



The Analysis of Performance Measurement of Village Unit Cooperatives (KUD) Using the Balanced Scorecard

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ABSTRACT. This study uses the Balanced Scorecard method to determine and analyse the performance of the Sarwa Mukti Village Unit Cooperative (KUD), Cisarua. The analysis used in this study is Current Ratio, Debt to Asset (DAR), Return on Assets (ROA), Customer Acquisition (CA), Customer Retention (CR), response time, and Employee Productivity. Based on the study results, it was concluded that the financial perspective seen from the Current Ratio is considered lacking. This is shown as a percentage that shows results below the criteria. Then, (DAR) is one of the suitable criteria, even though it has increased and decreased. The following financial perspective is that ROA is considered lacking. This is shown by the ability of cooperatives to produce total assets that have decreased. The customer's perspective on Customer Acquisition (CA) is lacking, and Customer Retention (CR) shows good value. This is seen in maintaining relationships with members, which has increased significantly every year. The perspective of internal business processes seen from operational processes can be pretty good because it pays great attention to the timeliness of delivery and product quality conditions. The perspective of learning and growth seen from employee productivity and employee performance is considered sufficient, and this is shown by the cooperative's operating income from the number of available employees.

Keywords: *Balanced Scorecard, Cooperative, Performance*

1. INTRODUCTION

The Village Unit Cooperative (KUD) is an economic institution that has a crucial role in spurring local economic growth and has the potential to become a driving force for national economic development [1]. The Village Unit Cooperative (KUD) has a strategic role in enhancing rural communities' welfare and economies and is a critical economic organisation promoting community members' welfare locally [2]. KUD has a big responsibility as a centre in empowering members and significantly contributing to economic growth (Setiawan, 2022). Rapid changes in the business environment and increasingly fierce competition require KUD to have the right strategy and performance measurement to achieve cooperative goals effectively and sustainably.

Data from the Sarwa Mukti Village Unit Cooperative (KUD) report shows that the cooperative's performance has not progressed. This can be seen from the data on the realisation of the development of business units in each sale of cooperative units, which always produces a lower amount than the initial plan. It was stated that the decline in dairy cattle units was 0.98%, mako units were 10.07%, and water units were 9.20%. In dealing with these complex dynamics, strategic management tools such as the Balanced Scorecard are becoming increasingly relevant and essential for KUD [3].

KUD Sarwa Mukti faces various challenges and problems related to its performance and sustainability. Performance problems arise due to changes in the economic environment and increasingly fierce business competition. Therefore, analysing performance measurements using the Balanced Scorecard method is essential to identify aspects that need improvement and allocate resources efficiently [4]. Through the Balanced Scorecard method, it is hoped that it can help KUD Sarwa Mukti achieve its strategic goals of empowering members and improving services to the community, as well as supporting the development and sustainability of KUD as institutions that benefit the local community and their environment.

Performance describes the successful implementation of an activity, program, or policy For achieving the organisation's objective, target, mission, And vision [5]. The company's performance should be a measurable result and describe the empirical condition of the company from various agreed sizes [6]. The meaning of the term performance is the result of work that can be achieved by an individual or group of people in an organisation following their authority and responsibility to achieve the goals of the organisation concerned legally without violating the law and following morals and ethics. Public sector performance measurement is a system designed to help public sector managers assess the achievement of a strategy using financial and non-financial measurement tools [7]. Performance Measurement is a process of assessing the progress of work against predetermined goals and objectives, including information on the efficiency of the use of resources in producing goods and services, quality of goods and services, comparison of activity results with targets, and effectiveness of actions in achieving goals [8]. Performance measurement serves as the basis for conducting performance evaluation, namely assessing the success or failure of an organisation, program, or activity.

Etymologically cooperative comes from the word cooperation, consisting of the word co, which means together, and operation, which means work or effort [9]. So, cooperation can be interpreted as working together or joint efforts for common interests. In general, cooperatives can be interpreted as an association of people who voluntarily unite to improve their economic welfare by establishing a company that is managed and run democratically. Cooperatives are one of the institutions that are the foundation of national economic development. Article 1 Paragraph (1) of Law No. 25 of 1992 concerning Cooperatives states that "cooperatives are business entities consisting of people or cooperative legal entities with the basis of their activities based on cooperative principles, as well as a people's economic movement based on the principle of kinship." It is necessary to understand that cooperative institutions in this context are not merely mandated by Article 33 of the 1945 Constitution (normative), but what is more essential is that cooperatives, in various respects, have advantages over other economic institutions, especially in terms of utilisation of existing resources among their members which is limited to not only material resources but also other resources such as labour and social ties that exist within group members [10].

The Balanced Scorecard is a management performance measurement method invented in 1990 by Harvard Business School professor Robert S. Kaplan and David P. Norton from the public accounting firm KPMG. A Balanced Scorecard is a measurement system that balances the old measure, which only has a financial dimension and a new non-financial dimension [11]. Balanced Scorecard aimed to improve a focused executive measurement system with more attention to performance finances and trends, ignoring non-financial [5]. Furthermore, the Balanced Scorecard experienced developments in its implementation, balance effort, and attention executive to financial performance and non-financial, and short-term performance and long-term performance. At first, the Balanced Scorecard was only used as a performance measurement tool for business organisations. Nevertheless, today, the Balanced Scorecard is used by business organisations and public organisations (public organisations). The balanced Scorecard aims to measure all critical activities, provide a strategic management system that can monitor the implementation of strategic planning, and facilitate communication with all stakeholders, especially employees [12]. The advantage of the balanced scorecard approach in Strategic planning is the ability to make strategic plans that are comprehensive, coherent, and aligned with strategic and measurable goals [13]. The Balanced Scorecard is a strategic management system or, more precisely called a "Strategic based responsibility accounting system," which describes the mission and strategy of an organisation into operational objectives and performance benchmarks from 4 different perspectives, namely financial perspective (financial perspective), customer perspective (customer perspective), internal business process perspective (internal business process perspective), and learning and growth perspective (learning and growth perspective) [14].

Several previous studies have highlighted the importance of performance measurement in improving the efficiency and effectiveness of KUD operations. The Balanced Scorecard method provides a holistic approach to measuring organisational performance, including financial and non-financial aspects [15]. This is in line with research conducted by [16], which provides an overview of the challenges faced by KUD related to a decrease in the number of members, financial instability, and increasingly fierce competition in a changing economic environment. They highlighted the importance of identifying and addressing these problems to increase the competitiveness and sustainability of KUD as a people's economic organisation.

This study aimed to analyse the performance measurement of the Sarwa Mukti Cisarua Village Cooperative Unit Using the Balanced Scorecard.

2. METHODS

The research method used is a qualitative method through a case study approach by analysing performance measurements based on Return on Assets (ROA), Customer Acquisition (CA), Customer Retention (CR), response time, and Employee Productivity.

Data were collected by interviewing Respondent, Mr Yeyep, the supervisor's chairman, and observing the research object, KUD Sarwa Mukti Cisarua. Libraries are also used to collect data by studying books and journals related to the topics discussed.

The analysis used in this study is based on four perspectives in the Balanced Scorecard, namely the first on the financial perspective through the Current Ratio, Debt to Assets (DAR), and Return on Assets (ROA). The second is from a customer perspective through Customer Acquisition (CA) and Customer Retention (CR). The third is from the perspective of internal business processes through response time. Fourth, learning and growth perspective through Employee Productivity

3. RESULT AND DISCUSSION

3.1 Financial Perspective

Performance Assessment of the Village Unit Cooperative (KUD) Sarwa Mukti Cisarua with the Balanced Scorecard from a financial perspective uses liquidity ratios (current ratio), solvency ratios (debt to asset ratio), profitability ratios (return on assets, return on equity). Calculation of all financial ratios uses data from the financial reports of the Sarwa Mukti Cisarua Village Cooperative (KUD), which consists of a Profit and Loss Report for the period 2020-2022 and a Balance Sheet as of 31 December 2020-2022.

1. Liquidity (Current Ratio)

The results of calculating the current ratio from 2020 to 2022 are presented in Table 1 below:

Table 1. Calculation of the Current Ratio of KUD Sarwa Mukti Cisarua

Year	Assets Fluent	Obligation Fluent	Current Ratio	Criteria	Score
2020	16,198,325,222.97	7,696,051,104.03	210.47%	Not enough	-1
2021	4,940,084,320.83	7,312,863,569.66	67.55%	Not enough	-1
2022	6,331,120,063.83	6,834,218,067.57	92.63%	Not enough	-1

Source: processed data, 2023

Based on the data and calculation results in Table 1. above, it can be seen that the current ratio level from 2020 to 2021 has decreased and in 2022 has increased by 25.08% from the previous year. However, even though it has increased, the calculated data show that the percentage is below the criteria/indicator, and it can be said that the financial performance of KUD Sarwa Mukti Cisarua is considered to be lacking.

2. Solvency, DAR (Debt to Asset Ratio)

The results of the calculation of DAR (Debt to Asset Ratio) from 2020 to 2022 are presented in Table 2 below:

Table 2. Calculation of the Debt to Asset Ratio of KUD Sarwa Mukti Cisarua

Year	Total Debt	Total Assets	Debt to Asset Ratio	Criteria	Score
2020	9,305,301,783.97	20,739,127,792.82	44.86%	Good	1
2021	9,855,039,258.47	20,821,465,499.51	47.33%	Enough	0
2022	9,376,393,756.38	22,301,625,576.39	42.04%	Good	1

Source: processed data, 2023

The table above shows that the debt-to-assets ratio (DAR) of KUD Sarwa Mukti Cisarua in 2020-2021 has increased by 2.47%. In 2020, the ratio was 44.86%, which means every Rp. 1.00 total debt is guaranteed with total assets of Rp. 0.4486. In 2021, it is 47.33%, which means every Rp. 1.00 total debt is guaranteed with total assets of Rp. 0.4733. Whereas in 2022, it will be 42.04%, which means that a total asset of Rp guarantees every Rp. 1.00 in total debt. 0.4204.

3. Profitability (Return on Assets)

The calculation results of Return on Assets from 2020 to 2022 are presented in Table 3 below:

Table 3. Calculation of Return on Assets of KUD Sarwa Mukti Cisarua

Year	Net Profit Before Tax	Total Assets	Return to Assets	Criteria	Score
2020	73,177,028.00	20,739,127,792.82	0.35%	Not enough	-1
2021	74,722,850.86	20,821,465,499.51	0.35%	Not enough	-1
2022	75,888,270.64	22,301,625,576.39	0.34%	Not enough	-1

Source: processed data, 2023

The ROA percentage as a result of the 2020 calculation is 0.35%. In 2016, it remained unchanged at 0.35%. In 2022, it decreased by 0.01%, as seen from Table X Calculation of Return on Assets of KUD Sarwa Mukti Cisarua shows the ability of cooperatives to obtain the remaining operating results from their total assets has stagnated and decreased. This affects the ability of cooperatives to generate profits from every rupiah of assets used so that they are considered less.

Thus, the current study aligns with the findings of [17] for smaller firms. Improving cash flow appears to be of strategic importance [18]. The financial perspective focuses on preventing abnormal issues and controlling

human resource costs. Incorporating financial indicators to measure the performance of a social enterprise will be challenging [19].

3.2 Customer Perspective

Calculation of performance from the customer perspective consists of 2 measures that will be used, namely calculating Customer Acquisition and Customer Retention. The data used is secondary data, which is processed based on data on the number of active members. The number of KUD Sarwa Mukti customers in 2019 was 669 members. In 2020, there were 719 members. In 2021, there were 813; in 2022, there were 841 KUD Sarwa Mukti members. The following results of calculating customer acquisition and retention are explained in Table 4.

Table 4. Outcome Measures from a Customer Perspective

Year	Yield Percentage		Score	Customer Receipt	Criteria	Score
	Customer Acquisitions	Criteria				
2020	6.95%	Not enough	-1	93.04%	Good	1
2021	11.56%	Enough	0	88.43%	Good	1
2022	3.32%	Not enough	-1	96.67%	Good	1

Source: processed data, 2023

The results of performance measurement from Customer Acquisition in 2020 The Sarwa Mukti Cisarua Village Cooperative Unit experienced adding 50 new cooperative members. However, this increase was still below the good Customer Acquisition criteria/standards, namely at 6.95%, so it was assessed as lacking in the cooperative's ability to acquire new customers. In 2021, the Sarwa Mukti Cisarua Village Cooperative Unit experienced the addition of 94 members. This increase was within the Sufficient criteria, namely 11.56%. In 2022, the Sarwa Mukti Cisarua Village Unit Cooperative has added members but has decreased compared to the previous year, which was 3.32%, so that it can be assessed as Less.

The performance measurements from Customer Retention results from the calculations for 2020 are 93.04%, 2021 88.43%, and in 2022 are 96.67%, as seen in Table 4. Results Measures from the Customer Perspective show the ability of cooperatives to maintain relationships with members has experienced a very significant increase every year, even though in 2021 it has decreased by 4.61% compared to 2020, but has experienced another increase in 2022 of 96.67% so that it can be considered Good.

Thus, the current study aligns with the findings that customer satisfaction is almost every organisation's top performance assessment indicator [18]. Consistency should help the management to earn customer loyalty, which would further increase the revisiting rate and create financial income. The customer perspective can be used to assess the performance of a social enterprise [19].

3.3 Internal Business Process Perspective

The performance of KUD Sarwa Mukti's internal business processes was analysed based on an assessment that focused on the internal company. In carrying out operational activities, KUD Sarwa Mukti monitors the ratio of operational costs to operational income or expenses in producing products. Based on the results of interviews with the head of the supervisory agency, it was stated that KUD Sarwa Mukti prefers customers with shorter mileage. This is done to minimise vehicle operating costs.

In addition, KUD Sarwa Mukti Cisarua also pays attention to the punctuality of delivery and the condition of the quality of cow's milk during the journey so that the milk received meets acceptance standards, namely TPC (Total Plate Count) of no more than one million bacteria. It was also explained that the average production time for cow's milk production takes a maximum of two hours from the regional farmer chain to the cooling unit before being distributed to milk trucks for distribution. So, this gives an idea of the level of time efficiency of KUD in carrying out its operations, which is considered good enough.

Thus, the current study is in line with the findings that the operation flow design of the organisation influences customer satisfaction [18]. Innovation is one of the significant capabilities for social enterprises in emerging markets that creates and captures beneficiary and local community value [19].

3.4 Growth and Learning Perspectives

The last perspective in the balanced Scorecard is the perspective of growth and learning. This perspective describes how an organisation can survive and be able to change to grow according to developments around it.

This study takes one of the main categories from the perspective of growth and learning that will be analysed and measured, namely employee competence, as seen from the level of employee productivity. The level of productivity will significantly affect the growth of an organisation. The level of employee productivity is the level of ability of the workforce in producing products or completing a job. Following are The results of calculating productivity levels in Table 5 as follows:

Table 5. Employee Productivity Level

Year	Productivity
2020	2%
2021	2%
2022	2%

Source: processed data, 2023

The performance measurement result of employee productivity in 2020 is 2%. Then, the data for 2021 shows that there has been an increase in net income and also a reduction in one employee, bringing the number of employees to 41 people. The results of the calculation for 2021 show a figure of 2%, which means there will be no change between 2020 and 2021. The last year in this study, namely 2022, will show relatively the same results as the previous two years, namely 2%. The learning and growth perspective shows the ability of cooperatives to obtain income from the number of employees who have not increased and have scores classified as unhealthy.

Thus, the current study aligns with the findings that if the organisation provided more resources and support for individual learning, individual learning and group growth would be in a better balance [18]. Organisational learning and growth can be used to measure the performance of social enterprises [19].

4. CONCLUSION

4.1 Conclusion

Based on the research results, it can be concluded that from a financial perspective, seen from (1), the current ratio for the 2020-2022 period has changed, fluctuating with fewer financial performance criteria. (2) Debt to assets ratio for 2020-2022 has increased and decreased, especially in 2022, but is still in good criteria. (3) Return on assets for 2020-2022 has stagnated and decreased with Fewer performance criteria.

The customer perspective in (1) customer acquisition for the 2020-2022 period has fluctuated changes, (2) customer retention for the 2020-2022 period rated its performance as good, and this shows that the ability of the Sarwa Mukti Cisarua Village Cooperative (KUD) to maintain relationships with members has increased very significantly every year, even though in 2021 it decreased by 4.61% compared to 2020.

The internal business process perspective in carrying out its operations is considered quite good because it pays close attention to the timeliness of delivery and the condition of the quality of cow's milk during the journey so that the received milk meets acceptance standards, namely TPC (Total Plate Count) of no more than one million bacteria.

The learning and growth perspective for the 2020-2022 period shows that the cooperative's ability to earn income from the number of employees has not increased and has a score classified as unhealthy, namely stagnant at a percentage of 2%.

5.2 Suggestion

Based on the conclusions that have been put forward, the suggestions that can be submitted to the Village Unit Cooperative (KUD) Sarwa Mukti Cisarua from the results of this study are that Cooperatives should try to apply the Balanced Scorecard method to maintain their membership. It is hoped that revenue will increase by increasing membership and activities. This is done to improve management in ways expected to improve joint performance. Future research is expected to be able to develop measurements outside of this research and also complete the data needed in its preparation so that the processed data is more accurate.

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