Mapping Literature the Measurement Performance on Indonesian SMEs Based on Systematic Literature Review

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Abstract

Since the development of the theory of performance measurement (PM), Indonesian academics and practitioners have focused on performance measurement using the Balanced Scorecard method. Even so, it is widely known that the implementation of the Balanced Scorecard has problems with goal incompatibility. Therefore, based on the discussion on the state of the art of PM, this article aims to provide guidelines for a possible new performance measurement system for micro, small and medium enterprises in Indonesia. Mapping the development of the MSME performance measurement literature in Indonesia is tracked and analyzed in depth. The findings of this study indicate that the development of MSME performance measurement theory in Indonesia is still stagnant in its application. Development of performance measurement literature by analyzing previous research and presenting topics that can be the focus of future studies to overcome the challenges of performance measurement in SMEs in Indonesia.

Keywords: *Management; Performance Measurement; SMEs; SLR*

1.Introduction

Issues related to the existence of Micro, Small and Medium Enterprises (MSMEs) are still an interesting issue to be studied in Indonesia. The MSME issue is one of the cross-sectoral issues, which is why the Ministry of Cooperatives and MSME encourages working groups to work together in MSME development.(Humas Kementerian Koperasi dan UKM, 2022). The development of existing MSMEs is not in line with the development of their MSME performance. SMEs are still far from being able to build complex systems. The main obstacles faced by MSMEs are generally related to human resources, costs to design, test, deliver, operate and maintain the system properly. Even though the performance of MSMEs is one of the benchmarks for business continuity. The performance of MSMEs also needs to be measured considering that the majority of MSME business continuity is still very fluctuating, in general the continuity can only be around 42 months.(GEM, 2018). There are various problems faced by SMEs, which of course requires an in-depth analysis and requires thoughts from academics to analyze how the development of the performance measurement literature in Indonesia. An analysis related to the performance measurement literature was made in order to find out what gaps there are, and to be able to formulate a new formula in performance measurement for MSMEs in Indonesia.

So far the performance measurement literature has developed a lot in various countries, it's just that for Indonesia the existence of performance measurement literature is still not widely implemented by SMEs. Thus, researchers seek to identify and categorize the performance measurement literature related to the issues faced by SMEs. With the identification and categories of the MSME performance measurement literature in Indonesia, it is hoped that it can contribute to the scientific development of performance measurement in accordance with country characteristics.

The purpose of this study is to analyze how the development of the performance measurement literature that is applied to SMEs in Indonesia and to review what areas should be studied further. Therefore, the formulation of the problem defined in this study is

RQ1: How is the development of the literature on performance measurement systems for MSMEs in Indonesia from time to time?

RQ2: What methods, tools, concepts are widely used in the MSME performance measurement literature in Indonesia?

RQ3: What areas should be studied further in the Indonesian MSME performance measurement literature?

To answer the formulation of the problem, the researcher uses a systematic literature review published by Garuda indexed journals during 2016 – 2022. This research contributes to the development of the performance measurement literature by analyzing previous research and presenting topics that can be the focus of future studies to overcome challenges. performance measurement in SMEs in Indonesia.

2. Literature Review

The development of performance measurement & management theory in general in the world has been going on for a long time. Performance measurement literature review has been researched by Taticchi et al., (2010) identified that the key trends and trends in management performance measurement literature include since 1970 there have been 6,618 articles published in 536 journals. Of the 546 journals, there are only 5 journals that have the most citationsh International Journal of Operations and Production Management, Management Science , European Journal of Operational Research, Strategic Management Journal, Harvard Business Review, and the most widely cited framework is performance measurement with the Balanced Scorecard.

3. Method

Studies on existence and performance over the last few years yield inhomogeneous findings. There are many pros and cons related to the existence and performance of MSMEs. Therefore, the author tries to map research articles about the existence and performance of MSMEs by using a Systematic Literature Review. The stages of the Literature Review carried out by researchers are as follows:

Table 1. Research procedure

Research Procedure	Detailed description
Database	Garuda
Publication Type	Open- access
Document Type	Research Artikel
Language	Articles in English & Indonesian
Time Range	2016-2022
Search for Title	Title, Abstract, and Keyword
Search term	TITLE-ABS-KEY (Performance Measurement of Indonesian MSMEs)

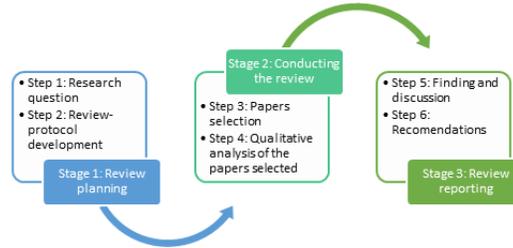|	Note: Results are organized in a spreadsheet and duplicates are removed
Inclusion criteria	*Articles related to the performance measurement of Indonesian MSMEs*
Exception criteria	*Articles that do not study the performance measurement of Indonesian MSMEs*
Data analysis and integration	*A content analysis approach is used to answer research questions to present gaps and suggests alternative future research*

Figure 1 Stages of Systematic Literature Review

The first rough selection is done by skimming the title and abstract of each article. After checking that all eligibility criteria were met, duplicate manuscripts and articles in other languages were removed. The remaining articles are scanned by reading the abstract (and, if necessary, the entire article). Topics and research design criteria were used to further exclude non-conforming articles. The results of the selection process will be included in the literature review.

Below are presented articles related to the measurement of the performance of MSMEs in Indonesia with a time span of 2016 – 2022:

No	Article Title, Author and Year	Objective	Method	Objek/ Sampel	Results
1	Pengukuran Kinerja UMKM Melalui Faktor Internal dan Faktor Eksternal : Studi Kasus pada UMKM Gula Kelapa di Kabupaten Banyumas (Rokhayati & Lestari, 2016)	Measuring the performance of Micro, Small and Medium Enterprises (MSMEs) in terms of internal factors and external factors	Statistik Deskriptif dan Structural Equation Modeling (SEM)	160 owners of Coconut Sugar SMEs throughout Banyumas Regency	The results of the descriptive analysis show that MSME owners consider that internal factors and external factors are very important and meaningful sources in influencing MSME performance. While the results of the SEM analysis show that internal factors (financial, HR, production and marketing) and external factors (technology, government policies, socio-economics, the role of related institutions) have a significant effect on the performance of coconut sugar SMEs in Banyumas Regency
2	Pengukuran Kinerja Pada Usaha Mikro Kecil dan Menengah (UMKM) dengan *Balanced Scorecard* (BSC)(Witanti & Hadiana, 2016)	To analyze the proposed performance of SMEs	BSC	UMK X	The use of the BSC method can be used to measure the performance of SMEs
3	Ragam Pengukuran Kinerja pada Usaha Mikro, Kecil, dan Menengah (UMKM)	Analyzing the variety of	Deskriptif Kuantitatif	MSME owners in	Based on the findings, MSME owners with

	di Surabaya(Kunaifi & Gunawan, 2017)	performance measurements on SMEs in Surabaya		Surabaya	culinary, craft, body care and fashion, cafes, digital printing services, shoe washing in Surabaya both put financial and non-financial aspects in an informal balanced manner according to theoretical principles and non-financial performance measurements. in the form of product quality and customer satisfaction to complement financial performance measurement.
4	Pengukuran Tingkat Efektivitas Kinerja UMKM Batik Bakaran Secara Berkelanjutan Menggunakan Model *Green SCOR*(Puryono & Kurniawan, 2017)	Conduct measurement management in order to monitor the effectiveness of the performance of UMKM Batik Bakaran	Combination of Green SCOR and AHP methods	Batik Entrepreneurs Bakaran	The performance of Batik Bakaran SMEs prioritizes the efficiency factor of 65.4% compared to the probability factor which is only 34.6%. This means that the efforts made by MSMEs are still focused on minimizing the costs incurred to produce products. MSMEs have not been able to balance the ability to earn profits through managing business assets and have not paid attention to environmentally friendly aspects
5	Pengukuran Kinerja UMKM Menggunakan Performance PRISM(Purnomo & Hadi, 2017)	Identify Key Performance Indicators (KPI), create appropriate measuring instruments and create measurement guidelines for MSMEs	Performance PRISM, AHP	25 KPI	The results of the performance evaluation show that 6 KPIs are in the bad category, 14 KPIs are in the adequate category, and 5 KPIs are in the good category. The results of the total annual performance assessment of MSMEs are in accordance with predetermined standards, namely 2.232, which means that the company's performance as a whole is quite good.
6	Analisis Pengaruh Penerapan Sistem Informasi Akuntansi Terhadap Pengukuran Kinerja UMKM di Wilayah Depok (Wahyuni et al., 2018)	Knowing the effect of implementing accounting information systems on	Regresi Logistik	UMKM in Depok	The results of this study based on the analysis conducted found that the Negelkerke's R Square value for ROA is 0.01 which indicates

		MSME performance measurement in the Depok area			that the dependent variable that can be explained by the independent variable is 1.0%, while the remaining 99% is explained by other variables that not included in this study. The Negelkerke's R Square value for ROE is 0.002 which indicates that the dependent variable that can be explained by the independent variable is 0.2%, while the remaining 99.8% is explained by other variables not included in this study.
7	Implementasi Metode Performance Prism dalam Perancangan Sistem Pengukuran Kinerja Usaha Mikro Kecil Menengah (UMKM) (Mufti et al., 2020)	Identify Key Performance Indicators (IKK), create appropriate performance measurement tools for MSMEs, make measurement references for MSMEs	PRISM , AHP	22 KPI UMKM ABC	The results of the performance appraisal were 22 KPIs, namely 5 KPIs with poor performance, 10 KPIs with moderate performance, and 7 KPIs with good performance, 5 KPIs with moderate performance, namely the application of concepts to production productivity, increased welfare, level of employee discipline, attention to employee health insurance, acceleration of time to fulfill obligations to suppliers
8	Pengukuran Kinerja UMKM Berdasarkan *Key Performance Indikators* (KPI) Metode *Balanced Scorecard* (Mawuntu & Aotama, 2022)	Measuring the performance of Culinary MSMEs in Tomohon City by using performance indicators that refer to each perspective of the balanced scorecard	BSC	10 SMEs Culinary Tourism Kota Tomohon	MSME performance has not been maximized. Although the assessment of performance indicators from the financial and customer perspectives shows good performance, there are still weaknesses in several performance indicators from the perspective of internal business processes and the perspective of learning growth, namely the lack of product innovation and training followed by employees to develop skills and competencies.

9	Pengukuran Kinerja Manajemen (Ameliya Rosita, 2022)	Provide an overview and input of the company regarding the basis for consideration of the company's strategic decision making	SWOT	UMKM Guest House in Jakarta Pusat	The results of this study indicate that MSME Guest Houses are currently in a healthy quadrant I position, in which the strategy applied is a growth strategy or an aggressive strategy.
10	Perancangan Model dan Kuisoner Pengukuran Kinerja UMKM melalui Technology-Organization-Environment(TOE)(Wulandari et al., 2022)	Producing a research model that can examine the relationship between the factors that influence social media adoption on the performance of MSMEs	Studi TOE Framework	Study Literatur	The results of this study indicate that the use of technology, organization and environment can be an alternative research model and questionnaire to measure social media adoption on the performance of MSMEs.
11	Analisis Pengukuran Kinerja Manajemen Rantai Pasok Produk Susu Sapi Perah dengan menggunakan Metode SCOR dalam upaya Peningkatan Kinerja(Ismail et al., 2022)	Observing patterns of supply chain management, measuring supply chain performance and designing improvement proposals to improve supply chain performance	Deskriptif Kuantitatif, Metode SCOR versi 12.0	KPSBU Lembang	The results of this study indicate that it is known that members of the supply chain consist of dairy farms, KPSBU, milk processing industry, KPSBU outlets and end consumers. In addition, in performance measurement it was found that all supply chain components had not been managed well enough, where several sub-operations of the supply chain system caused inefficiency.

The eleven articles reviewed provided various information and this became a study which was studied in depth and analyzed to gain an understanding in accordance with the initial objectives of this study. Each article presents conditions that are different from other articles, so it is interesting to observe and discuss in the next chapter. New information regarding developments and challenges in performance measurement for MSMEs in Indonesia is generally summarized and disclosed in this article.

4. Result and Discussion

This research study is based on the development of MSMEs which are not accompanied by developments in their management capabilities (GEM, 2018). In addition, it is known that in the global performance measurement literature has developed a design that is quite complex (Taticchi et al., 2012). Therefore, with the development of this theory, researchers seek to map the extent to which the development of performance measurement theory is applied in Indonesia.

This section presents the results of the frequency analysis and classification according to the dimensions of the structure of the review literature that have been described previously. From the eleven articles, important points related to the measurement of MSME performance in Indonesia can be analyzed as follows:

4.1 Development of Literature on Performance Measurement Systems for MSMEs in Indonesia from Time to Time

Based on the findings of articles published on Garuda from year to year, the results are shown in Figure 1. Figure 2 highlights that the number of publications related to performance measurement for MSMEs in Indonesia over the years is insignificant. Even in 2019, there were no publications related to measuring the performance of MSMEs indexed on the Garuda portal.
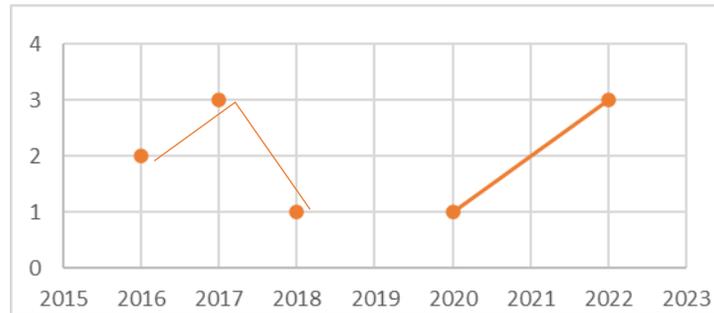

Figure 2 Year of Publication

From Figure 2 above, it can be analyzed that so far there has been very little research related to measuring the performance of MSMEs in Indonesia. Although the development of performance measurement theory is quite popular in Indonesia, it is dominated by performance measurement in large companies. This is a wide open opportunity for research and dedication for academics related to performance measurement in MSMEs.

4.2 Methods, Tools, Concepts That Are Widely Used in the MSME Performance Measurement Literature in Indonesia

The methods, tools and concepts that are widely used in the MSME performance measurement literature in Indonesia are related to the Balanced Scorecard, KPI, PRISM, SWOT, AHP. These methods and tools reflect that so far the development of theory with the support of the implementation of measuring instruments is still stagnant. The successful implementation of this measurement tool must of course be supported by the managerial capabilities of MSMEs in terms of operational, financial, marketing and human resources. The performance measurement system must have an assessment stage, capable of evaluating to determine the basis for improvement plans. In addition, performance measurement must also be able to reflect the company's business because it certainly requires consideration from the perspectives of different stakeholders both internally, externally, financially and non-financially. So in this case it is necessary to try to use new methods such as benchmarking which measures the performance of MSMEs from various business aspects such as operational efficiency, product quality, customer service. Apart from that, you can also use the Customer Satisfaction Index (CSI) to find out how well MSMEs are in meeting customer needs and expectations, Return On Investment (ROI) to measure profits or losses resulting from investments, evaluate investment effectiveness and use of funds in business. Or you can also use the philosophy of the Indonesian state which already has operational values and standards in its application.

4.3 Areas That Should Be Further Studied in the Indonesian MSME Performance Measurement Literature

There are several areas that can be studied further in the Indonesian MSME performance measurement literature, including:

a. The MSME performance measurement method needs to be seen how the MSME performance measurement method in Indonesia is sufficient or still needs to be developed. This is done to help improve effectiveness in measuring the performance of MSMEs in Indonesia

b. It is necessary to pay attention to the factors that affect the performance of MSMEs, MSME actors need to understand what factors have an impact on their business performance and improve overall business performance.

c. The contribution of MSMEs to the country's economy is no longer in doubt, so it is very important for related parties to be able to provide assistance in evaluating the performance of MSMEs and provide information about the role of MSMEs in Indonesia's economic growth.

d. The readiness of MSMEs in facing challenges from global competition and the dynamics of the world economy, so it is necessary to analyze how MSMEs in Indonesia are ready to face challenges and how they can improve business performance in the era of globalization.

e. The influence of technology on the performance of MSMEs needs to be studied further in order to help MSMEs improve their performance.

Conclusion

The conclusions in this study indicate that the development of the performance measurement literature applied by MSMEs in Indonesia and reviewing what fields should be studied further. The results of this study are new findings that performance measurement theory becomes more meaningful with more in-depth and comprehensive testing. This makes it possible to thoroughly evaluate the reliability and validity of new performance measurement methods, and test whether they can provide useful information to users. It is necessary to develop clear and standardized standards to ensure that performance measurements carried out with the new method can be interpreted correctly and used to make the right decisions. The standards also make it possible to compare performance measurement results with previous ones and compare performance measurements between organizations of different ages and sizes. Practical recommendations that can be made by future researchers in measuring the performance of MSMEs in Indonesia are to determine performance indicators that are appropriate, relevant and can be measured accurately. The limitation of SLR research in measuring the performance of MSMEs in Indonesia is the limited number of relevant studies because most of the use of performance measurement is in large companies and not MSMEs.

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