

Measurement of SME Performance in Digital Era: A Systematic Literature Review

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Abstract. Small and Medium Enterprises play important role in the economy in the world, not only in developed countries but also developing countries, including Indonesia. The COVID-19 pandemic that occurred contributed to the acceleration of digitalisation of SMEs so that there were fundamental changes in business activities. These changes require a more comprehensive measurement of business performance than just financial performance. Accuracy in measuring business performance plays a major role in helping business sustainability and developing future strategies to optimise business performance. The concept of SMEs going upmarket will not be achieved without the right measure of business performance. This research uses a systematic literature review approach in evaluating business performance measurements that have been carried out in various parts of the world. This research uses 20 reputable articles that have been adjusted to the research needs. In practice, business performance measurement needs to be done with financial and non-financial approaches.

Keywords: Digital Era, Financial, Non-Financial, SME Performance

1 Introduction

The role of micro, small, and medium-sized enterprises (SMEs) to support global economy is remain significant, not only in Indonesia but also on a global scale. [1], [2]. SMEs contribute as instrumental role in job creation and contribute to global sustainable growth. The majority of businesses in various countries are SMEs. In general, SMEs contribute more than 90% of business forms, absorb more than 80% of the workforce and contribute total domestic income of more than 40% of the country's GDP in the world. [3]. Consequently, SMEs have made considerable contributions to the global economy, including the creation of employment opportunities, the alleviation of poverty, the generation of income, the provision of support to large industries, the promotion of innovation, the advancement of entrepreneurship, and the facilitation of accelerated industrialization [4], [5] .

Developed countries have an SME contribution to GDP of 45-48% and employ around 60% of the workforce, such as United States (US) and United Kingdom (UK). In Europe, SMEs represent 99% of businesses and 67% of the labour force. Singapore has a labour absorption of up to 75% and 60% of GDP contributed by SMEs in the country. In Malaysia, SMEs account for 47.8% of the labour force and 37.4% of the country's GDP. [6]. SMEs in Indonesia have a contribution of more than 99% of businesses and a contribution to GDP of

not less than 50%. [7], [8]. This condition shows the importance of the role of SMEs in the world. This phenomenon is not exclusive to developed countries. There is also evidence in developing countries such as Indonesia.

As we want to understand the situation of SMEs globally, we require to compare the performance and situation of SMEs in different countries that can provide new point of view of key success factors in which helping SMEs to achieve success business life, especially in the global environment. Analysis of SME performance results from other perspectives can provide policymakers and business leaders with comparative data that can provide meaningful information for the creation and adoption of policy initiatives and support programmes aimed at fostering SME growth, creativity, innovation, and improved access to finance. This encourages job creation in sectors of the economy that further boost the role of SMEs in the economy. For example, the provision of tax incentives for SMEs that have a willingness to spend in research and development activities have a considerable beneficial influence on the innovation performance of SMEs in the South African region. [9]. Another example is the consistent implementation of strategic planning approach has been identified as a key driver behind the improved performance of SMEs in the Malaysian Region. [10], [11]. In many developed countries, the availability of digital financial services that enable easier access to finance for SMEs has been shown to be important. All of these factors ultimately improve the performance and productivity of SMEs. In Indonesia, the importance of internal factors such as entrepreneurial skills is one of the driving factors for SME success.

Despite SMEs' significant contribution to the economy, the business failure rate of SMEs is high. This is a major worry for whole enterprises, governments, and stakeholders alike. According to empirical research, over one-third of SMEs fail during the first two years of operations, with more than half failing within the first five years. However, failure rates vary significantly by sector and geographic location. For example, firms in highly competitive industries, such as retail and hospitality, may be more vulnerable to failure owing to fluctuations in customer preferences and severe rivalry. Additionally, ventures in developing countries may encounter infrastructure and regulatory challenges that heighten the probability of failure. Many of these enterprises lack the essential resources and capabilities at pivotal stages, such as production, distribution, promotion, and business innovation that require a lot of fundings. In addition, the ability of enterprises to compete on a larger scale is limited by various internal and external challenges, such as limited access to capital, skilled labour, and modern technology. SMEs also face hurdles related to internationalisation and digitalisation, but it is worth noting that SMEs have the adaptability to respond quickly to changing needs and environmental conditions, which can be a significant advantage if harnessed effectively.

In order to further promote the role of SMEs, it is necessary to identify the underlying causes of the difficulties faced by small and medium-sized enterprises and to develop strategies for overcoming them. This will facilitate the enhancement of business performance, which in turn will lead to increased business success and growth. SMEs possess a range of resources, including capabilities, assets, techniques, attributes, and strategic orientation, which can be leveraged to establish a sustainable competitive advantage. A company's strategic assets can be deployed in a strategic manner to maintain its competitive advantage in the market. Marketing, innovation, a learning culture, and an entrepreneurial attitude are all major strategic aspects that may impact SMEs' management processes and operations. Small and medium-sized enterprises can use these characteristics to improve overall performance. A firm's strategic orientation refers to the managerial procedures and activities that give the strategic direction required to create the appropriate organisational culture that supports long-term business performance. Strategically orientated SMEs constantly align their attitudes,

culture, beliefs, and values to maximise corporate resources, enhance relationships with customers to better respond to their demands, and proactively monitor market competition.

While many studies have provided insight into the performance and factors influencing the performance of small and medium-sized enterprises have been identified, but there are still gaps in our knowledge that need to be addressed. Research on SME performance measurement across various business contexts is still limited, with many focusing solely on financial performance. Furthermore, the advent of digitalization has transformed the landscape of SMEs in general. To gain a deeper understanding of this phenomenon, it is essential to extend SME performance analysis models to encompass a more nuanced exploration of the specific capabilities that can contribute to SMEs' competitive advantage in the global arena. Despite the growing body of research on this topic, several key issues remain largely unresolved. These include the role of organizational learning, the influence of firm growth stages, the impact of managerial practices, the importance of innovation culture, the significance of logistics, the relevance of social development, and the various drivers affecting SME development and growth. As a result, the factors that contributing to improve SME performance remain largely unexplored. Given the increasing involvement of SMEs in international markets and digital markets, the academic environment needs to focus more on such areas. However, a comprehensive synthesis of the antecedents of SME performance is currently lacking in the existing literature, especially in the digital era post COVID-19 pandemic. Without a thorough understanding of the factors underlying SME performance, SME management will not be optimal. Therefore, it is necessary to conduct a literature review in an effort to obtain novelty in performance measurement and factors that affect performance in the current digital and global era.

Considering the important role of SMEs and the incomplete, fragmented information within current literature, this study was conducted with the objectives of: (1) to collect and analyse empirical research on SME performance published during the pandemic period up to 2023, with a focus on identifying the key antecedents of their performance as the pace of SME digitisation accelerates in that period; (2) to discuss various measures of SME performance beyond financial metrics. This is particularly important, as previous reviews failed to consider the multidimensional nature of SME performance evaluation, which goes beyond financial indicators; and (3) draw implications for unexplored challenges for academics and practitioners, as well as some future research directions on SME performance.

2 Literature Review

2.1 Small and Medium Enterprises Study in Scopus Database

Small, Medium and Medium Enterprises, with their enormous role in the economy, invite academics to conduct research on them. Research at this stage is focused on evaluating research related to SME performance in international journals indexed in the *Scopus Database*. In addition, due to its broad scope, this research is limited to journals that have the scope of (1) business, management and accounting; (2) economics, econometrics and finance; and (3) social science. The selection of this scope is based on the relevance of SME performance which is the focus of the research. Research on SME performance on these criteria has been ongoing since 1995 until now. The number of indexed articles from 1995 to

2023 is 524 articles. The development of the number of research articles on Scopus is as follows:

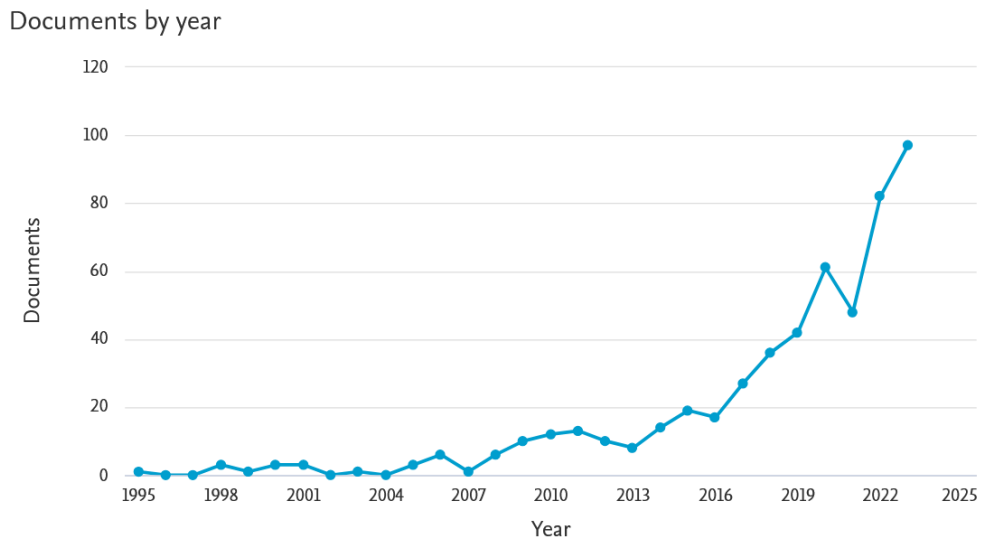


Fig. 1. Number of articles on SME performance in Scopus for the period 1995 - 2023

Figure 1 indicates that research around SME performance began to grow rapidly since 2013 with a spike in publications occurring in 2022. The global impact of the COVID pandemic has prompted a rethink among SMEs around the world. There is an adjustment in the habit of carrying out shopping activities as well as the acceleration of digitalisation which makes the SME environment fundamentally change. The changes that have occurred are interesting to be researched further, especially with the rapid development of digitalisation and internationalisation of SME activities.

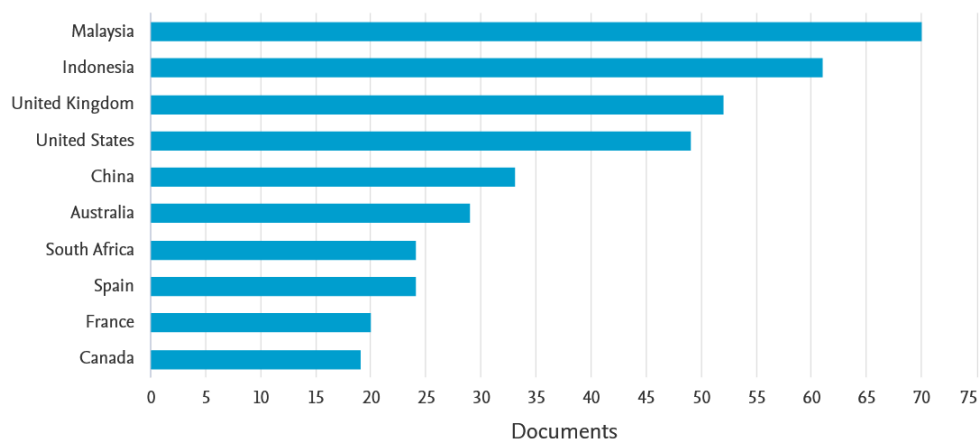


Fig 2. SME Performance Articles on Scopus per Country

Figure 2 discusses the performance of SMEs studied in each country. In general, Malaysia is the country that published the most Scopus articles related to the performance of small and medium-sized enterprises (SMEs) that reaches 70 articles. Indonesia specifically published articles related to SMEs in its country which reached 61 articles, followed by Europe published by the UK and US. This shows the world's great attention to the performance of SMEs given their enormous role. Furthermore, research is frequently conducted in accordance with the significant contribution of SMEs to the economies of countries such as Malaysia, Indonesia, the United Kingdom, and the United States, where SMEs serve as the primary driving force behind economic growth.

2.2 SME Development in the World

The world has changed significantly as a result of the Industrial Revolution, especially in the economic sector. Given these advancements, it would be advantageous for small and medium business (SME) owners, executives, entrepreneurs, and strategists to think about elements that may help them deal with these difficulties. Businesses may attain high performance and obtain a competitive edge with the aid of strategic orientation. By increasing the firm's access to finance, expertise, markets, and digital technologies that affect business operations, strategic presence might become an intangible resource and improve firm performance, according to the resource-based perspective hypothesis.

The results of strategic research indicate that intangible resources and knowledge are more advantageous for firms than materialized resources. Intangible resources foster a proactive mindset that enables firms to learn competitors' strategies and gain a sustainable competitive advantage. In contrast, materialized resources are easily copied by competitors. The greater the extent of an organization's organizational, information, and technology networks, the greater the potential for learning and absorption during a crisis. The global economic impact of the COVID pandemic has been significant, particularly on small and medium-sized enterprises (SMEs). Small and medium-sized enterprises (SMEs) have encountered difficulties in maintaining their operations due to constrained financial resources during the crisis. The pandemic has resulted in a notable decline in revenue. The pandemic has also resulted in cash flow issues for businesses, leading to layoffs and business closures. It is therefore imperative that stakeholders address the threats posed by the global pandemic.

At the global level, policymakers consider the development of strategies and the promotion of innovation in the SME environment to be fundamental to the achievement of global development goals and objectives. This process is conducted through the formulation of innovation catch-up strategies and the promotion of innovation as a means of directing and enhancing organizational performance. Firms with robust strategic orientations, including entrepreneurial, market, and learning orientations, have access to knowledge on innovation policies and have the ability to push governments to change laws and regulations to their advantage. For instance, firms may utilize political channels to advance or safeguard innovative products with the backing of governmental entities. These companies will be successful in using technology to develop new products and services because of their competitive edge and legislative support. Additionally, by providing the necessary funds for research and development, the government can help businesses grow and stay competitive. Furthermore, the advantages of financial support and the development of contemporary technologies assist firms in engaging in inventive activities, which serve to enhance their capabilities. In summary, firms must have a strategic direction in order to overcome market obstacles, get a competitive edge, and function well. This is only possible, though, if

policymakers acknowledge innovation as a tool for accomplishing businesses' goals and objectives, encourage a strong strategic orientation mindset in businesses, and give them access to the information they need to improve the sector's performance. In this sense, cooperation is now necessary for SMEs to promote company expansion.

Digitalisation has made the SME market wider. Along with the breadth of the market, the competition that occurs in fighting for the market is also becoming increasingly fierce. In this case, SMEs need to prepare strategies, both strategies by utilising capabilities, internal, external factors and collaboration in driving better performance.

3 Research Method

This study follows the method proposed and explained by Denyer et al. [12] and Tranfield et al. [13], and today commonly referred as SLR or "*systematic literature review*". In line with most recent study to increase methodological rigour in the management and analysis of literature reviews, this study will collect and analyse data from these studies, thereby building on the development of information to construct new conceptual models and trace specific research results over time. This strategy assists in synthesising and organising the literature in a particular context, often offering academics and practitioners a fundamental reference point for knowledge development.

Literature reviews are essential to clarify the results of previous research and provide *insight into* the understanding of a particular topic. *Systematic Literature Review* (SLR) serves an excellent function in synthesising empirical data to answer specific research questions and evaluate credibility through all available evidence. In addition, the delineation of research parameters especially addressing evolving topics is essential to advance the scope of knowledge as well as the definition of the variables under study. Literature research through previous publications is important and pointing out research gaps helps ensure the scope and depth of the current study. Previous studies have developed a roadmap for various systematic reviews by identifying relevant references and making recommendations. This study utilised SLR to uncover the key determinants that influence SME performance.

3.1 Literature Data Collection

The source of information collected for this study followed the systematic implementation of SLR used to investigate, uncover, and improve the research topic, allowing the researcher to implement and modify the literature list during the course of the study. This research utilised reputable databases, namely Scopus [14], [15]. This reduces the vulnerability of researcher bias in selecting reputable articles. This study used a rigorous search approach with well-defined inclusion and exclusion criteria for the articles in order to accomplish the goal of a comprehensive literature review. Finding and choosing pertinent keywords and search queries was part of the search strategy, including "SME Performance" or "Enterprise Performance". Further adjustments were made by adjusting the keywords during the search process.

SLR relies heavily on the inclusion of relevant data in the literature review process and should be conducted in line with the research objectives. [13]. The main focus of the research is the measurement of SME performance in the era of business digitisation after the COVID-19 pandemic. This goal is expected to improve performance and prevent business failure in

general. As the purpose of this research, the database to be taken is the publication of Scopus indexed articles in the period 2020 - 2023, which began with the acceleration of digitalisation in the COVID-19 pandemic. The determination of the inclusiveness of the literature base of this review is carried out by considering the changes that occur in SMEs so that adjustments are needed in measuring SME performance in the future.

This study used a rigorous procedure with the SLR framework was implemented to guarantee the precision of the article selection process. [16]. The first step was to check for irrelevant data to obtain a list of relevant journals for analysis. Next, we reviewed the abstracts, methods, and discussion sections of the journal articles to assess their eligibility for research. Finally, we used Mendeley and Excel to manage the data and assist in data analysis.

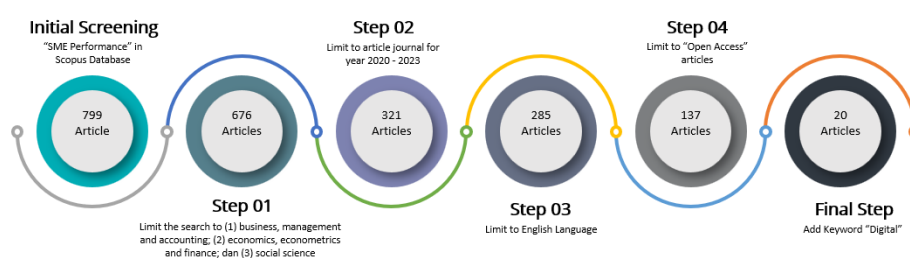


Fig 3. Systematic Literature Review Article Screening Process

Figure 3 provides information on the results of *initial screening* on the *Scopus Database* for the keyword "SME Performance" which resulted in 799 journal articles. In the first stage, *screening* was carried out by limiting articles to the scope of (1) *business, management and accounting*; (2) *economics, econometrics and finance*; and (3) *social science* which resulted in 676 articles. The next stage was limited to journal articles which limited the articles to 607 documents. In the next stage, the publication period 2020-2023 was restricted so that 321 articles remained. Because there were *non-english* articles, restrictions were made so that 285 articles remained. The research focused on *open access* articles, leaving 137 articles. As the focus was on the digital era, the keyword "digital" was added, leaving 20 journal articles. In the final stage, 20 articles became the basis for conducting SLR that fulfilled all the criteria in the study. The articles are summarised in Table 1.

Table 1. List of Journal Articles Used in SLR

No.	Author	Title	Journal
1	Ledi K.K.; Ameza-Xemalordzo E.; Amoako G.K.; Asamoah B. (2023) [17]	Effect of QR codes and mobile money on performance of SMEs in developing countries. The role of dynamic capabilities	Cogent Business and Management
2	Saruchera F.; Mpunzi S. (2023) [18]	Digital capital and food agricultural SMEs: Examining the effects on SME performance, inequalities and government role	Cogent Business and Management
3	Frimpong S.E.; Agyapong G.; Agyapong D. (2022) [19]	Financial literacy, access to digital finance and performance of SMEs: Evidence From Central region of Ghana	Cogent Economics and Finance
4	Wongsansukcharoen J.; Thaweepaiboonwong J.	Effect of innovations in human resource practices, innovation capabilities, and	European Research on

No.	Author	Title	Journal
	(2023) [20]	competitive advantage on small and medium enterprises' performance in Thailand	Management and Business Economics
5	Sudarnice S.; Herachwati N.; Udin U. (2023) [21]	Bank Financing, Government Support, and SME Performance: The Mediating Role of Entrepreneur Competence	International Journal of Sustainable Development and Planning
6	Eller R.; Alford P.; Kallmünzer A.; Peters M. (2020) [22]	Antecedents, consequences, and challenges of small and medium-sized enterprise digitalisation	Journal of Business Research
7	Tiwasing P.; Kim Y.R.; Sawang S. (2023) [23]	The interplay between digital social capital and family-owned SME performance: a study of social media business networks	Journal of Family Business Management
8	Riadi S.S.; Hapsari P.; Budiman P.W.; Anwar K.; Yudaruddin R. (2023) [24]	The impact of knowledge management on SMEs' performance during the COVID-19 pandemic: Assessing the significance of digital variables	Knowledge and Performance Management
9	Ullah I.; Khan M.; Rakhmonov D.A.; Bakhriddinovich K.M.; Jacquemod J.; Bae J. (2023) [25]	Factors Affecting Digital Marketing Adoption in Pakistani Small and Medium Enterprises	Logistics
10	Harini S.; Pranitasari D.; Said M.; Endri E. (2023) [7]	Determinants of SME performance: Evidence from Indonesia	Problems and Perspectives in Management
11	Surahman; Shee H.; Fitriani Z.; Adi A.S.; Yudaruddin R. (2023) [26]	The effect of digital transformation and innovation on SMEs' performance in times of COVID-19	Problems and Perspectives in Management
12	Endrodi-Kovács V.; Stukovszky T. (2022) [27]	The adoption of industry 4.0 and digitalisation of Hungarian SMEs	Society and Economy
13	Roman A.; Rusu V.D. (2022) [28]	Digital Technologies and the Performance of Small and Medium Enterprises	Studies in Business and Economics
14	Kádárová J.; Lachvajderová L.; Sukopová D. (2023) [29]	Impact of Digitalisation on SME Performance of the EU27: Panel Data Analysis	Sustainability (Switzerland)
15	Kurniasari F.; Lestari E.D.; Tannady H. (2023) [30]	Pursuing Long-Term Business Performance: Investigating the Effects of Financial and Technological Factors on Digital Adoption to Leverage SME Performance and Business Sustainability-Evidence from Indonesian SMEs in the Traditional Market	Sustainability (Switzerland)
16	Dura C.C.; Iordache A.M.M.; Ionescu A.; Isac C.; Breaz T.O. (2022) [31]	Analysing Performance in Wholesale Trade Romanian SMEs: Framing Circular Economy Business Scenarios	Sustainability (Switzerland)

No.	Author	Title	Journal
17	Kim S.-S. (2021) [32]	Sustainable growth variables by industry sectors and their influence on changes in business models of smes in the era of digital transformation	Sustainability (Switzerland)
18	Vrontis D.; Chaudhuri R.; Chatterjee S. (2022) [33]	Adoption of Digital Technologies by SMEs for Sustainability and Value Creation: Moderating Role of Entrepreneurial Orientation	Sustainability (Switzerland)
19	Teng X.; Wu Z.; Yang F. (2022) [34]	Research on the Relationship between Digital Transformation and Performance of SMEs	Sustainability (Switzerland)
20	Djastuti I.; Mahfudz; Daryono; Lestari L. (2020) [35]	Effect of training and job satisfaction on employees performance and company performance in support of achieving the internationalisation model of SME's competitive advantage.	WSEAS Transactions on Business and Economics

4 Result

In this section, a resume of the data collected based on the synthesis of the SLR is reported. This activity aims to provide an up-to-date overview of SME performance research that has been conducted previously. Table 1 has previously summarised information about the research including authors, journals and titles of articles included in the SLR. Table 2 provides an overview of the journals of publication and journal rankings used in the SLR. Table 2 summarises the descriptive nature of the 20 studies.

Table 2. Summarised Journal Sources in SLR

No.	Journal Name	Quartile (2023)	Total	H-Index	Publisher
1	Journal of Business Research	Q1	1	265	Elsevier Inc.
2	Sustainability (Switzerland)	Q1	6	169	MDPI
3	Society and Economy	Q1	1	102	Routledge
4	Cogent Business and Management	Q2	2	44	Taylor & Francis
5	Cogent Economics and Finance	Q3	1	37	Taylor & Francis
6	European Research on Management and Business Economics	Q1	1	36	European Academy of Management and Business Economics
7	Problems and Perspectives in Management	Q2	2	30	LLC CPC Business Perspectives
8	Journal of Family Business Management	Q1	1	29	Emerald Group Publishing Ltd.
9	Logistics	Q2	1	23	MDPI
10	International Journal of Sustainable Development and	Q3	1	23	International Information and

No.	Journal Name	Quartile (2023)	Total	H-Index	Publisher
	Planning				Engineering Technology Association
11	WSEAS Transactions on Business and Economics	Q4	1	22	World Scientific and Engineering Academy and Society
12	Studies in Business and Economics	Q3	1	11	De Gruyter Open Ltd.
13	Knowledge and Performance Management	Q2	1	7	LLC CPC Business Perspectives

Table 2 shows that the articles used in this study are reputable articles published in quality journals. In general, the articles were published in Q1 and Q2 journals with some Q3 and Q4. In terms of H-Index Scopus journals show that the publication of journal articles used is placed in quality journals with the largest H-Index reaching 265. In addition, publications are also generally carried out by well-known publishers, ranging from Elsevier, Inc., Taylor & Francis, MDPI, LLC CPC Business Perspective and several other journal publishers.

Table 3. Country of Origin and SME Performance Indicator

No.	Author	Country of Research	Performance Indicator Used
1	Kádárová J.; Lachvajderová L.; Sukopová D. (2023)	Slovakia	Value Added, Employment
2	Ullah I.; Khan M.; Rakhmonov D.A.; Bakhritdinovich K.M.; Jacquemod J.; Bae J. (2023)	South Korea, Lativa, Pakistan, Uzbekistan	Financial
3	Kurniasari F.; Lestari E.D.; Tannady H. (2023)	Indonesia	Market Share, Return on Investment, Profit, Response Time, Customer Complain
4	Harini S.; Pranitasari D.; Said M.; Endri E. (2023)	Indonesia	Market Share, Sales, Profit, Competitors
5	Ledi K.K.; Ameza-Xemalordzo E.; Amoako G.K.; Asamoah B. (2023)	Ghana, South Africa	Sales, Profit, Customer, Market Share, Cost, Dependability, Flexibility
6	Sudarnice S.; Herachwati N.; Udin U. (2023)	Indonesia	Profitability, Social Engagement, Employees
7	Riadi S.S.; Hapsari P.; Budiman P.W.; Anwar K.; Yudaruddin R. (2023)	Indonesia	Sales, Efficiency, Profitability, Customer Satisfaction, Innovation
8	Frimpong S.E.; Agyapong G.; Agyapong D. (2022)	Ghana	Profitability, Sales
9	Dura C.C.; Iordache A.M.M.; Ionescu A.; Isac C.; Breaz T.O. (2022)	Romania	Efficiency, Sales, Profitability
10	Roman A.; Rusu V.D. (2022)	Romania	Value Added, Employment
11	Surahman; Shee H.; Fitriani Z.; Adi A.S.; Yudaruddin R. (2023)	Indonesia, Australia	Sales, Profit, Customer, Market Share, Cost, Dependability, Flexibility
12	Wongsansukcharoen J.; Thaweepaiboonwong J. (2023)	Thailand	Market Share, Sales, Profitability, Innovation (Product and System)

No.	Author	Country of Research	Performance Indicator Used
13	Eller R.; Alford P.; Kallmünzer A.; Peters M. (2020)	United Kingdom, Austria, France	Financial
14	Djastuti I.; Mahfudz; Daryono; Lestari L. (2020)	Indonesia	International Activity
15	Tiwasing P.; Kim Y.R.; Sawang S. (2023)	Thailand, United Kingdom	Turnover, Sales, Innovation
16	Kim S.-S. (2021)	South Korea	Financial, Technology Competitiveness
17	Vrontis D.; Chaudhuri R.; Chatterjee S. (2022)	Cyprus, India	Overall Financial Performance
18	Teng X.; Wu Z.; Yang F. (2022)	China	Financial Metrics
19	Endrodi-Kovács V.; Stukovszky T. (2022)	Hungary	Innovation, Sales
20	Saruchera F.; Mpunzi S. (2023)	South Africa	Profitability, Market Share, Access

The literature review indicates that discussions around SMEs occur globally around the world and all indicate that there is an important role for SMEs in each country's economy. In this study, the majority of articles are about SMEs in Indonesia (6 articles) which also indicates that there is a lot of research related to SME performance and SME digitalisation in the country.

Table 3 has also provided synthesised data related to SME performance measurement in the articles. Broadly speaking, there are differences in approaches to SME performance measurement, but there are similarities in the emphasis of the indicators used. This is in line with the *gap* that occurs in the measurement of SME performance conducted by various studies. SME performance is generally focused on the financial aspect, which includes business profits. In addition, SME performance is also done by discussing market aspects such as *market share* and also access to the market. The presence or success of innovation, both in the form of products and systems is also an important point of view in measuring SME performance. From the consumer side, performance is measured through customer satisfaction, lack of complaints and the growth of new customers. Performance is also measured through employees, including skills and growth of business employees. Figure 3 provides a summary of the SME performance measures used in the research article.

This study indicates that based on the selected literature, SME performance measurement is multidimensional. It also indicates that there is no consensus on how the performance of an SME business is measured in terms of business success and the factors that influence business performance. Differences in performance measurement will lead to different performance drivers. This lack of uniformity makes it difficult to manage SME performance. Conditions such as the uniqueness of the business, the dynamic business environment and the different perspectives of business owners on business success make this scope difficult to research and develop. Figure 4 provides a summary of the performance measures used in the literature, which generally centre on financial performance, business performance and international performance. Some studies recommend performance measures based on market access, export capability or potential and inventory turnover of the enterprise as performance indicators.

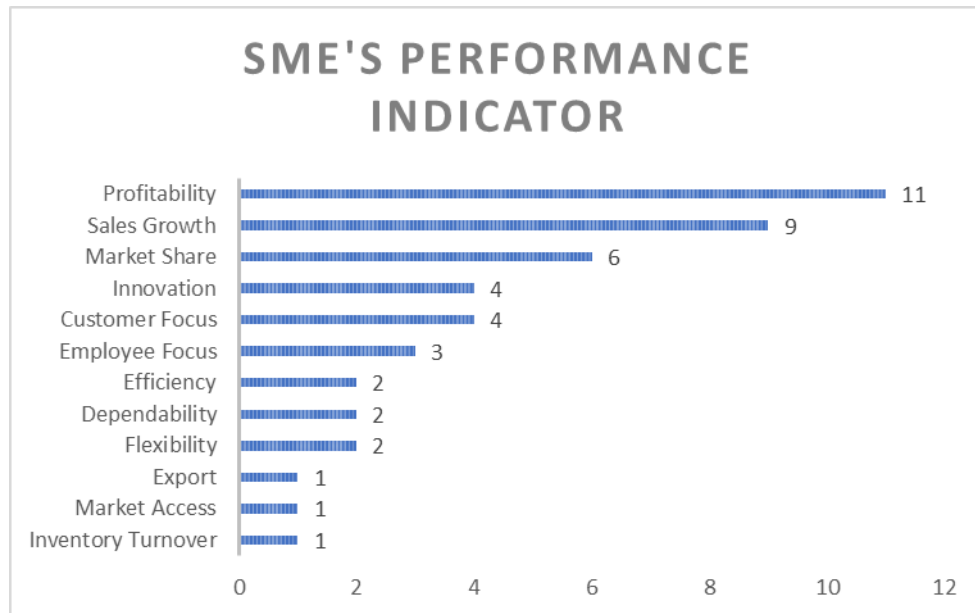


Fig 4. SME Performance Indicators in the Research Articles

Figure 4 shows that the most widely used performance measure in the study is financial performance. In general, the most frequently used financial performance measures are revenue growth and sales growth. Many other financial indicators are used as substitutes or additional measures such as *return on investment*, *profitability index* and various other measures. Another interesting result to note is the use of *market share* as a performance measure. Market share in some studies is considered to be a more important component than business profit itself due to its long-term nature. Profits tend to be viewed as short-term performance in business performance measurement. Innovation also plays an important role, both product innovation and process innovation that leads to business efficiency. A small number of studies emphasise international activities such as export success as a measure of business performance.

5 Discussion

Research that has been conducted based on the methodology proposed by Denyer et al. [12]. This research analyses 20 articles published in 13 reputable international journals indexed in the Scopus Database. The articles discuss the performance of SMEs in the digital era published in the period 2020 - 2023. The selection of a relatively narrow period was made because of the fundamental changes in SMEs around the world due to the COVID-19 pandemic. [36] as well as the acceleration of technological transformation in SMEs [37].

This research provides the first contribution showing that there has been an increase in the academic world's discussion around the performance of SMEs, especially in the digital era since the COVID-19 pandemic occurred. These publications are carried out in highly reputable journals which also show the seriousness of natural academics discussing SME performance. The different perspectives of SME performance make it difficult to develop

strategies in developing SME performance in the future. This research also shows that the interest of academics, especially from Indonesia, is quite large in contributing to encourage the performance of SMEs. A total of 6 out of 20 articles came from Indonesia which shows the increasing intensity of research on SME performance. The business structure in Indonesia consists of 99% SMEs with less than 1% large businesses. SMEs in Indonesia also absorb more than 90% of the labour force and contribute no less than 55% of gross domestic product annually. [8], [38].

A further contribution of this study is to emphasise the dimensions and indicators used in measuring SME performance. Several studies propose multi-dimensionality in measuring business performance, including financial performance of the company which is evaluated in terms of profitability, liquidity, and solvency, market performance is assessed based on the company's market share, market position, and market growth, innovation performance is determined by the company's ability to develop and introduce new products and services and non-economic performance encompasses factors such as customer satisfaction, brand equity, and corporate social. However, in practice, the indicators used in measuring each of these performances are relatively diverse. For example, the use of financial aspects has different measures, ranging from being limited to net profit, net sales to the use of ratios such as profitability, long growth or return on investment. The current research seeks to consider multi-dimensional aspects so that in the future a more robust measurement can be obtained. With a clear reference in measuring business performance, the development of aspects that can encourage better and sustainable business performance can be directed.

Literature studies that indicate the breadth of business performance measurement conducted by academics over time require simplification of performance measurement dimensions. From the evaluation results that have been conducted, the multi-dimensional approach of business performance can be grouped into two main categories, namely (1) financial performance, which includes the achievement of *outcomes* in terms of the economic value of the business. [39] and (2) non-financial performance which covers various important aspects of strategy development, including innovation, market, labour and efficiency of business operations. The composite of financial performance includes various aspects, such as sales growth, profitability, net profit growth, cash flow and various other measurements. [40]. Meanwhile, the non-financial aspects are relatively *solid*. The measurement of innovation can be done through innovations produced, labour through labour growth and labour skills. Therefore, the division of dimensions into financial and non-financial aspects becomes more relevant and balanced. The development of the business performance measurement construct is summarised in Figure 5.

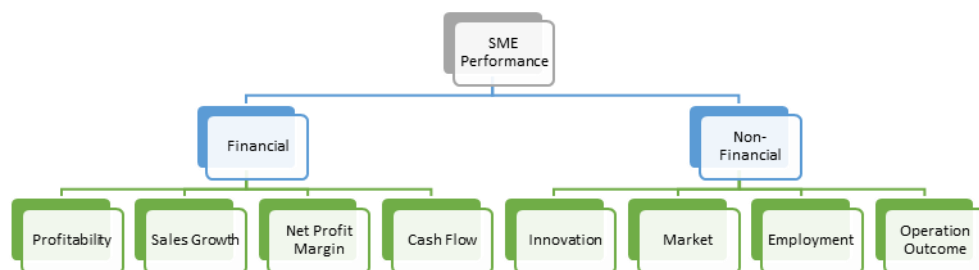


Fig 5. Dimensions and Indicators of SME Performance

6 Conclusion

The conceptual model developed based on the literature study conducted can provide a more comprehensive perspective in measuring business performance. This can be utilised to develop better and more robust measurement methods that can assist in the development of strategies to help SMEs going forward. To illustrate, scholars in the field can utilize this systematic literature review (SLR) to identify and synthesize existing research, thereby facilitating a more comprehensive understanding of the theoretical and conceptual frameworks employed to assess business performance. Such insights can inform the development of novel theories and models pertaining to the orientation of studies and provide guidance for future research on small and medium-sized enterprises (SMEs).

The practical implications of this study are based on a thorough analysis of research published in credible and relevant publications in the fast-growing subject of SME performance and digitisation. The findings present a list of probable characteristics utilised in various organisational situations to define strategy direction when assessing SME performance. However, it is important to highlight that the same determinants may become less significant when used to measure under various settings and conditions.

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