THE BALANCED SCORECARD METHOD AS A STRATEGY FOR MEASURING FINANCIAL AND NON-FINANCIAL PERFORMANCE OF MSME BU-DHE TUNA FISH PRODUCTION IN NORTH HALMAHERA

Rina Silvia[1], Novriani M.Wangka[2]
University of Halmahera, North Halmahera[1,2]

Email: silviasilviarina@gmail.com

Abstract

The purpose of the research is to find out the measurement of financial and non-financial performance using the balanced scorecard method on MSME Bu-dhe, namely seen from the financial perspective, customer perspective, internal process perspective, and learning and growth perspective. This research uses a qualitative method with a descriptive approach, namely statistical analysis used to analyze data by describing or illustrating the data that has been collected. This research method provides a general description of the object being studied, namely measuring financial and non-financial performance (customer perspective, process perspective, learning and growth perspective).

The results of this research are: Based on the balanced scorecard financial perspective analysis, the performance of MSME Bu-dhe can be said to be very good. Based on the balanced scorecard customer perspective analysis, it can be concluded that the performance of MSME Bu-dhe is very good. Based on the balanced scorecard internal process perspective analysis, it can be concluded that the performance of MSME Bu-dhe is said to be good. Based on the balanced scorecard learning and growth perspective analysis, it can be concluded that the performance of MSME Bu-dhe is said to be good.

Keywords: Balanced Scorecard, Performance Measurement, Financial, Non-Financial, MSME

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are thriving in several regions. This can be seen from the data reported by the Ministry of Cooperatives and Small and Medium Enterprises, showing that the total number of MSMEs in Indonesia reached 64 million business units in 2024. North Maluku recorded 4.1 thousand units, and Papua recorded 3.9 thousand units, as shown in the following table:
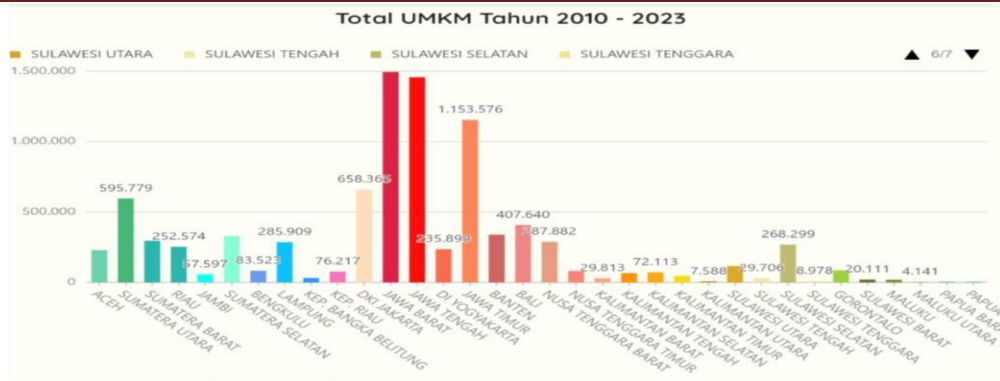
Figure 1.1. Number of MSMEs in Indonesia

source: Https://Databoks.Katadata.Co.Id/Datapublish/2023/02/02/Jumlah-Umkm-Di-Indonesia].

From the data, it can be seen that MSMEs in North Maluku occupy the last position before Papua, with 4.1 thousand units. North Halmahera, which is part of the North Maluku Province, still shows very low development in terms of MSMEs. The low number of MSME actors in North Halmahera is caused by several factors based on the results of community service programs (PKM), surveys, and previous observations on MSME Yiskashop, MSME Bu-dhe, and MSME Solo Indah Furniture, as well as interviews with the head of the North Halmahera MSME Association. These factors include suboptimal financial management, customer service, internal business management, as well as development and growth of MSMEs, which have led to bankruptcy.

Considering the problems above, the researcher chose the topic of how to improve the performance of MSMEs in Halmahera. One of the targeted partners in this study is MSME Bu-dhe. MSME Bu-dhe is a productive MSME in the food sector that has the potential to absorb labor in the future and to increase the income of tuna fishermen in North Halmahera. The business of MSME Bu-dhe is processing tuna fish into tuna floss, tuna meatballs, and tofu stuffed with tuna meatballs, with average monthly sales as follows:

Table 1.1.General Overview of Bu-dhe Tuna Fish Production in 2024

Nama produk	Hasil Produksi	Penjualan	Keterangan
Abon Ikan varian pedas	69 kg	68 kg	Return 1 kg
Abon Ikan original	100 kg	100 kg	Return 3 kg
Abon ikan Varian Gurih	100 kg	98 kg	Return 5kg
Bakso	1.000 biji	1.000 biji	Return 100 biji
Tahu bakso	1.000 buah	1.000 buah	Retur 50 buah

Sumber:UMKM Bu-dhe

From the overview of tuna fish production at MSME Bu-dhe, it can be seen that sales are not yet optimal due to product returns caused by expiration or damaged packaging. Based on information from Mrs. Santi, the owner of this business, there was even a case where all tuna floss products were returned because they were deemed unfit for sale. This happened due to an immature or rushed production process, resulting in many customer complaints and forcing the owner to withdraw products that had already been distributed to shops and minimarkets, and replace them with

new ones. Inevitably, this caused losses for the owner.

After gathering information, conducting interviews, and receiving input from students participating in internships, it was concluded that MSME Bu-dhe faces several challenges in improving its business. These include suboptimal financial management, customer service, internal business management, and MSME development and growth. This aligns with the problem-solving method formulated by Kaplan and Norton (1992) regarding the Balanced Scorecard strategy model, which emphasizes continuous improvement rather than merely achieving specific goals such as profit.

Performance measurement has now become an inseparable part of every organization's activities. Holistic performance measurement models have been widely developed to respond to these demands. One of the most prominent is the Balanced Scorecard (BSC). The BSC framework complements a company's financial performance measures (outcome measures) with performance drivers from other perspectives, aiming to provide a comprehensive view of how financial performance is achieved. Thus, companies will be able to project their sustainability in the future based on their current capabilities, not merely on the results already obtained.

Research Urgency: The ability to manage financial and non-financial aspects of MSMEs is a fundamental foundation for entrepreneurs in improving and developing their businesses. Considering the large number of MSMEs that have experienced failure, including MSME Bu-dhe which nearly went bankrupt, this research is urgent for MSME Bu-dhe in order to understand and implement proper strategies in its business. The failure of MSMEs has an impact on increasing unemployment rates as well as poverty levels.

RESEARCH METHODS

This research was conducted at MSME Bu-dhe, a tuna fish production business in North Halmahera. The purpose of this study is to measure the performance of the MSME using a qualitative method with a descriptive approach, namely statistical analysis used to analyze data by describing or illustrating the data that has been collected (Sugiyono, 2013). This research method provides a general overview of the object studied, namely the measurement of financial and non-financial performance (customer perspective, internal process perspective).

The Balanced Scorecard has advantages that make it a strategic management system of significant relevance today by using the following four perspectives:

1. **Financial Perspective**

The financial objectives at this stage are directed at the level of return on investment made. The benchmarks used at this stage include ROI, profit margin, operating ratio, current ratio, ROE, TATO, SG, ROA, RI, and EVA.

A. ROI (*Return On Invesment*)

Return on Investment from operating income, or commonly referred to as ROI, is a ratio used to measure the ability of invested capital in total assets to generate net income.

$$ROI = \frac{LabaBersih}{TotalAktiva} \, x100\%$$

B. Profit Margin

Used to see the magnitude of business profit in relation to sales in order to determine the company's efficiency. The higher the profit margin value, the better, as it indicates the company's ability to generate profit is relatively high.

$$ProfitMargin = \frac{LabaBersih}{Penjualan} x100\%$$

C. Operating Ratio

Operating ratio is operating expenses divided by net sales and expressed as a percentage. Operating expenses consist of the cost of goods sold (COGS) plus operating expenses. The higher the operating ratio, the more it indicates that the MSME can utilize its costs effectively to generate net sales.

$$OperatingRatio = \frac{LabaBersih}{Penjualan} x100\%$$

D. Current Ratio

Maximizing cash inflows and working capital expenditures.

$$CurrentRatio = \frac{AktivaLancar}{HutangLancar} x100\%$$

E. Return On Equity (ROE)

Formula used:

$$ROE = \frac{Net\ income}{Net\ worth}$$

F. *Total Asset Turn Over* (TATO)

Formula used:

$$TATO = \frac{Sales}{Tatal\ asset}$$

G. *Sales Growth* (SG)

Sales growth measures the ability of a business entity to increase sales year after year. If sales growth continues to rise, it is considered better, as this means the products produced by the business entity are increasingly in demand by consumers.

H. Return On Asset (ROA)

This ratio measures the level of profitability of investments before tax.

$$\text{ROA} = \frac{\text{Income}}{\text{Net Worth}}$$

I. *Residual Income*.
   Residual Income = Profit – (Assets used to generate profit × Expected rate of return on assets)

J. *Economic Value Addedd* (EVA)
   Economic Value Added (EVA) is a similar concept but has a different perspective on costs and investments.

$$\text{EVA} = (r - c^*) \times \text{Capital}$$
$$r = \frac{\text{E.B.I.T} - \text{Tax}}{\text{Capital}}$$

r = *Corporate Economic Return* (*percentage*)
c* = *Opportunity cost of debitur and quity* (*percentage*)
Capital = *debt and equity*
E.B.I.T. = (*Earning before income tax*)

2. Customer Perspective

Performance in the customer perspective has a direct impact on increasing company sales. The purpose of the customer perspective is to find out how customers see the organization, while the difference lies in who becomes the customer. In public sector organizations, the main customers are the taxpaying society and the public as users of public services. Profit margin is used to see the size of business profit in relation to sales to find out the efficiency of the company. The higher the profit margin value, the better, because it is considered that the company's ability to obtain profit is quite high. The customer perspective is divided into two measurement groups, namely customer core measurement and customer value proposition with the following measurements:

A. Customer Retention; measures the degree to which the company can maintain relationships with consumers. Customer Retention Rate = Number of old customers / Total number of customers x 100%

B. Customer Acquisition*;* measures the degree to which a business unit is able to attract new customers or win new business. Customer Acquisition Rate = Number of new customers / Total number of customers x 100%

C. Customer Satisfaction; estimates the level of customer satisfaction related to specific performance in the value proposition. Using questionnaires distributed to customers

D. Customer Profitability; measures the profit obtained by the company from sales of products/services to consumers. *Customer Profitability Level = Net Profit / Net Revenue x 100%*

3. **Internal Business Perspective**

Measurement of the company's internal business process performance is carried out using value chain analysis. Here, management identifies the critical internal business processes that must be prioritized by MSMEs, namely innovation. This measurement is done by looking at MSME data regarding what kinds of innovations are carried out for employees and customers, as well as after-sales services, whether consumers buy in cash or pay after the product is sold. The measurements carried out for the internal business process perspective are:

A. *Supplier Lead Time*
The average time required by the supplier to deliver the ordered goods.
B. *Part Per-million Defect Rate.*
The purpose of determining this measurement is to find out the level of product defects in the business entity compared to the overall production of the business entity.
C. Fleksibilitas
Includes set-up time, down time, operator experience, machine capacity, maintenance activities, equipment readiness, and also safety factors that need to be considered, both the number of accidents in the production process and the impact of these accidents which must be controlled.

4. **Growth and Learning Perspective**

A. *Employe Productivity*
The formula for employee productivity is using output per labor hour. This ratio is taken into account because with the increase of this ratio, costs will be reduced. It also needs to be considered that if this ratio is too high, it is feared that products will be finished quickly but many are defective. This causes losses for the business entity due to the large number of defective products.
B. *Employe Turn Over*
The purpose of this measurement is to find the level of labor stability. This turnover is measured by comparing the number of total separations minus unavoidable separations with the average number of employees.
C. Absenteism.

What is meant by absenteeism is the frequency of working time lost due to employees not working. This factor occupies the first place in terms of violations of regulations among several other factors. As for calculating the absenteeism rate according to Suad Husnan (1995) it is as follows:

Absenteeism Rate = A / B + C
Description:
A : Lost working days
B : Days employees worked
C : Days employees did not work

Furthermore, to be clearer, absenteeism can be detailed, for example, what percentage of employees did not come to work due to absence without notice (alpha) and due to illness.

The following is about these two things: Alpha and Illness.

Population and Sample

The population of this research is all MSMEs in Halmahera, as shown in the table below with 53 MSMEs that already have business permits, with the sample taken from MSME Bu-dhe, a tuna fish production business in North Halmahera.

Kabupaten/Kota *Regency/City*	Izin Usaha yang Dimiliki *Licensing*				Status Badan Hukum Usaha/ *Form of Enterprises/ Corporation*
	Nomor Induk Berusaha (NIB) *Business Registration Number*	Izin Usaha Industri (IU) *Industrial Business License*	Surat Izin Usaha Perdagangan (SIUP) *Business Trade License*	Izin Usaha Mikro dan Kecil (IUMK) *Permanent Business License*	PT *Limited Liability Company*
(1)	(2)	(3)	(4)	(5)	(6)
[8201] Halmahera Barat	57	38	–	–	–
[8202] Halmahera Tengah	–	–	–	–	–
[8203] Kepulauan Sula	–	8	13	4	–
[8204] Halmahera Selatan	18	37	182	14	–
[8205] Halmahera Utara	431	334	364	53	–
[8206] Halmahera Timur	6	–	79	–	–
[8207] Pulau Morotai	12	–	16	25	–
[8208] Pulau Taliabu	–	–	11	–	–
[8271] Kota Ternate	452	34	138	131	10
[8272] Kota Tidore Kepulauan	–	–	263	89	–
MALUKU UTARA	976	451	1.066	316	10

[Https://Malut.Bps.Go.Id/Id/Publication/2024/12/12/7d93464bec941e3725f13e6c/Profil-Industri-Mikro-Dan-Kecil-Provinsi-Maluku-Utara-2023. Html]

According to Djarwanto (1993), population is the total number of units or individuals whose characteristics are to be studied, and a sample is a part of the population whose characteristics are to be studied. The sample in this research is purposive sampling, which is non-probability sampling where the researcher selects individuals or objects based on specific purposes, special criteria, or certain considerations (Kuntjojo, 2009).

RESULTS AND DISCUSSION

1. Financial Perspective

Table 1. Income Statement of MSME Bu-dhe Year 2024

Income Statement
MSME BU-DHE
2024

Business Revenue	
Tuna Floss Sales	110.400.000

Meatball Sales	86.400.000
Tofu Meatball Sales	86.400.000
Total Revenue	**283.200.000**
Cost of Goods Sold (COGS)	
COGS	110.400.000
Total COGS	110.400.000
Gross Profit	**172.800.000**
General and Administrative Expenses	
Salaries and Wages	48.000.000
Vehicle Rental	10.000.000
Electricity and Water Expenses	360.000
Repair and Maintenance Expenses	5.000.000
Training Expenses	4.000.000
Employee Welfare Program Expenses	12.000.000
Total General and Administrative Expenses	79.360.000
Net Profit	**93.440.000**

Source: Processed Data 2025

Tabel 2. Balance Sheet of MSME Bu-dhe

Balance Sheet
MSME BU-DHE
2024

Assets	
Current Assets	
Cash	261.000.000
Accounts Receivable	17.200.000
Supplies	5.000.000
Total Current Assets	**283.200.000**
Fixed Assets	
Equipment	20.000.000
Accumulated Depreciation of Equipment	2.000.000
Total Fixed Assets	**22.000.000**
Total Assets	**305.200.000**
Liabilities	
Current Liabilities	
Accounts Payable	9.200.000

Bank Loans	-
Total Liabilities	9.200.000
Equity	
Owner's Capital	296.000.000
Total Equity	296.000.000
Total Liabilities and Equity	**305.200.000**

Source: Secondary Data Processed 2025

a. ROI (*Return On Invesment*)

b. The rate of return on investment from operating income, or commonly known as ROI, is a ratio used to measure the ability of the capital invested in total assets to generate net income. The net income after tax obtained is Rp.93,440,000 and the total assets are Rp.305,200,000, resulting in an ROI percentage for MSME Bu-dhe of 30%. Based on interviews, the target ROI is 30%.

c. Based on the calculation of the Net Profit Margin formula, the net income after tax is Rp.93,440,000 and the sales value is Rp.283,200,000, resulting in a total NPM percentage at MSME Bu-dhe of 33%. The management target for Net Profit Margin (NPM) is 35%.

d. Based on the calculation of the Net Profit Margin formula, the net income after tax is Rp.93,440,000 and the sales value is Rp.283,200,000, resulting in a total NPM percentage at MSME Bu-dhe of 33%. The management target for Net Profit Margin (NPM) is 35%.

e. Current Ratio
Maximizing cash inflows and working capital expenditures, based on the calculation of CR with current assets of Rp.283,200,000 and current liabilities of Rp.9,200,000, the percentage obtained is 31. This means that MSME Bu-dhe has 31 times the current assets compared to its current liabilities, so it can be considered to have good liquidity.

f. Based on the calculation of the Return on Equity (ROE) formula, the net income after tax is Rp.93,440,000 and the owner's equity is Rp.296,000,000, resulting in a total ROE percentage at MSME Bu-dhe of 31%. The management target for Return on Equity (ROE) is 30%.

g. Total Asset turn over (TATO), based on the calculation of the TATO formula, obtained from sales of Rp.283,200,000 and total assets of Rp.305,200,000, resulting

in 92%. This means that MSME Bu-dhe has maximized the use of assets to generate revenue.

h.   *Sales growth* at MSME Bu-dhe from month to month and year to year over its 7 years of operation has continued to experience an increase in sales. This can be known from interviews with the owner and the increase in MSME production.

i.   Return on asset (ROA), this ratio measures the level of return on investment before tax. Based on the calculation, from revenue of Rp.172,800,000 and owner's equity of Rp.296,000,000, the percentage obtained is 58%. This means that if investing in MSME Bu-dhe, the asset return rate is 58%.

j.   Residual income, based on the residual income calculation, is obtained from profit minus assets multiplied by the expected rate of return on assets. Thus, the result is Rp.93,440,000 – (0.30 × 79,360,000) = 93,440,000 – 23,808,000 = residual income of Rp.69,632,000. In this case, the residual income is positive, which means that the investment generates sufficient income to meet the minimum return requirement of 30%.

k.   Economic Value Added (EVA), based on the EVA calculation with EBIT of Rp.93,440,000, tax 0, debt of Rp.9,200,000, and equity of Rp.296,000,000, the result is 93,440,000 – (296,000,000 × 15%) = 93,440,000 – 44,400,000 = Rp.49,050,000. Based on the EVA parameter, MSME Bu-dhe is considered to provide economic benefits for investors because EVA is positive at Rp.49,050,000.

2. Customer Perspective

a. Based on the calculation of the Customer Retention (CR) formula, the total number of old customers is 100 customers on average from 4 stores that are regular customers, and the total customers in 2024 are 124 customers, resulting in a Customer Retention (CR) percentage at MSME Bu-dhe of 80%. The management target for Customer Retention (CR) is 50%.

b. Customer Acquisition; measures the extent to which a business unit is able to attract new customers or win new business. Based on the calculation, the number of new customers is 24 and the old customers are 100, resulting in 24%, with the management target being 30%.

c. Based on the calculation of the Customer Complaints (CC) formula, the total number of customer complaints served is 20 customers with the total number of customer complaints being 30 customers, resulting in a Customer Complaints (CC) percentage at MSME Bu-dhe of 66%. The management target for Customer Complaints (CC) is 100%.

d. Customer Profitability; measures the profit obtained by the company from sales of products/services to consumers.
Customer Profitability Level = Net Profit / Net Revenue × 100%

In the calculation of customer profitability, the net profit is Rp.93,440,000 and the revenue is Rp.172,800,000, resulting in customer profitability of 54%.

3. Internal Business Process Perspective

a. Supplier Lead Time, This is the average time required by the supplier to deliver the ordered goods. Based on interview results, the average time needed to deliver goods is 1–2 hours per day.

b. Part per-milliom defect rate, This measurement is used to identify product defects. Based on the calculation of the Product Quality (PQ) formula, the total number of good products available is 960 packs of tuna floss, 1,440 meatballs, and 1,440 tofu meatballs, with a total of 3,840 products produced. Of this, 40 packs of products were not suitable for sale (poor quality). Thus, based on the data, the total percentage of product quality at MSME Bu-dhe is 96%. The management target for Product Quality (PQ) is 90%.

c. Fleksibilitas

Includes set-up time, down time, operator experience, machine capacity, maintenance activities, and equipment readiness. In addition, there are safety factors that need to be considered, both the number of accidents in the production process and the impact of these accidents that must be controlled. Based on interviews with the business owner, machine maintenance activities are carried out twice a year and equipment readiness is always checked, in order to minimize work accidents.

4. Learning and Growth Perspective

a. Based on the calculation of the Employee Productivity formula, MSME Bu-dhe obtained a net profit of Rp.14,400,000 with the performance of 5 employees, so the value of work productivity per employee per month is Rp.2,880,000. This serves as an evaluation for MSME in providing wages to employees.

b. The purpose of this measurement is to find the level of labor stability. This turnover is measured by comparing the number of total separations minus unavoidable separations with the average number of employees. The number of employees leaving in one month divided by the average number of employees in a month. At MSME Bu-dhe, there were no employees who left in 2025, so there has not been any turnover at MSME Bu-dhe.

c. Based on the calculation of absenteeism (lost working days / days employees worked and days employees did not work), the frequency of working time lost due to employees not working at MSME Bu-dhe has not occurred. This is because, on average, the employees working at MSME Bu-dhe live within the MSME premises.

Performance Assessment Analysis of MSME Bu-dhe Using the Balanced Scorecard Method

Table 3. Summary of Performance Assessment with the Balanced Scorecard Method

No	Balanced Scorecard Indicator	Performance Achievement Score	Description
1	Financial Perspective	9	Achieved / Very Good Performance from 10 indicators and 1 indicator Good
2	Customer Perspective	2	Achieved / Very Good Performance from 4 indicators and 2 indicators Good
3	Internal Business Process Perspective	1	Achieved / Good Performance and 2 indicators Fairly Good
4	Learning & Growth Perspective	3	Achieved / Good Performance and 1 indicator Fairly Good
	Total Overall	15	**Achieved / Good Performance**

Source: Processed Data, 2025

Based on Table 3, it can be explained that the total score of the Balanced Scorecard method in measuring the performance of MSME Bu-dhe shows good performance. From the financial perspective with 10 calculation indicators, the customer perspective with 4 measurement indicators, the internal business process perspective with 3 measurement indicators, and the learning and growth perspective with 3 measurement indicators.

CONCLUSION

Based on the results of the research and discussion, the following conclusions can be drawn:

1. Based on the Balanced Scorecard analysis of the financial perspective, the performance of MSME Bu-dhe can be considered very good.
2. Based on the Balanced Scorecard analysis of the customer perspective, it can be concluded that the performance of MSME Bu-dhe is very good.
3. Based on the Balanced Scorecard analysis of the internal process perspective, it can be concluded that the performance of MSME Bu-dhe is good.
4. Based on the Balanced Scorecard analysis of the learning and growth perspective, it can be concluded that the performance of MSME Bu-dhe is good.

From the results of the Balanced Scorecard Method as a Strategy in Measuring Financial and Non-Financial Performance in MSMEs, it shows that this method can be applied very well.

Reference

Alamsyah L, Firdaus, Lukman Baga, 2017. Strategi Peningkatan Kinerja Menggunakan Balanced Scorecard Pada Pemerintah Kota Jakarta Utara, Jurnal Manajemen Pembangunan Daerah Volume 9 No. 1

Atkinson, A.A., Waterhouse, J.H. & Wells, R.B. (1997). A Stakeholder Approach To Strategic Performance Measurement, *Sloan Management Review*, 38 (3), 25-37

Djarwanto, Ps.1993.Statistik Sosial Ekonomi, Edisi Kedua, Yogyakarta. BPFE

De Waal, A.A. (2003). The Future Of The Balanced Scorecard: An Interview With Prof. Dr. Robert S. Kaplan, *Measuring Business Excellence*, 7 (1), 30-35.

Galib, M., & Hidayat, M. (2018). Analisis Kinerja Perusahaan Dengan Menggunakan Pendekatan Balanced Scorecard Pada PT. BOSOWA PROPERTINDO. *SEIKO: Journal of Management & Business*, *2*(1), 92-112.

Hanuma And E. Kiswara,2016 "Analisis Balance Scorecard Sebagai Alat Pengukur Kinerja Perusahaan," Anal. Balanc. Scorec. Sebagai Alat Pengukur Kinerja

Https://Databoks.Katadata.Co.Id/Datapublish/2023/02/02/Jumlah-Umkm-Di-Indonesia

Https://Malut.Bps.Go.Id/Id/Publication/2024/12/12/7d93464bec941e3725f13e6c/Profil-Industri-Mikro-Dan-Kecil-Provinsi-Maluku-Utara-2023. Html

Kaplan Dan Norton.1992.The Balanced Scorecard-Measures That Driver Performance. Harvard Business Review

Kaplan Dan Norton.1996.The Balanced Scorecard: Translating Strategy Into Action. Harvard Business School

Kaplan, Robert S, Norton, David P (2000), Balanced Scorecard: Menerapkan Strategi Menjadi Aksi. Jakarta: Penerbit Erlangga

Kuntjojo. 2009. Metodologi penelitian. Materi Diklat pada Universitas Nusantara PGRI Kediri

Maita, Fahrani. 2020. Analisis Kinerja Perusahaan Menggunakan Metode Balanced

Scorecard. Jurnal Ilmiah Rekayasa Dan Manajemen Sistem Informasi Vol 6. No 2

Mulyadi. 2001, *Balanced Scorecard*, Alat Manajemen Kontemporer Untuk Pelipat Ganda Kinerja Keuangan Perusahaan, Salemba Empat, Jakarta

Neely, A., Adams, C. & Crowe, P. (2001). The Performance Prism In Practice, *Measuring Business Excellence*, 5 (2), 6-12

Panudju, Asfar, Fitri Fauziah.2021 Pengukuran Kinerja Perusahaan Menggunakan Metode Balanced Scorecard (Bsc) Dengan Pembobotan Analytical Hierarchy Process (AHP) Di PT. Abc, Tbk. Jurnal Integrasi Sistem Industri UM

Silvia R, Utami I. 2016. Strategi Pemitigasian Bias Pengukuran Umum Dalam Evaluasi Balanced Scorecard. UKSW

Silvia R , Wangka.2022. Economic Value Added And Market Value Added As A Measuring Tool For Financial Performance International Journal Of Social Science And Business Volume 6, Number 1

Sugiono. 2013. Metode Penelitian Kuantitatif Dan Kualitatif, Dan R&D.Alfabeta Bandung