | | | |
| | Y | | | |

Fig. 7. The example of fixed asset depreciation cards.

The fixed asset report contains information about fixed asset reports. The example of the fixed asset report form is presented in Fig. 8.

DAFTAR ASET TETAP & AKUMULASI PENYUSUTAN PER

| No. | Nama Aset | Kode | Tgl. | Biaya | Nilai Sisa | Umur | Metode | F | Penyusutan | | | Jumlah Tercatat |
|--------|-----------|------|-----------|-----------|--------------|---------|------------|---|------------|---|---|--------------------|
| .10. | Name Aser | Aset | Perolehan | Perolehan | Tillian Ston | Manfaat | Penyusutan | | | | | |
| - | | - | | | | | | | | | - | |
| + | | - | | | | | | - | _ | _ | | |
| + | | - | | | | | | | | _ | - | |
| + | | - | | | | | | | _ | _ | - | |
| + | | 24 | | | | | | | | | | |
| $^{+}$ | | 1 | | | | | | | | | | |
| 1 | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | то | TAL | | | | | | | | | | |

Fig. 8. The example of fixed asset report of application.

The fixed asset applications are applications created as a supplement to SIPADES. Fixed asset applications can provide data that can be imported by the SIPADES application so that data input more quickly. The fixed asset application can also complement the output of the SIPADES application that is exported to an excel file. The SIPADES application can import data from Excel files and can also export data to Excel files.

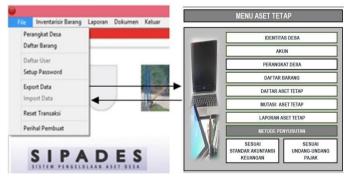


Fig. 9. Relationship between SIPADES and Fixed Asset Applications.

B. The Feasibility of Fixed Asset Application

Feasibility testing of fixed asset application drafts is carried out by giving questionnaires to accounting and computer experts. Feasibility assessment includes application feasibility from technical and operational aspects.

Technical aspects include the ability of hardware and operating system and also simplicity and ease of use. The ability of hardware and operating system to support application from the ability of the central processing unit to respond to application requests quickly and the ability of the operating system to support the application. Simplicity and ease of use from the application is easy to learn, easy to use, provides a system dialog that directs the user, the application menu structure can make it easier for application users The results of expert assessments on technical aspects is presented in Table II.

TABLE II. THE RESULTS OF TECHNICAL FEASIBILITY ASSESSMENTS

| Aspects of Technical Feasibility | Value (%) | Level |
|--|-----------|----------|
| The ability of hardware and operating system | | |
| Central Processing Unit can respond to | 89.81 | very |
| application requests quickly. | | feasible |
| The operating system can support the | 87.96 | very |
| application. | | feasible |
| Simplicity and ease of use | | |
| The application is easy to learn. | 90.74 | very |
| | | feasible |
| The application is easy to use. | 92.59 | very |
| | | feasible |
| This application provides a system dialog | 81.48 | very |
| that directs the user. | | feasible |
| The application menu structure can make it | 86.11 | very |
| easier for application users. | | feasible |
| Average | 88.12 | very |
| | | feasible |

Based on Table II, it is known that the mean score (%) of each technical aspect more than 81.25. These show that fixed assets application is very feasible on the technical aspects. The ability of the hardware and the operating system to support the spreadsheet-based fixed asset application is very feasible. The spreadsheet-based fixed asset application is simple and easy to use. The ability of hardware and operating system to support the application can be seen from the ability of the Central Processing Unit to respond to the application quickly. Simplicity and ease of usage can be seen from the easy of learning, ease of use, the availability of system dialog that directs the user, and the application menu structure can make it easier for application users. The results of the study are consistent with the results of previous studies that show that hardware and operating system can support the application [4,7,8]. The technologies can be accepted not only because of useful but also because of easy to use [9-11].

The operational aspects include; the ability of users using



the application, the ability of the application to generate information, and application control on the fixed asset application. The results of expert assessments on operational aspects are presented in Table III.

Based on Table III, it is known that the mean score (%) of each operational aspect more than 81.25 unless the ability of the application to generate detailed information, password, application control, and output control less than 81.25%. These show that the feasibility of the fixed asset application is very feasible on the operational aspect, except the ability of the application to generate detailed information and password are feasible. The user was able to use the fixed asset application. The application can generate information, and the application has application control. The ability to use applications seen from the user can quickly use the application, and the user can overcome its difficulties in the use of the application. The application ability to generate information can be seen from the application that can generate fixed asset reports, can provide detailed information, can provide information that can be displayed on the monitor, and can provide information in hardcopy documentation (print). The application control can be seen from the application password, application's control, and control output. The results of this study are consistent with the results of previous studies that state that users can use spreadsheet-based applications, the ability to use the spreadsheet applications is related to perceived usefulness [4,7,8,12]. Spreadsheet-based applications can generate the required information [13,14]. The Controlling application is feasible, which means that the password, application control, and output control are adequate [15-17]. The quality of the application is influenced by internal control effectiveness [18]. The effectiveness of the control application is characterized by appropriate safety [19,20]. The previous study found a positive effect of The effectiveness of controls on the detection of fraud [21].

TABLE III. THE RESULTS OF OPERATIONAL FEASIBILITY ASSESSMENTS

| Aspects of Operational Feasibility | Value (%) | Level | | | |
|---|-----------|---------------|--|--|--|
| The user ability to use application | | | | | |
| Users can use the application quickly. | 91.67 | very feasible | | | |
| Users can overcome their difficulties in | 87.04 | very feasible | | | |
| using the application. | | | | | |
| The ability of the application to generate infor- | mation | | | | |
| The application can generate financial | 93.52 | very feasible | | | |
| reports. | | | | | |
| The application can generate detailed | 79.63 | feasible | | | |
| information. | | | | | |
| The application can generate information | 98.15 | very feasible | | | |
| on the monitor. | | | | | |
| The application can generate information | | | | | |
| in hardcopy documentation (print). | 93.52 | very feasible | | | |
| The application control | | | | | |
| The application includes an adequate | 76.85 | feasible | | | |
| password. | | | | | |
| The application has some application's | 78.04 | feasible | | | |
| controls. | | | | | |
| The application has some control of the | 78.33 | feasible | | | |
| output. | | | | | |
| Average | 86.31 | very feasible | | | |

IV. CONCLUSION

The purpose of the study is to describe fixed asset applications using Excel and testing the feasibility of application as a supplement of village asset management systems. The study results are the fixed asset application using excel consists of village identity, account, village apparatus, list of goods, list of fixed assets, mutation, depreciation (financial and fiscal methods), and the fixed asset reports. The fixed asset applications using excel serve as a supplement of village asset management systems. The fixed asset application using Excel can receive data exported from village asset management systems and can provide data imported into village asset management systems. The fixed asset applications using Excel are technically and operationally feasible as a supplement of village asset management systems.

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