

## Integration of Business Unit Financial Reporting Systems in Village-Owned Enterprises (BUMDes)



I Gede Made Karma<sup>1</sup>, I Made Wijana<sup>2</sup>, Jeni Susanti<sup>3</sup>

<sup>1,2,3</sup> Accounting Department, Politeknik Negeri Bali, Badung-Bali, Indonesia

**ABSTRACT:** BUMDes is a village government-owned business institution established in an effort to strengthen the village economy, based on the needs and potential of the village concerned. In its operations, BUMDes can have various business units with autonomous management in one business entity. Each business unit makes its own financial report according to the type of business it runs. The resulting financial report will be submitted to the head office for merger and consolidation. Although each business unit has a different type of business, the process and provisions for preparing financial reports in each business unit are the same, because they are regulated in government regulations. The only differences are related to operational reporting and components/account names in the financial report. To improve the ease of preparation and accountability of its financial reports, the existence of an integrated accounting information system is a must. As an initial step, a design process is carried out which will be used as the basis or technical reference for the development process. The design process is carried out with an object-oriented approach, with the results in the form of classes/components and interactions between them which are the foundation of the system building. This will facilitate the development process and this integrated system can then be built/developed in stages according to the development/addition of business units from BUMDes.

**KEYWORDS:** BUMDes; business units; financial reports; integrated systems; object-oriented.

### I. INTRODUCTION

Village governments throughout Indonesia are allowed to have a business entity commonly known as BUMDes (Village-Owned Enterprise) [1]. This village business institution is managed by the community and village government in an effort to strengthen the village economy and is formed based on the needs and potential of the village [2]. The purpose of its establishment is, among others, to increase the village's original income [3] [4]. As an economic institution, its business capital is built on the initiative of the community and adheres to the principle of independence. This means that the fulfillment of its business capital must come from the community [5]. However, it does not rule out the possibility of applying for a capital loan from an external party, such as from the Village Government or another party (third party). [6].

The establishment and management of Village-Owned Enterprises (BUMDes) is a manifestation of the management of the village's productive economy which is carried out cooperatively, participatively, emancipatively, transparently, accountably and sustainably [7]. Therefore, the management of this business entity must be carried out effectively, efficiently, professionally and independently to achieve its goals [8], [9]. In addition to the village community concerned, this institution is also required to be able to provide services to non-member communities (outside the village).

The basic considerations for establishing BUMDes are the needs and potential of the village, including the needs of the community related to the fulfillment of their basic needs, the availability of village resources that have not been optimally utilized and the existence of community business units that are less accommodated [10]. This is what makes the existing BUMDes able to have different management characteristics and types of businesses from one another. Various business units are possible to run, adjusted to conditions, needs and capabilities [11].

The variety of business units run and the weak capacity of existing resources often cause problems, especially related to accountability in BUMDes management [12], [13]. So far, accountability has been more directed towards procedural fulfillment only, with mechanisms that are sometimes ineffective [14]. Many stakeholders do not have the capacity to manage BUMDes, even though they should be able to monitor, control and evaluate BUMDes performance [15], [16], [17]. Therefore, this study attempts to propose a design for an integrated governance mechanism between business units and their head office. This design is an integrated computerized information system, especially related to the BUMDes financial reporting system. This is expected to improve accountability in BUMDes management [18], [19].

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### II. RESEARCH METHODS

The development of this system uses the Waterfall method, which is a method with a gradual and continuous process [20]. The implementer will apply an object-oriented approach with 3 (three) process stages [21], [22], namely: The development of this system uses the Waterfall method, which is a method with a gradual and continuous process [20]. The implementer will apply an object-oriented approach with 3 (three) process stages [21], [22], namely:

- Object-Oriented Analysis (OOA); understand the business processes that occur and collect various information in order to determine the needs of the system to be built. The needs of this system are a description of what and how this system will work. The resulting model will be described using UML (Unified Modeling Language).
- Object-Oriented Design (OOD); compiles and determines the design of the components of the system being built. The results are in the form of components that form the system and the interactions between these components.
- Object-Oriented Programming (OOP); translates the entire system design into a computerized system using specific tools and programming languages.

In this study, the stages carried out only focus on the OOA and OOD stages.

### III. EXISTENCE AND ANALYSIS NEEDS OF BUMDES

BUMDes was established in order to strengthen the village economy and was formed based on the needs and potential of the village. Given that the needs and potential of each village are different, it is very possible that each BUMDes has a different management pattern and type of business. Although the management pattern and type of business are different, in preparing and reporting its finances, BUMDes must comply with applicable regulations [23]. The preparation of BUMDes financial reports is regulated in the Decree of the Minister of Villages, Development of Disadvantaged Regions, and Transmigration of the Republic of Indonesia number 136 of 2022. This Ministerial Decree regulates in detail and completely the procedures (guidelines) for preparing a BUMDes financial report. It can also be seen explicitly in this guide that the preparation of BUMDes financial reports is carried out in stages, separately and integrated according to the various types of businesses run by the BUMDes concerned.

Types of business units that may be run by BUMDes include serving, banking, renting, brokering, trading and holding. Serving is a business unit that runs a social business that aims to provide social benefits to residents, even though it does not obtain large economic benefits. Banking is a business unit that runs a business like a financial institution, and is most commonly done by the majority of BUMDes. Not chasing interest but just light services, so that villagers avoid being trespassed or loan sharks. Renting is a business unit that runs a rental business to serve the needs of the community, such as tractor rentals, rice mills, meeting halls, party equipment, and so on. Brokering is a business unit as an intermediary institution, for example connecting agricultural commodities with the market so that farmers do not have difficulty selling their products to the market. Trading is a business unit that runs a business that produces and/or trades certain goods to meet the needs of the community or is marketed on a wider market scale. Holding is a business unit that runs a joint business, or as the parent of business units in the village, where each unit that stands alone, is regulated and synergized by BUMDes so that the joint business grows.

When a BUMDes has more than one business unit, then this business unit will be positioned as a subsidiary that is managed autonomously. Each business unit has its own management and financial report, which in time will be submitted to the head office for merger [24]. In this case, transaction recording is carried out at the head office and each business unit. The financial report produced by each business unit is then submitted to the BUMDes Head Office for merger or consolidation. Finally, a Combined Financial Report or Consolidated Financial Report will be issued.

### IV. BUMDES INTEGRATED SYSTEM DESIGN

As explained previously, a BUMDes can have more than one business unit, which will indirectly differentiate one BUMDes from another. Each of these business units will be managed independently, but coordinated in one unit. The governance and financial reporting system of BUMDes is in the form of a relationship between the head office and business units, as illustrated in Figure 1.

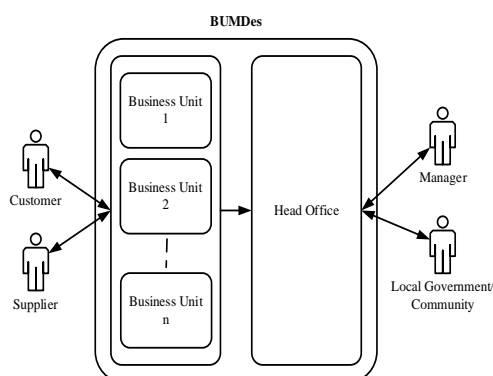
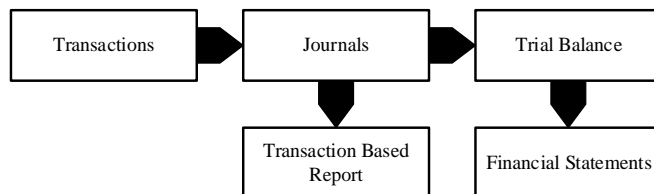


Figure 1. BUMDes governance

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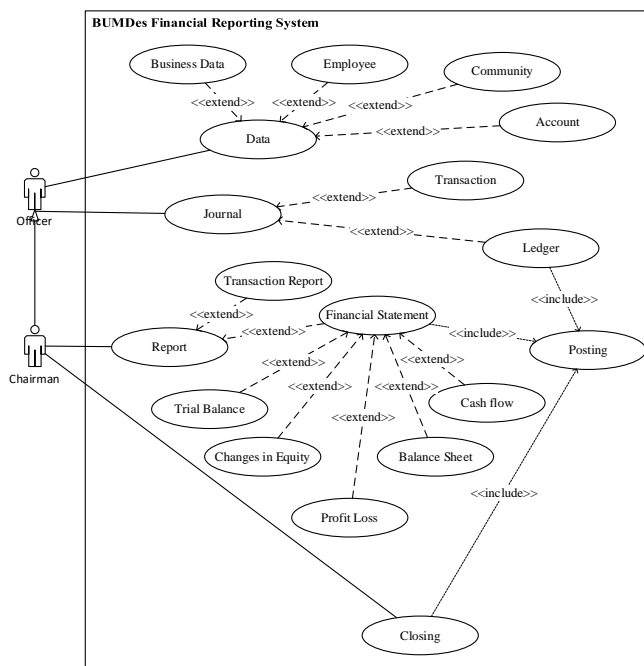
Each business unit will have different types of businesses. In terms of management, this will require different governance. Although different, when viewed from the reporting system, especially financial reports, in general all business units will have similarities, in accordance with applicable regulations. The only difference lies in the reporting related to transactions in each business unit, according to the type of business. The financial reporting system in each business unit can be illustrated as in Figure 2.



**Figure 2. Business unit financial reporting process**

Starting from the occurrence of financial transactions, then recording and making financial journals are carried out. Based on these transaction records, reports can then be made related to transactions that occur according to the type of business unit, such as sales reports for trading business units and savings deposit reports for banking business units. Journals from these financial transactions will be posted to produce a trial balance, which will be used as the basis for issuing financial reports. The financial reports from these business units are then submitted to the head office to be merged and consolidated.

The financial reporting system in each business unit involves two groups of parties, namely ordinary employees (can be cashiers, savings officers, recording officers or other officers according to the type of business unit) and managers. Ordinary officers will be tasked with recording transaction evidence and managing data related to operational reporting of the business unit. The managers and several officers who are given the authority to prepare the financial reports of the business unit and close the books at the end of the accounting period. In terms of functionality, this financial reporting system can be modeled in more detail in a use case diagram, as in Figure 3.



**Figure 3. Use case diagram of the system**

In general, there are 4 (four) main functions in this financial reporting system, namely data management function, journal function (recording transaction evidence), report creation function and book closing function. These four functions will be carried out by employees, according to their functions and duties, which are grouped into 2 (two) categories.

There are four types of data that will be managed in each business unit, according to the type of business. The data includes business-related data (such as goods data for trading businesses, saver data for banking businesses and so on), business unit employee data, community data related to capital investment in BUMDes and bookkeeping account data.

The function of the journal is related to recording transaction evidence that is equipped with its journal. This journal recording will be used as the basis for making a ledger, which is a reference for making financial reports for business units.

The function of making reports is related to the preparation of reports related to transactions and financial reports of business units. Reports related to transactions of course depend heavily on the type of business of the business unit, such as savings deposit

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reports for banking businesses or sales reports for trading businesses. While for financial reports include trial balances, changes in equity, cash flow, balance sheets and profit and loss.

The function of closing the books is a function related to the process of closing or ending the accounting period, and starting a new accounting period. The process of closing the books is carried out in two stages, namely at the end of the month and the end of the year [25]. The basic concept of closing is the transfer of the final balance value of each account in the balance sheet to the opening balance for the following month or year. While the final balance value of each account in the profit and loss is closed and transferred to the current year earnings account every month. Then, the current year's profit will be closed and transferred to retained earnings at the end of the year after the books are closed at the end of the year.

Referring to the description of the financial report preparation process and following the guidelines for developing object-oriented systems [26], the system design can then be prepared. The system will be built by a number of classes, which are the embodiment of data/reports and functions/interfaces in the system. As a system, these components will interact with each other, which shows the relationship between them. The components (classes) owned by this system and their interactions are illustrated in a class diagram, as in Figure 4.

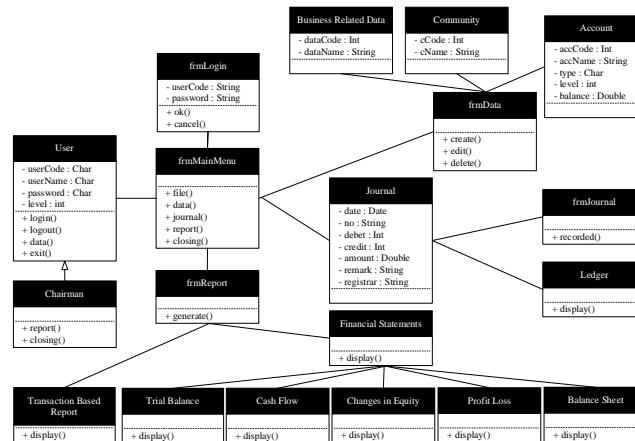


Figure 4. Class diagram of the system

Each box represents a class, and the lines show their interactions/relationships. A class (box) has 3(three) components that represent the name, attributes and methods. The name is the class identity, attributes are data processed by the class and methods are things that can be done by the class in question. Class categories are usually determined based on the naming pattern of the class.

To describe the work process that occurs in the system, a diagram in the form of a sequential diagram is then created, which contains the sequence of processes and interactions between existing system components. The sequential diagram of this system can be seen in Figure 5.

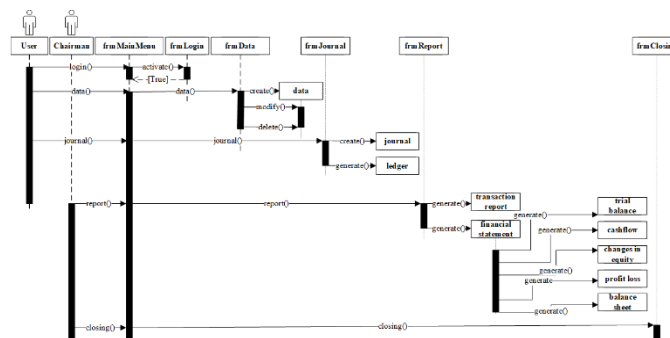


Figure 5. Sequential Diagram of the System

It begins with the user (employee or chairman) logging into the system. The login process is done by selecting the Login menu on the main menu (frmMainMenu), and then handled by the frmLogin class. If successful, the user will have a menu of choices, according to their authority, namely the Data, Journal, Report and Closing menus. The data menu is used to manage data, the Journal menu to record evidence of transactions/journals and publish ledgers, the Report menu to generate reports and the Closing menu to carry out the book closing process. Specifically for the Report and Closing menus, they can only be done by users with the Chairman category.

What happens to the business units and the head office of BUMDes, in general, is actually the same. The differences that exist, related to the preparation of this financial report that will affect the design and implementation are in the types of data, reports and details/details of account names related to the preparation of the financial report. The types of data and reports from each business unit are generally unique, according to the type of business it runs. For details/details of account names, for each business unit it

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can be different because it must be adjusted to the type of business activity, but what is certain is that at the head office, because it is related to combined and consolidated reports, it will have details/details of account names that accommodate all accounts in all its business units.

### IV. CONCLUSIONS

A BUMDes can have a number of business units with different types of businesses. Each business unit has its own governance in a single unit of control by its head office. Financial reports produced by business units are reported to the head office to be combined and consolidated. Even though these BUMDes business units have different types of businesses, overall, they have the same financial reporting system, with slight differences in reporting related to reporting their operational activities. The existence of an integrated system for its financial reporting process is believed to streamline the process and increase the accountability of BUMDes financial reports. An integrated system built on an object-oriented system design can be developed gradually, in line with the development/addition of BUMDes business units. During implementation/development, the system design only needs to be adjusted to the type of business of the business unit. A BUMDes can have a number of business units with different types of businesses. Each business unit has its own governance in a single unit of control by its head office. Financial reports produced by business units are reported to the head office to be combined and consolidated. Even though these BUMDes business units have different types of businesses, overall, they have the same financial reporting system, with slight differences in reporting related to reporting their operational activities. The existence of an integrated system for its financial reporting process is believed to streamline the process and increase the accountability of BUMDes financial reports. An integrated system built on an object-oriented system design can be developed gradually, in line with the development/addition of BUMDes business units. During implementation/development, the system design only needs to be adjusted to the type of business of the business unit.

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