



Dashboard for Monitoring Financial Performance of Business Islamic Boarding School Sukorejo Situbondo

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Abstract

Every company must have a good strategy. A strategy built from the results of company performance analysis. One aspect that needs to be controlled and evaluated is financial performance. From financial performance analysis, management may find out the strengths and weaknesses from the financial side. So it can be used to improve company strategy. By automating financial ratios and presenting information graphically and up to date. So, management can find out developments in company performance in real-time in supporting economic decisions. This research aims to produce a dashboard for monitoring the financial performance of PP Salafiyah Syafi'iyah Sukorejo Situbondo. The data obtained consisted of primary and secondary sources, which were collected using observation, interviews, documentation, and questionnaires. Then its validity was tested using triangulation methods, extended observations, and discussions with colleagues. Qualitative data was analyzed using the approach of Miles and Huberman. Meanwhile, in developing information systems, the waterfall model is used. The conclusion reached was the availability of a Dashboard for Monitoring the Financial Performance of the Sukorejo Islamic Boarding School Business. The system presents information about turnover development, business results or profits, and financial position, in graphical and quantitative form. The system also provided information about the health level of each business entity and business unit.

Keywords: Dashboard, Financial Performance, Business Entity, Islamic Boarding School.

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1. Introduction

Facing intense business competition, every company must have a good strategy. A strategy built from the results of an analysis of the performance achieved by the company. Performance analysis is useful for capturing strengths and weaknesses in a company [1]. The results of performance analysis can be used by management to improve the company's strategy in the future [2].

One important aspect that needs to be monitored in real time is finance. Financial performance is a reflection of management's achievements in carrying out company operations. Financial performance is a benchmark for determining the level of efficiency and effectiveness in the use of business resources [3]. The method commonly used in performance assessment is financial report analysis.

Financial reports are a tool to provide information to others. It is accounting information needed in decision-making. Not only useful for management but also useful for external. Numbers in financial reports are not necessarily information. It could be just data and have no value to the user. For the information to be optimally useful, it needs to be analyzed and interpreted [4].

Financial analysis is useful for knowing detailed financial conditions. Both the level of profitability and liquidity, overall business prospects, and risks [5]. Financial report analysis functions to translate data into more specific and in-depth information units [6]. Through financial report analysis, strengths and weaknesses in the company can be explored.

Salafiyah Syafi'iyah Sukorejo of Islamic Boarding School, or known as Sukorejo Islamic Boarding School, is one of the Islamic boarding schools whose funding sources do not only rely on student fees alone. To support educational funding, the Sukorejo Islamic Boarding School develops various economic businesses. Starting from photocopy businesses, telephone kiosks, canteens, shops, mineral water, internet cafes, agriculture, and other businesses. These business units are supported by business entities in the form of Trading Business (UD) and Cooperatives (Kopontren).

From the results of a preliminary study conducted by researchers, it is known that business unit development reports were carried out by Business Field every four months. The report consists of a turnover or income report, a financial position report, and a profit and loss report. The report is presented in the form of a financial recap and compared with the previous period's report. Reports are dominated by absolute figures regarding income, operating expenses, and profits. There is no information regarding the health level of the business unit. The

administrators find it difficult to assess the achievements of each business entity. Which business units have decreased and increased performance, and which ones are healthy and unhealthy?

Financial analysis is complicated, by automating information system-based ratio analysis, The administrators will determine business performance. Financial analysis can be used to assess past, present, and prospects. Financial analysis is useful for evaluating business conditions from a financial perspective, by providing an easy-to-read overview.

Another weakness in the performance reporting system of the Sukorejo Islamic Boarding School is that financial data is processed using Microsoft Excel, so its validity depends on the staff's accuracy in using formulas. The recapitulation process takes a long time because it is done manually and in stages. So the information is not immediately conveyed to The administrators.

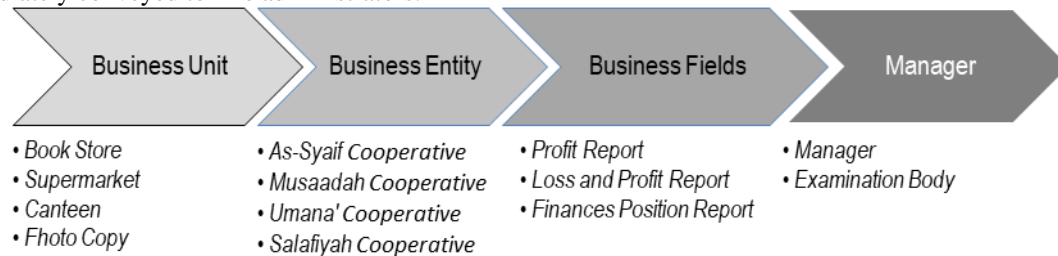


Figure 1. Flow of Preparing Business Unit Financial Reports

The research results of Maulida, et al. [Dewi, et al. [8], Sugiarto [9], and Setiadi, et al. concluded that the dashboard system could be a solution to overcome problems in presenting financial data. The dashboard system can present performance information that is easy to understand and analyze. Financial performance data that is visualized in the form of graphical displays becomes more detailed, flexible, interactive, and easy for users to understand. Visualizing information on one screen makes the monitoring process simpler. The eyes capture information quickly and the brain understands it easily [10].

From the problems and research findings above, the researcher proposes the development of a system for monitoring the financial performance of the Sukorejo Islamic Boarding School business with a dashboard system model. The aim is to help Islamic boarding school administrators, as top management, to find financial reports (business conditions) quickly and in real-time. So the goal to be achieved from this research is the availability of the Financial Performance Monitoring Dashboard application for PP Business Entities. Salafiyah Syafi'iyah Sukorejo Situbondo.

2. Research Methods

This research was carried out at Salafiyah Syafi'iyah Sukorejo of Islamic Boarding School, which is located on Jalan KHR. Syamsul Arifin, Sumberejo, Banyuputih, Situbondo. The research data obtained consisted of primary data and secondary data. Data was collected using observation, interviews, documentation, and questionnaires. Every collected data was validated using triangulation methods, extended observations, and discussions with colleagues. The data was analyzed using the steps from Miles and Huberman, namely data reduction, data presentation, and conclusion. Meanwhile, information system development uses the waterfall model, which begins with the system analysis and system design stages. Next, design implementation (program coding), testing, and maintenance are carried out [11].

3. Results and Discussion

From the results of observations, interviews, and document analysis. It is known that the financial reports of the Sukorejo Islamic Boarding School Business Entity are prepared in stages, processed manually using the Excel application, and presented every four months (quarterly). The following is the process flow in preparing the quarterly report for the Islamic boarding school business sector.

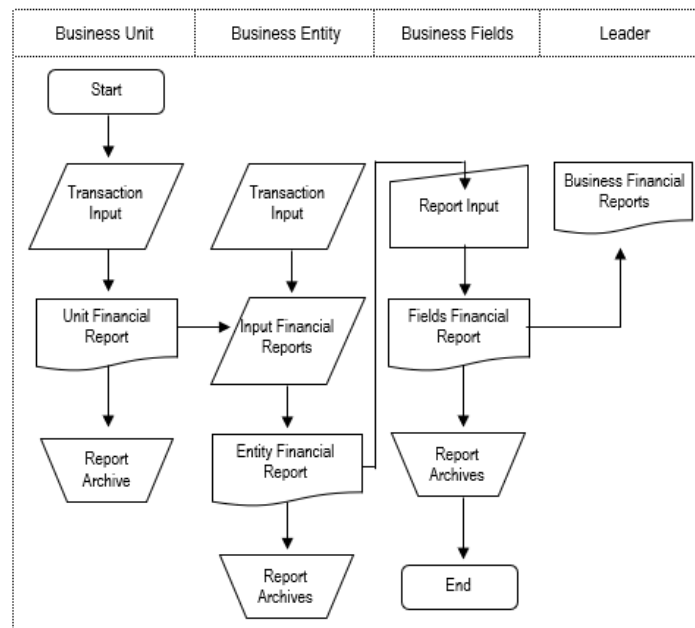


Figure 2. Process Flow for Preparing Business Quarterly Reports

From the process flow above, several weaknesses in the running system were identified. These include: (a) Islamic boarding school administrators cannot monitor business unit developments in real-time, (b) preparing reports to take a long time, (c) data validity depends on staff accuracy in applying Excel functions, (d) report files are not yet compatible, (e) the business development report only contains profit and loss reports and quantitative financial position reports, no data is presented graphically, nor is there information regarding the performance of each business unit, (f) there is no standard for assessing the health level of business units, (g) Data maintenance and data search processes take a long time, because the data is stored on local computers and archive cabinets.

From the identified problems then system requirements specification was created. Which functions must be on the system. The initial description of the system is presented with a context diagram. Context diagrams function to describe the system's interactions with entities in its environment. Who will be involved with the system and their activities [12].

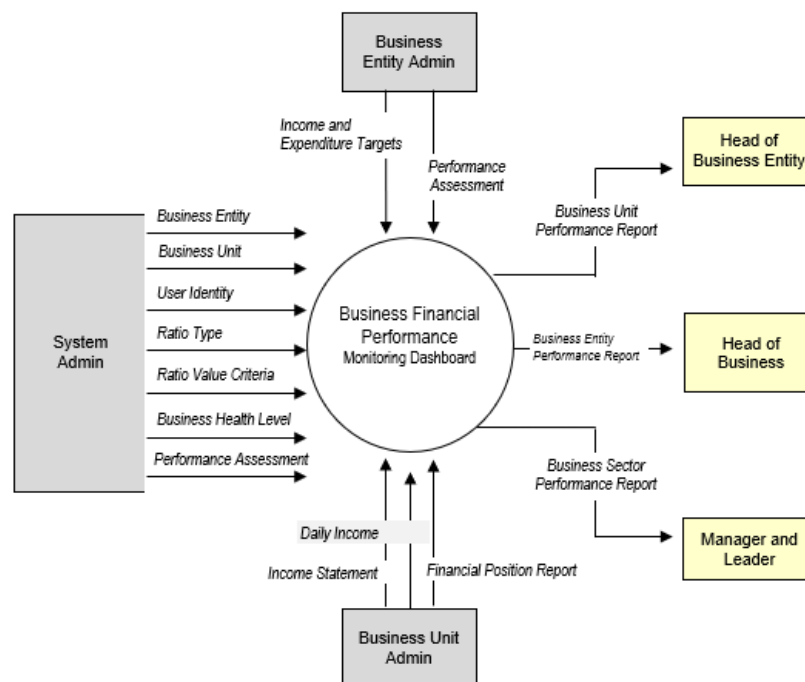


Figure 3. Context Diagram for Financial Performance Monitoring Dashboard

From the context diagram description, data modeling is then carried out using the Data Flow Diagram (DFD), Entity Relationship Diagram (ERD), and Physical Data Model (PDM) models. Data Flow Diagrams (DFD) provide an overview of where the data comes from, how the data is processed, and where it is stored [13]. With this DFD modeling, we get a picture that the tables will be prepared to store master data and financial transactions are 12 tables, including 6 master tables and 6 transaction tables. The master table is used to store data on the name of the business entity, business unit, user password, type of financial ratio which is an assessment indicator, and standards for assessing the level of business health.

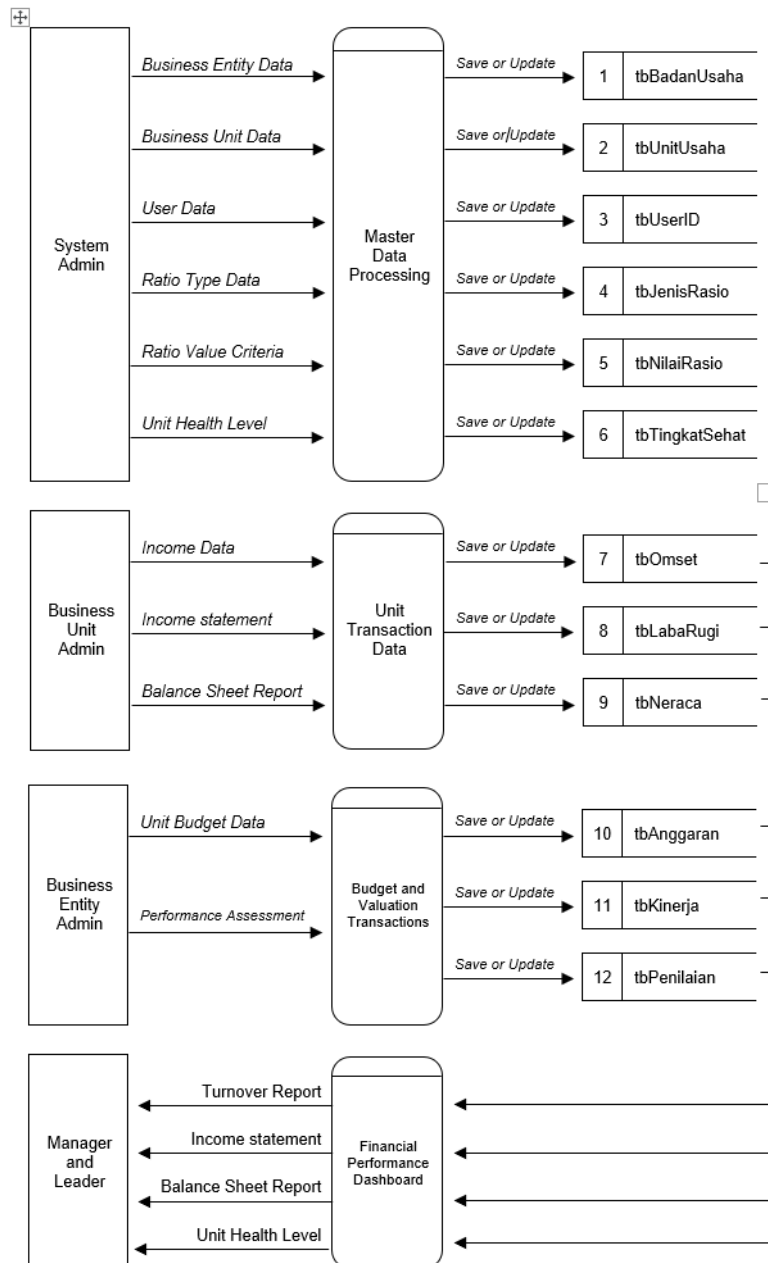


Figure 4. DFD Master Data, Transactions, and Financial Reports

Salafiyah Syafi'iyah Sukorejo of Islamic Boarding School has four business entities, namely: As-Syarif Cooperative, Musa'adah Cooperative, Umana' Cooperative, and Salafiyah Cooperative. Each business entity has several varied business units. Starting from businesses operating in the trade sector (shops, canteens, and supermarkets), telecommunications and printing services, and agriculture, and mineral water factories. The resulting business financial reports include profit and loss reports, financial position reports, and turnover reports (daily income).

Before conducting the research, the Sukorejo Islamic Boarding School did not yet have standard guidelines for assessing the financial performance of each business entity and its business units. Financial performance

assessment generally uses a financial ratio analysis approach. The results of ratio analysis are used as a basis for assessing health levels. To meet these needs, a master has been prepared in the system to input ratio types as performance indicators and assessment criteria. By setting up this menu, the user can flexibly determine the types of ratios and value weights that will be applied in the future.

With the DFD above, an Entity Relationship Diagram was developed. ERD is a technique for describing database schemas. ERD illustrates the database structure logically, taking into account the entities contained in the system [14]. ERD is a combination of entities, attributes, and relationships between attributes.

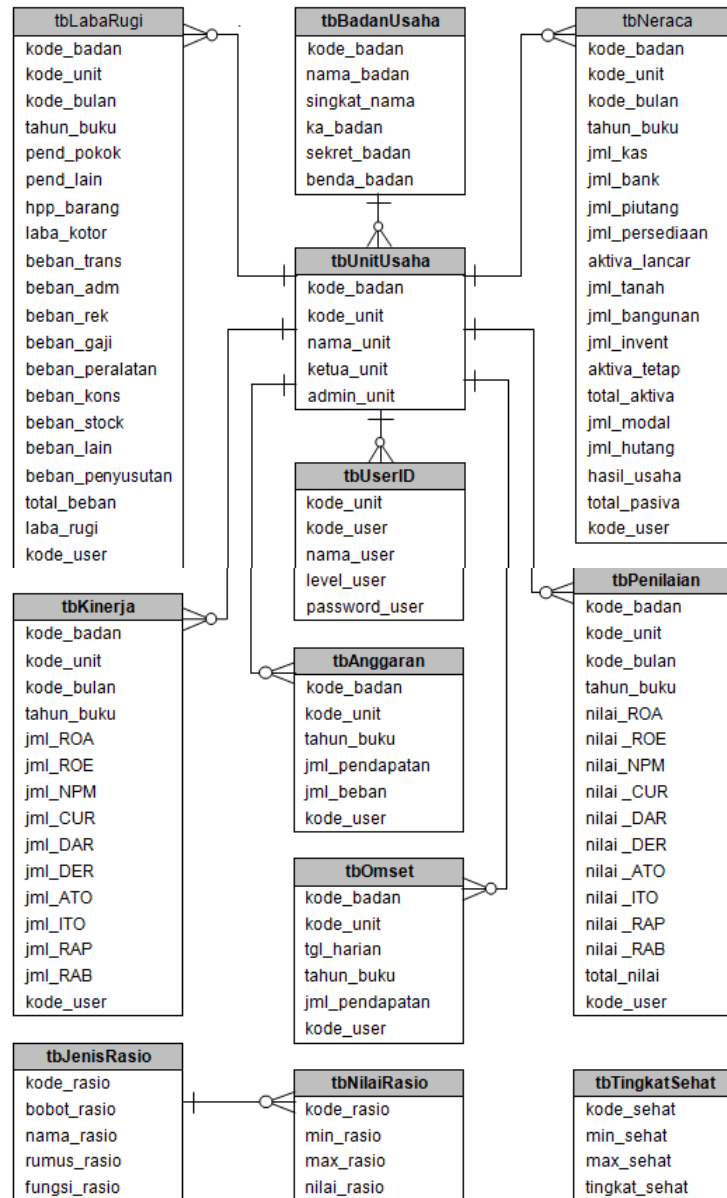


Figure 5. ER-Financial Performance Monitoring Dashboard Diagram (Indonesia)

In the Waterfall method, after going through the system analysis and system design stages, the system development project continues with the implementation of the program design. Each coding result will be tested. If a malfunction is found in the system (bug), it is immediately repaired or perfected (maintenance) [15].

From the input-output design and coding implementation stages, a monitoring system is produced which consists of a menu for inputting basic or master data, financial transaction recap data, and financial performance reports. The master input section includes the interface: user data, business entity and business unit, types of financial ratios, standards for assessing financial ratios, and criteria for assessing the level of financial health of business units. In the transaction data input section, the interface includes budget data or income targets, business unit daily income, profit and loss report recap, and financial position recap.

After filling in the data, the application will produce a financial performance report which is presented in graphical form. The resulting dashboard consists of turnover development, net profit development, and business unit financial position. Through this performance dashboard, The administrators can monitor business developments in real-time.

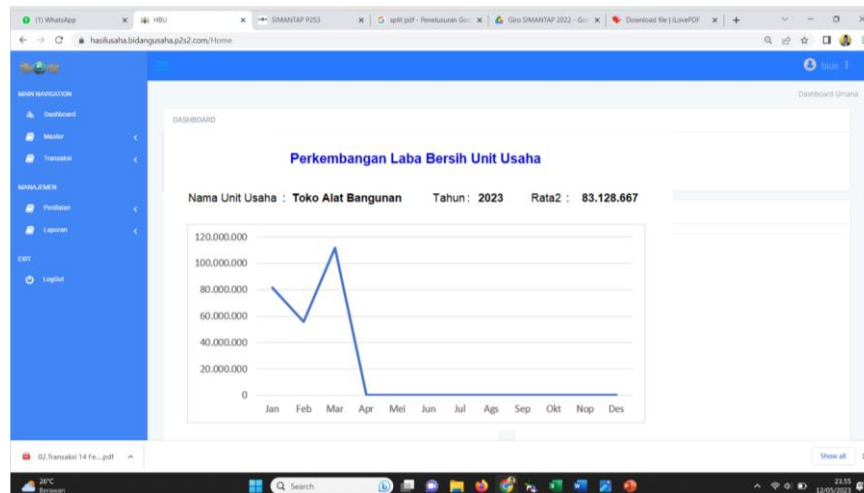


Figure 6. Net Profit Development Dashboard (Indonesia)

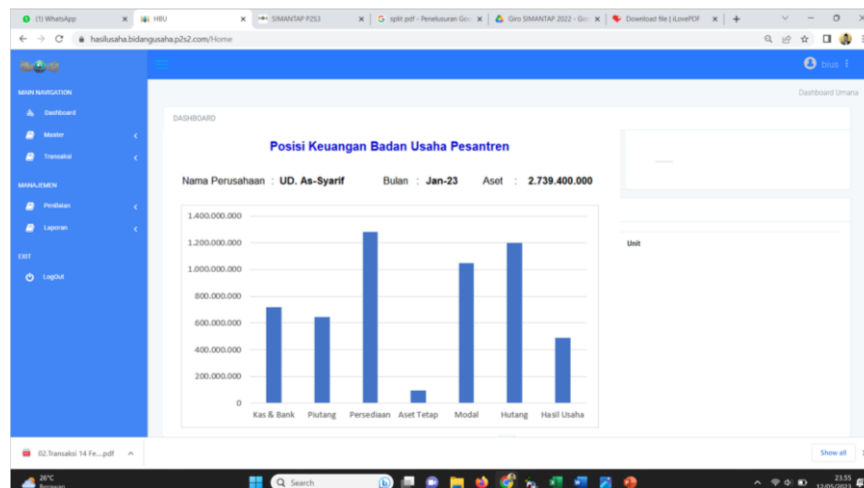


Figure 7. Financial Position Development Dashboard (Indonesia)

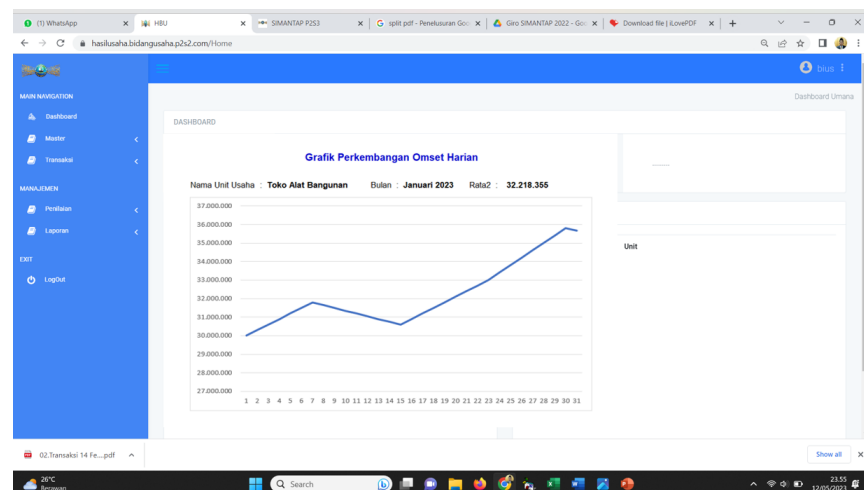


Figure 8. Turnover Development Dashboard (Indonesia)

4. Conclusion

The system was built using the Waterfall model approach, which consists of the stages of system analysis, system design, implementation (design) or program coding, system testing, and system maintenance. System modeling uses context diagram models, data flow diagrams (DFD), entity relationship diagrams (ERD), physical data models (PDM), and system decomposition modeling.

The research produced a Dashboard information system for Monitoring the Financial Performance of Salafiyah Syafi'iyah Sukorejo of Islamic Boarding School. The system presents information about turnover development, business results or profits, and financial position in graphical and quantitative form. The system also provides information about the health level of each business entity and business unit. How many units have healthy, fairly healthy, and less healthy financial performance?

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