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Confirmatory factor analysis of marketing performance dimensions: a lesson from SMEs in Malang, Indonesia

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ABSTRACT

Literature on marketing has been extensive, with attention given mostly to measuring performance. This article extends the body of knowledge by focusing on the evolution of marketing measurement and the emerging trends. The novelty lies in the involvement of developing-country SMEs, with the goal of developing a model for measuring SMEs' marketing performance. A simple random sampling was used to survey 101 SMEs in Malang, Indonesia. The data was analyzed using SEM PLS. The findings show six dimensions to measure marketing performance in SMEs: product market level, marketing effectiveness, customers, financial performance, marketing efficiency, and adaptability. This study contributes to the existing literature on marketing performance and fills a gap by exploring the financial, market-related, and internal aspects from an SME's perspective. The practical implication is that SMEs need to encourage business activities and adapt the measurement based on these marketing performance dimensions. In addition, the findings can help SMEs with self-learning processes. They can measure marketing performance, identify the weaknesses and strengths of their business, and understand their business positioning. For researchers and policymakers, this study provides insight into the current state of SMEs and their level of maturity.

IMPACT STATEMENT

Resanti Lestari

Research Description

SME growth has numerous challenges despite being a sector that significantly boosts Indonesia's GDP. SMEs struggle with a number of issues, including their inability to carry out comprehensive, logical analyses based on data. This research can assist to giving understanding about how SMEs measure their Marketing Performance. Marketing performance measurement is a form of corporate control in management and the form is an instrument used to assess the overall performance of marketing. This research examines the search for a form of marketing measurement that is suitable for the SME sector. Purpose of this study, is to construct a marketing performance measurement model with dimensions and measurements that are only needed by the SME sector. This research provides implications in the form of a marketing measurement guidance model needed for SMEs.

Introduction

The Ministry of Indonesia classifies micro, small, and medium enterprises (MSMEs) based on two criteria: headcount and turnover value. Based on the headcount, SMEs are classified into three: (1) micro businesses employ fewer than five people, (2) small businesses employ fewer than twenty people, and (3) medium businesses employ fewer than 100 people (Dewi & Mahendrawathi, 2019). The SME sector is the key to economic growth and acceleration in East Java, Indonesia. Data shows that SMEs absorb about 98% of the workforce and contribute 54.98% of GDP or IDR 1,1689.88 trillion, making East Java a

province with the highest population of SMEs in the country (Tobing et al., 2018). SMEs stimulate the economy by creating jobs, fostering social cohesion, providing a financial source for the community, and buffering a country's economic stability. As such, research on SMEs is crucial as it can help advance the measures to alleviate poverty, particularly in emerging countries (Bruce et al., 2023).

Defining small and medium enterprises (SMEs) is important as it aids the statistical analyses and monitoring of the sector's health, comparing countries as well as regions within an economy. It also establishes arbitrary standards for imposing taxes or other regulations. The term SMEs indicates their sizes, and their categorization is based on quantifiable indicators, with the most common categorization being the headcount (Smith & Brown, 2021). Past research in Indonesia has shown that the informal sector employs between 61% and 70% of the entire labor force (Rothenberg et al., 2016), which is often linked to SMEs. Nonetheless, there are constraints in supporting these businesses as many of them have not registered their operations due to expenses, knowledge, and tax evasion. The government has attempted to address this issue using a digitalized licensing service program called the One Single Submission (OSS). This service includes the provision of business licenses and Business Identification Numbers (NIB) and troubleshooting SME problems, which can be accessed across regions in Indonesia. This service is designed entirely online to ease the monitoring.

Addressing the challenges and limitations SMEs face necessitates the involvement and engagement of multiple stakeholders. Given SMEs' fundamental role in the national economy, the first step toward progress is to acknowledge their contribution to economic growth. The next step is to identify the challenges and limitations. Similar to other emerging economies, SMEs in Indonesia have limitations in promotional and marketing activities, (Jaidan, 2010). One solution to enhance their competitiveness in the global market in the digital age is capitalizing on the advancements in Information and Communication Technology (ICT). Effective implementation of ICT and digitalization can help SMEs enhance their capabilities and progress and enable them to participate in global competition.

Other barriers to the development of SMEs are the limited ability to measure success in marketing operations and the low willingness to seek feedback on marketing activities. A study by Page and Io (2017) involving 1009 SME actors has provided empirical evidence of these barriers. This research investigates the challenges faced by SMEs in developing countries, resulting in three conclusions: (1) many small business owners are not prepared for a digital environment, (2) CEOs of small businesses double up as chief marketing officers, (3) most small business owners lack marketing efforts and measurement of marketing activities (Page & Io, 2017). The survey also shows that nearly half of small business owners do not use any marketing tools. Less than half of SMEs utilize apps to help with social media management, website administration, customer relationship management, and other tasks to build their digital presence. Another study by Page and Io (2017) found that SMEs do not actively assess how the company performs in marketing.

Many of them focus solely on how to sell their products and services. The main focus is on how many goods are sold, without considering the effectiveness of the efforts to bring in customers and approach the target market, the efficiency of the business operations, the company's internal procedures, and the consumers' preferences (whether they are already in sync with the company's growth, brand, and how these have impacted the rivals). Figure 1 shows the results of the survey capturing SMEs' perspectives on their marketing performance in business statistics.

Unlike SMEs, which often lack data and rely on traditional methods for computation, more established companies usually have all the data concerning marketing performance. This disparity makes SMEs fall behind in the competitive market. In other words, making marketing performance measurement accessible to SMEs is critical, as well as how marketing performance measurement is carried out. Therefore, this study aims to fill in the gap by examining the case of SMEs in Malang City, East Java, Indonesia.

In Indonesia, an SME is defined as a productive entity owned by an individual or a business unit that excludes a subsidiary firm or branch office directly or indirectly owned and/or controlled by or is a component of a bigger firm. The SME categorization uses the following criteria (Table 1).

In East Java, Malang City is the second largest city after Surabaya. In Indonesia, it is the 12th largest city, with a population of 866,118 in 2021 and many higher education institutions, as well as natural and artificial tourism attractions. This potential encourages the growth of SMEs. Data on the number of
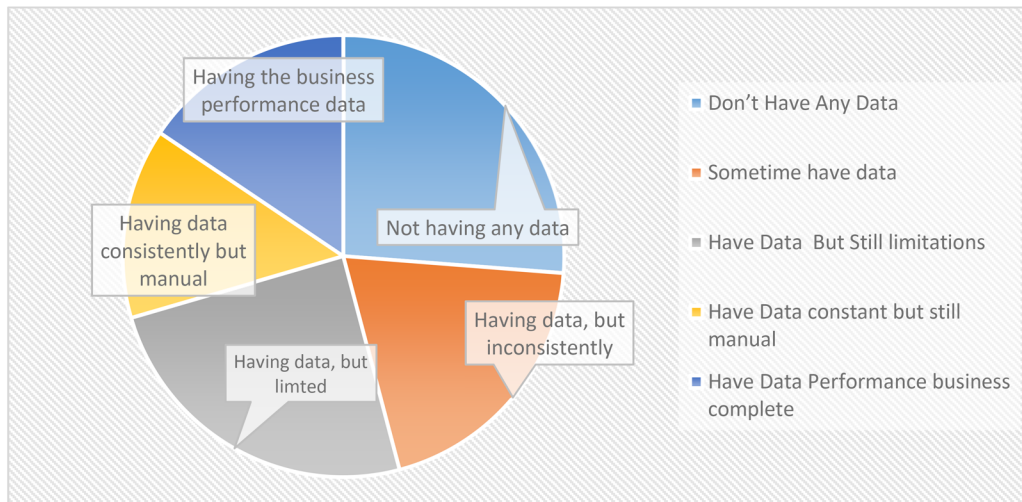
Figure 1. SME perspectives on marketing performance in business statistics.
Source: Pre-Survey, 2022.

Table 1. The MSME criteria in Indonesia.

Item	Micro	Small	Medium
Net assets (land and building excluded)	Less than Rp50 million	Rp50 million–Rp500 million	Rp500 million–Rp10 billion
Total annual sales value	Less than Rp300 million	Rp300.0 million–Rp2.5 billion	Rp2.5 billion to Rp50.0 billion
Employment	1–4 people	5–19 people	20–99 people

Source: ADB Asia SME Monitor 2022 database; data from Law No.20/2008 on Micro, Small, and Medium-sized Enterprises.

Table 2. Number of businesses and traders in Malang municipality in 2018–2020.

Sub-district in Malang Municipality	Number of Businesses and Traders in Malang					
	Businesses (Units)			Traders (People)		
	2018	2019	2020	2018	2019	2020
Kedungkandang	1815	1815	1803	1091	1091	1375
Sukun	3409	3409	3674	2671	2671	2824
Klojen	8027	8027	7812	4385	4385	4296
Blimbing	2656	2656	2670	2116	2116	1931
Lowokwaru	1114	1114	1112	478	478	478
Malang Municipality	**17021**	**17021**	**17071**	**10741**	**10741**	**10904**

Source: Malangkota.bps.go.id.

enterprises and merchants in Malang Municipality from 2018 to 2020 by Statistics Indonesia (BPS) is shown in Table 2 (Malang Kota.bps.go.id)

Table 2 illustrates the number of business enterprises and traders in Malang City prior to the pandemic in 2018–2020. This number declined during the pandemic, similar to what happened in all Indonesian regions and around the world. Nonetheless, ministries and government agencies have fostered collaboration to support the development of Indonesian SMEs. Multiple programs have been implemented, such as initiatives that involve various stakeholders in different sectors. For example, the government offers the People's Business Credit (KUR) program through government-owned financial institutions. The interest subsidies and guarantees have greatly aided SMEs in terms of capital, but many believe that this program could be more effective and accelerated through cooperatives and other microfinance institutions.

Aside from funding, other constraints SMEs face include marketing and company operations, which the government has not specifically addressed. In this study, we present a model for assessing an SME's marketing performance. We developed this model on the premise that SMEs, as business actors, must be able to analyze and evaluate their work and business results to ensure sustainability. The critical business growth measurement may include (1) indicators of growth, efficiency, and effectiveness, (2)

evaluation of whether the business meets the market demands, (3) identification of potential business gap, and (4) awareness and ability of business to pivot to remain resilient (Saad et al., 2021). Measuring marketing performance correctly is crucial for SMEs to move forward.

This study aims to examine the evolution of marketing performance measurement as well as the most recent themes, develop a model for the SME sector, and determine the most appropriate dimensions for measuring marketing performance for the SME sector. The model was tested in real cases involving SMEs in Malang City, Indonesia. The model is expected to fill the gap between the contradiction perspective notion and measuring marketing activities, financial results, and market size. The proposed model is built upon previous studies by Ortiz-Rendon et al. (2022), Morgan (2012), Klinčeková and Šalgovičová (2014), Morgan et al. (2002), Lau et al. (1999), Lamberti and Noci (2010), and Wu et al. (2015).

Literature review

Marketing performance measurement is a business process that evaluates marketing efforts to provide feedback for business operations (Liang et al., 2018), aligned with the definition by Clark et al. (2006) and B. Clark (2007). Marketing performance has been studied since 1959, with a total of 907 articles in the Scopus database from 1959 to 2022. Based on the bibliometric study of the Scopus database, run on R software on 19 October 2022, at 14:31, marketing performance research was absent or neglected before finally resurfacing in 1975, when studies on this topic proliferated. The author reprocessed the bibliometrics data into the graphic visualization in Figure 2.

Based on the statistics presented above, the urgency and trend for further studies of marketing performance remains strong, with several prospects for advancement. According to Liang et al. (2018), due to the increased demand for greater marketing accountability, companies have invested significant resources in developing and improving their marketing performance assessment, taking into account changes in business patterns that have shifted due to digitalization and changes in business patterns during the COVID-19 pandemic. However, model development for marketing performance analysis is still in its early stages, particularly for SMEs in developing nations where marketing support is limited.

The review of the literature in this study includes a bibliometric study and systematic investigation (Donthu et al., 2021) to assess the existing reading material. Aside from the Scopus scientific data from 1959 to 2022, we also used metadata processing using the R Program. The bibliometric analysis shows that there are 489 sources, 1847 writers with 2133 writers' keywords (DE), 493 Sources, 37922 References, and a 2.55% annual growth rate between 1959 and 2022. This can be interpreted as a constant increase in marketing performance analysis. With the expansion of studies in this area, developing novelty is highly feasible to add to the body of knowledge.
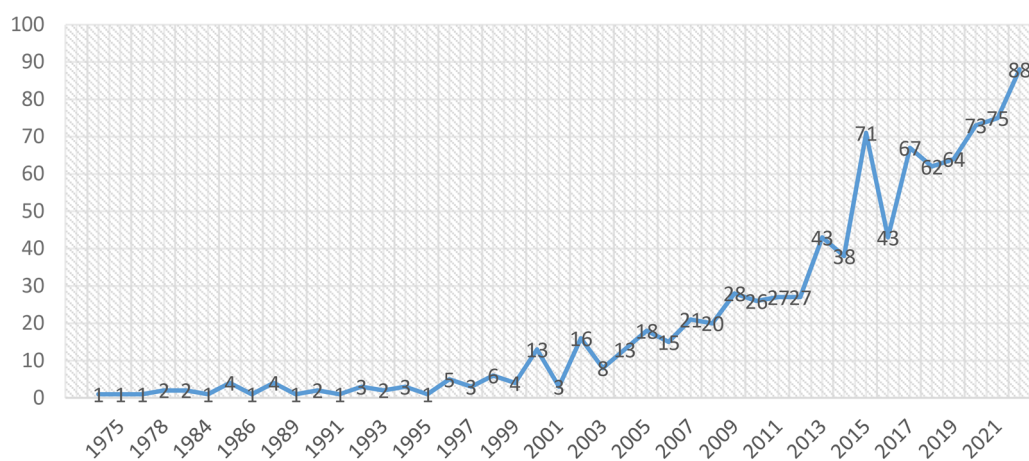

Figure 2. Annual scientific production.
Source: Bibliometric Analysis with Scopus Data (1959–2022), R Program.
Retrieved 19 October 2022, at 14:31.

The metadata on marketing performance above can help understand the history and evolution of marketing performance thinking. One of the studies by Bruce H. Clark (1999) analyzes the history of marketing performance, offering an understanding of changes in the concentration of marketing performance measurement. We investigated and tracked definitions in order to understand how marketing performance was conceptualized and operationalized in each study. The findings show that we need to bridge the varying opinions and provide a unified, holistic concept. This also indicates a gap in the literature, leading to fragmented interpretations of the concept. Bruce H. Clark (1999) divided marketing performance assessment into three approaches: (1) financial to non-financial output measures, (2) output to input measures, and (3) one-dimensional to multidimensional measures. The modifications of the approach measuring marketing performance are presented in Table 3.

Based on the history of marketing performance, it is clear that measurement varies over time as business patterns change. With evidence on the historical trends in marketing performance measures, the most suitable marketing performance measurement can be developed based on the business's internal conditions, markets, competitors, consumers, changing environments, or in the context of business digitalization. According to Bruce H. Clark (1999) and Wu et al. (2015), marketing performance is formed from two aspects: financial and non-financial. Following this, Inam Bhutta et al. (2021) did a study on the elements that influence corporate success in emerging countries. Accounting metrics (financial elements) and market aspects were employed to gauge the performance. The results show that the skill of company managers was a key factor in enhancing corporate success. However, the performance studied here was that of publicly traded enterprises. Therefore, metrics of business performance, such as profits and stock prices, were also considered. Meanwhile, the non-financial aspect is extremely broad. It encompasses the internal and external environment, company growth, innovation, internal procedures, the consumer side, and the shareholder as the company's owner.

Good and measurable company growth directly impacts stakeholders, so the importance of precise and accurate measurements of the company's state becomes a control tool that must be accessible. Past studies have identified the dimensions to measure performance marketing and business performance, as presented in Table 4.

Multiple studies contribute directly to the literature and the industry by enriching the measurement of marketing performance. In relation to this, a thematic map of marketing performance from 1847 writers is drawn based on the bibliometric analysis, as shown in Figure 3

Table 3. The expanding domain of marketing performance measurement.

Financial Output Measure	Non-Financial Measure	Input Measure	Multiple Measure
Profit	Market Share	Marketing Asset	Efficiency
Sales Revenue	Quality of Service	Marketing Audit	Effectiveness
Cashflow	Adaptability	Marketing Implementation	Multivariate Analysis
	Customer Satisfaction	Marketing Orientation	
	Customer Loyalty		

Table 4. Dimensions of marketing performance.

Performance	Definition	Main References
Marketing Efficiency	The company's ability to efficiently convert inputs into outputs	(Ambler et al., 2004); (Bruce H. Clark, 1999)
Customer Relationship Management	Customers' perception of the firm's potential to remain profitable	(Kim et al., 2003); (O'Sullivan & Abela, 2007); (Shah et al., 2006)
Internal Consistency	The company's ability to manage a strategic relationship with all functions inside the firm and to make dynamic alignment decisions	(Jaworski et al., 1993); (Sheth et al., 2000)
Supply-chain Interface	The company's ability to manage strategic relationships with all supply chain partners in a dynamic manner, resulting in alignment	(Srivastava et al., 1999)
Intellectual Capital and Knowledge-based Asset Management	The company's ability to provide market intelligence that is quickly and widely disseminated to all company stakeholders	(Jaworski et al., 1993); (Jaworski, 1988); (Srivastava et al., 1999)

According to the thematic map of marketing performance, one theme in the lower right quadrant is performance assessment. This theme emerged and became of concern to business research to search for appropriate dimensions and measures for performance assessment in SMEs. The creation of the marketing performance model, as proposed in this study, serves as the foundation for an assessment at the marketing functional level. The model we built examines a previously tested model, specifically the model produced by Yamani et al. (2019), which aims to capitalize on information technology in the SME sector to boost SMEs' performance and profits. Another related measurement of marketing performance in SMEs is by Hasibuan (2015), which uses SWOT analysis to determine the strengths, weaknesses, opportunities, and threats of business actors. In this case, the measurement uses IPA with several indicators, including materials, production process, production environment, equipment, production control, facilities, activities, quality standards, business growth, distribution, market, capital, business management, product strategy, and promotion (Hasibuan, 2015).

Another model was developed by Bolisani and Scarso (2012), proposing eight dimensions: (1) the management's understanding of a competitive environment, (2) commercial strategy, (3) the image that top management wishes to project, (4) the first encounter with clients, (5) the understanding the demands of stakeholders, (6) the complexity of services centered on client solutions, (7) the after-sales service, and (8) feedback formulation.

Based on the roadmap of marketing performance in the bibliometric analysis above, past studies have collated and modeled the assessment of marketing performance. The current study identified 1847 Scopus articles from various disciplines, backgrounds, themes, and places. The current analysis discovered no research has developed a reliable marketing performance measurement, especially for SMEs. Therefore, this study aims to develop a marketing performance measurement exclusively for SMEs that consider their characteristics. We propose a model to become a practical assessment tool that SMEs can use to quantify their marketing performance. This model is built upon the extensive existing studies mentioned above, with Figure 4 showing the most cited authors globally.

These past studies assist us in mapping the concept of marketing measurement. Some instances that can be used as a guide for modeling include selecting articles that are tested and most cited. As shown
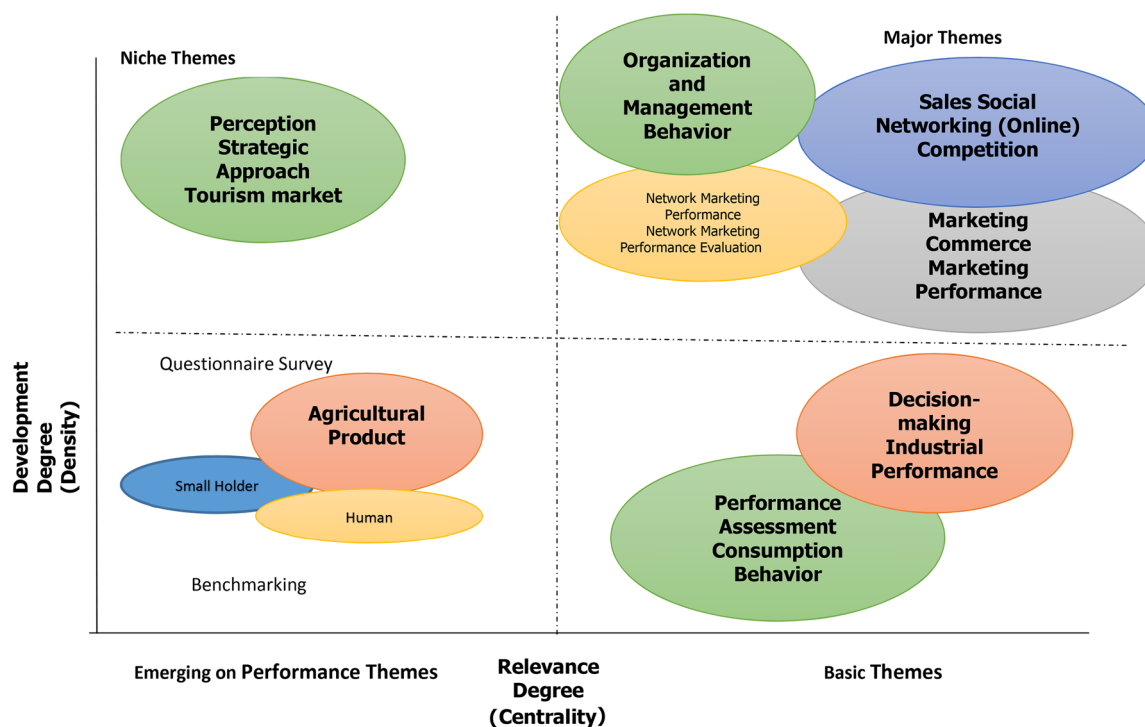

Figure 3. Thematic map.
Source: Bibliometric analysis with scopus data (1959–2022).
Retrieved 19 October 2022, at 14.31.

in the data, writers rank in the top ten in terms of worldwide citations. Meanwhile, the three most important journals reviewing this topic are *Developments in Marketing Science*, *the Journal of Business Research*, which has 15 papers, and *the European Journal of Marketing*, which has 13 publications.

The most relevant writer in the study of marketing performance is Julian CC. These results are obtained based on metadata in relevance and frequency. The second writer is Ambler T., followed by Aryanto VDW. Meanwhile, Morgan, widely cited and used as a reference in the metadata, ranked eighth. The most globally cited articles were by J Marks and Kastikeas, which we also use as a reference in measuring marketing performance for SMEs. Some other authors this study refers to in measuring marketing performance are Morgan et al. (2002), Clark (1999), Ambler et al. (2004), Ortiz-Rendon et al. (2022), Katsikeas et al. (2016), and Lamberti and Noci (2010).

This study constructs a measurement model based on the model promoted by Ortiz-Rendon et al. (2022), where marketing performance is measured by strategy execution, effectiveness, user satisfaction, and organizational and learning dimensions of the company. Morgan (2012) measures marketing performance from two dimensions: market performance (sales, satisfaction, and retention) and share indicators. The second dimension is the financial performance with indicators of cash flow, costs, margin, profit, ROI, market value, and stock risk. Another adoption that enriches the construct of marketing performance analysis is the marketing performance measurement proposed by Klinčeková and Šalgovičová (2014), which extended the performance measures proposed by Kotler (1977) called a marketing audit. This includes the audit of the marketing environment, strategy, organizations, systems, productivity, and functions.

Morgan et al. (2002) modeled marketing performance through three dimensions, namely marketing productivity analysis, which adopted an efficiency perspective, where input (marketing expenses, investment level, quality) was compared with output (profit or sales). This view was developed when non-financial aspects of measuring output began to be adopted, such as quality of service (Bucklin, 1978). Meanwhile, the traditional view of marketing department activities (Lau et al., 1999) examines marketing efficiency performances through intra-functional processes, such as the costs and turnover resulting from promotional, selling, pricing, and distributional activities. Subsequent developments in marketing performance measurement include engagement with consumers, where marketing activities are measured by customer lifetime value, loyalty, and satisfaction. The next dimension of marketing performance measurement is marketing audit, which measures the effective side, carried out by the AMA, following Kotler (1977). Next is the adaptive dimension, which refers to the size of the company's resources and capabilities.

Previous studies (e.g. Lamberti & Noci, 2010) also measured marketing performance in seven companies with qualitative methods. However, it should be noted that the various marketing performance measurement models above have their advantages and disadvantages. If they are adapted to the SME sector, where the organization is simple and informal, unlike that of a corporation. Therefore, some marketing performance measures, such as stock risks or financial measures for corporations, cannot be used
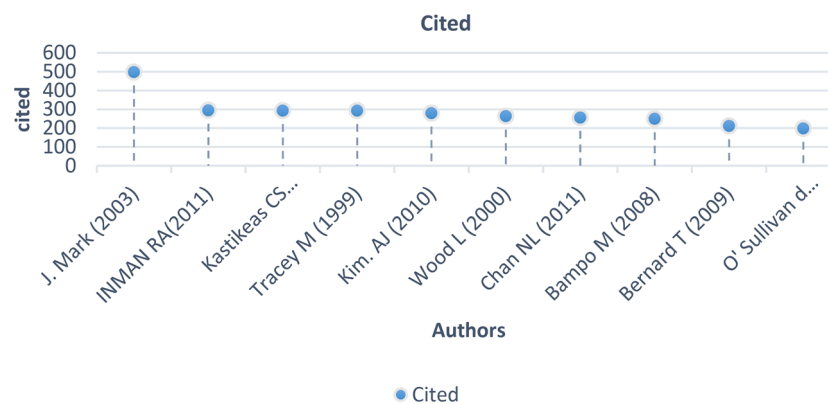
Figure 4. Most globally cited articles.
Source: Bibliometric Analysis with Scopus Data (1959–2022), R Program.
Retrieved: 19 October 2022, at 14.31.

in this construct. In other words, differences in the measurement model vary depending on the form of business, time span, and organizational level, the level of business complexity, technological advances, and the use of digitalization. Past studies such as by Nuryakin and Maryati (2022) have also examined green marketing performance in SMEs, testing whether marketing performance can be supported by company innovativeness, competitive advantage and marketing orientation.

Based on the past research outlined above, the following is the model construct to be tested in this study (Figure 5).

Research methodology

This research is quantitative. The method used in this research is a survey using a questionnaire, where data is taken from a sample that is a member of the population. The steps taken in this study are: (1) developing a hypothesis with six latent variables and 66 indicators; (2) designing questionnaires and conducting surveys of selected MSME respondents and distributing them by random sampling, (3) analysis and interpretation of model results, (4) testing the validity of the model and evaluate the model, (5) using six variables that explain their respective indicators, as follows:

H1. Marketing efficiency is proven valid as a marketing performance measure.

H2. Marketing effectiveness is proven valid as a marketing performance measure.

H3. Adaptability is proven valid as a marketing performance measure.

H4. Product market level is proven valid as a marketing performance measure.

H5. Customers are proven valid as a marketing performance measure.

H6. Financial performance is proven valid as a marketing performance measure.

The population in this study was SMEs in Malang City with the criteria for joining the target group, both from the Department of Industry and Trade and the Cooperatives and SMEs Service in Malang City
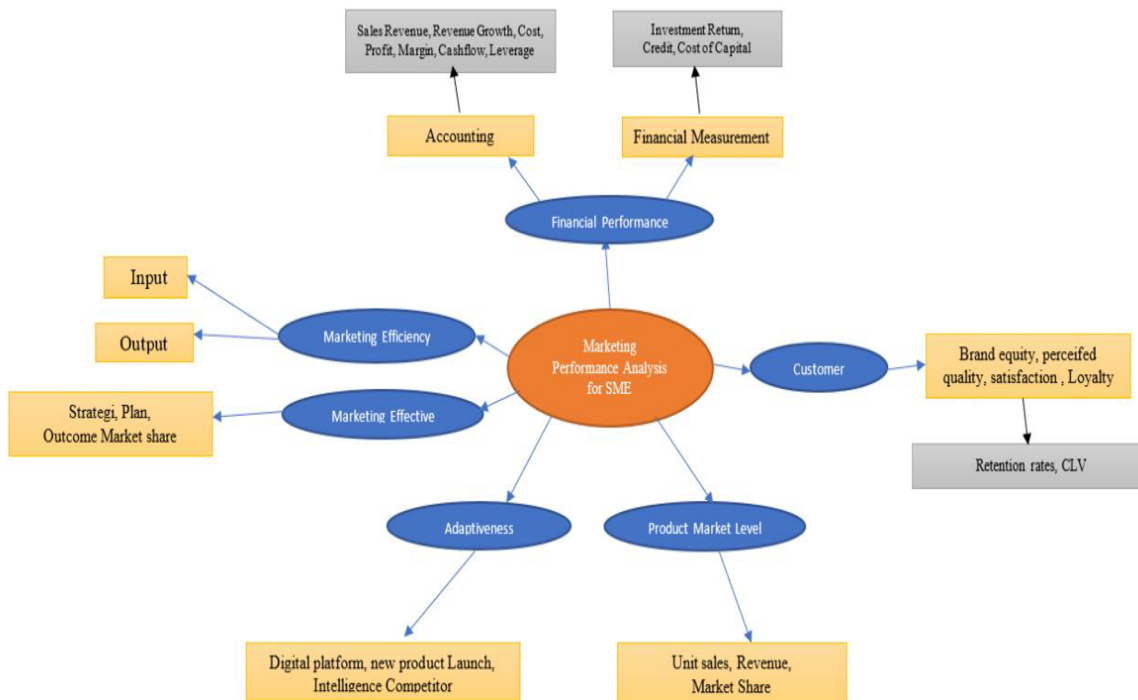
Figure 5. Marketing performance for SME model.
Adaptation construct from Morgan et al. (2002), Lamberti and Noci (2010), Katsikeas et al. (2016), Bruce H. Clark (1999), Ambler et al. (2004).

and Malang Regency. There are seven SME groups with 273 members. Based on the population, the sample in this study is calculated using the Slovin formula as follows:

$$\text{Amount } n = \frac{N}{\left(1 + Ne^2\right)}$$

where: n = Number of samples; N = Total population; e = Percentage slack of non-attachment due to sampling error, which is still desirable

$$n = \frac{273}{(1 + 273 \cdot 0,07^2)}$$
$$= \frac{273}{2,33}$$
$$= 101 \, \text{people}$$

The data sources in this study are primary data in the form of opinions, attitudes, justifications, and perceptions of respondents, who were SME business actors in Malang City and Malang Regency. The surveys were conducted in September until October 2022. Data collection was carried out using an online questionnaire with an assessment process through a Likert scale of 1-5. The instrument was sent to 101 SMEs, and data was examined using confirmatory factor analysis. Validity is tested by seeing the score Kaiser-Meyer-Olkin measure of sampling (KMO) and measures of sampling adequacy (MSA).

This analysis method is carried out in line with the research objective, which is to see the factors that can reflect the measurement of marketing performance. The measurement uses six indicators based on the previous studies by Lamberti and Noci (2010) and Katsikeas et al. (2016). Efficiency and effectiveness measurement factors in marketing are adapted from Morgan et al. (2002). Financial performance dimensions and customer indicators were adapted from Katsikeas et al. (2016), as well as the market product fit. The total number of indicators is 66, with all existing indicators tested for validity and reliability.

CFA testing in this study is to confirm or test the model. This study tests the suitability of the marketing performance analysis measurement model based on the model construct by Morgan et al. (2002), Lamberti and Noci (2010), and Katsikeas et al. (2016). The construct concept in this research is multidimensional with Second Order Confirmatory Factor Analysis (CFA Second Order). The testing cannot be done directly, but in two stages: the latent construct to its six dimensions in the first stage and testing the dimensions of the indicators in the second stage.

This study was approved by the Universitas Merdeka Malang Ethical Clearance Committee (Ket.586.a/ FEB/UM/IX/2022). A consent letter was provided to all respondents. The written consent to participate was acquired from respondents through the instrument. The respondents had provided their consent without any coercion. Subsequently, to protect the rights and privacy of the respondents, all forms of data acquired are kept confidential.

Results and discussion

This study examines variable indicators in measuring marketing performance in SMEs in Malang City. There are six latent variables studied, namely marketing efficiency, marketing effectiveness, adaptive, product market level, customer, and financial performance, with a total indicator for all variables amounting to 66 question items. The validity of this study is tested using CFA analysis.

In this study, there are six variables to use in the marketing performance analysis of SMEs in Malang City, with a total of 66 question items (indicators). At the factor analysis testing stage, the 66 questions were analyzed to test the feasibility of each variable. The result was that 36 indicators were declared valid. The test results using SPSS.26 software are presented in Table 5.

Based on the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO-MSA) value, a value of 0.838 is greater than 0.50, and Bartlett's Test significance value is less than 0.05, so factor analysis can be continued.

Table 5. KMO-MSA test. **KMO and Bartlett's Test**.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.838
Bartlett's Test of Sphericity	Approx. Chi-Square	6795.314
	Df	2145
	Sig.	<.001

Source: SPSS.26 Output Processed by the Author (2022).

Table 6. Anti-image correlation.

Variables	Indicator	Anti-image Correlation	Variables	Indicator	Anti-image Correlation
X1	x1.1	0.704	X5	x5.1	0.900
	x1.2	0.746		x5.2	0.887
	x1.3	0.623		x5.3	0.832
	x1.4	0.613		x5.4	0.775
	x1.5	0.706		x5.5	0.800
X2	x2.1	0.837		x5.6	0.906
	x2.2	0.820		x5.7	0.908
	x2.3	0.819		x5.8	0.917
	x2.4	0.776		x5.9	0.784
	x2.5	0.708		x5.10	0.813
	x2.6	0.824		x5.11	0.836
	x2.7	0.847		x5.12	0.832
	x2.8	0.809		x5.13	0.886
	x2.9	0.873		x5.14	0.834
	x2.10	0.846		x5.15	0.808
X3	x3.1	0.631	X6	x6.1	0.864
	x3.2	0.654		x6.2	0.900
	x3.3	0.766		x6.3	0.885
	x3.4	0.774		x6.4	0.884
	x3.5	0.807		x6.5	0.886
	x3.6	0.790		x6.6	0.874
X4	x4.1	0.801		x6.7	0.835
	x4.2	0.783		x6.8	0.927
	x4.3	0.835		x6.9	0.909
	x4.4	0.799		x6.10	0.862
	x4.5	0.905		x6.11	0.889
	x4.6	0.776		x6.12	0.868
	x4.7	0.854		x6.13	0.867
	x4.8	0.924		x6.14	0.832
	x4.9	0.804		x6.15	0.881
	x4.10	0.869		x6.16	0.834
	x4.11	0.850	Criteria:		
	x4.12	0.873	anti-image correlation > 0.50		
	x4.13	0.692			
	x4.14	0.882			

Source: SPSS.26 output processed by the Author (2022).

Based on Table 6 above, the anti-image correlation value for all indicators is greater than 0.50, meaning that the Measure of Sampling Adequacy (MSA) assumption is met.

Based on Table 7, the extraction value for all indicators is more than 0.50, so the assumption of commonality is met.

Based on Table 8, it is known that of the 66 indicators, 11 factors were formed with an Eigenvalue of more than 1. While in this study the construct variables studied were six. Therefore, it is necessary to further test the validity of the items/indicators by looking at the factor loading value. For a sample size of 100, the factor loading requirement is more than 0.55 and clustered on one factor.

The results of the analysis show that the KMO and MSA values are above 0.5, which is 0.838, and the score on Bartlett's Test is lower than 0.05. Then, the analysis factor could be done. The next test is to meet the assumption of Measure of Sampling Adequacy (MSA). The results show that the anti-image correlation value for all indicators is greater than 0.50, meaning that the assumption MSA is met. Based on the extraction for all indicators with a value of more than 0.50, the assumption of commonality is met (see Appendix). The next test is the Total Variance Explained. The result shows that 66 indicators formed and 11 factors show an Eigenvalue of more than 1. In this study, there were six loading factors. For a sample of 101, the factor loading provisions are more than 0.55 and clustered on 1 factor to make the selection. Notably, only valid indicators are used in subsequent analysis, and the invalid indicators are excluded. As such, the indicators that used in the subsequent analysis for each variable are as follows (Table 9).

Table 7. Communalities.

Variables	Indicator	Extraction	Variables	Indicator	Extraction
X1	x1.1	0.738	X5	x5.1	0.745
	x1.2	0.748		x5.2	0.737
	x1.3	0.709		x5.3	0.678
	x1.4	0.695		x5.4	0.734
	x1.5	0.717		x5.5	0.797
X2	x2.1	0.668		x5.6	0.767
	x2.2	0.654		x5.7	0.767
	x2.3	0.647		x5.8	0.753
	x2.4	0.815		x5.9	0.689
	x2.5	0.758		x5.10	0.684
	x2.6	0.774		x5.11	0.687
	x2.7	0.727		x5.12	0.707
	x2.8	0.741		x5.13	0.773
	x2.9	0.744		x5.14	0.797
	x2.10	0.741		x5.15	0.763
X3	x3.1	0.604	X6	x6.1	0.822
	x3.2	0.731		x6.2	0.824
	x3.3	0.677		x6.3	0.833
	x3.4	0.718		x6.4	0.872
	x3.5	0.789		x6.5	0.839
	x3.6	0.838		x6.6	0.830
X4	x4.1	0.750		x6.7	0.789
	x4.2	0.712		x6.8	0.825
	x4.3	0.677		x6.9	0.848
	x4.4	0.770		x6.10	0.759
	x4.5	0.735		x6.11	0.815
	x4.6	0.592		x6.12	0.838
	x4.7	0.738		x6.13	0.841
	x4.8	0.699		x6.14	0.800
	x4.9	0.738		x6.15	0.863
	x4.10	0.801		x6.16	0.856
	x4.11	0.693	Criteria:		
	x4.12	0.699	Extraction > 0.50		
	x4.13	0.676			
	x4.14	0.792			

Source: SPSS.26 output processed by the Author (2022).

Table 8. Total variance explained.

	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	28.518	43.206	43.206	28.518	43.206	43.206	11.928	18.072	18.072
2	4.692	7.109	50.315	4.692	7.109	50.315	11.091	16.804	34.877
3	4.132	6.261	56.576	4.132	6.261	56.576	6.004	9.097	43.973
4	2.134	3.234	59.810	2.134	3.234	59.810	4.502	6.822	50.795
5	1.970	2.986	62.796	1.970	2.986	62.796	4.314	6.536	57.331
6	1.662	2.518	65.314	1.662	2.518	65.314	2.523	3.823	61.154
7	1.453	2.202	67.516	1.453	2.202	67.516	2.251	3.411	54.565
8	1.398	2.117	69.634	1.398	2.117	69.634	2.186	3.312	67.876
9	1.351	2.046	71.680	1.351	2.046	71.680	1.926	2.918	70.794
10	1.236	1.874	73.554	1.236	1.874	73.554	1.528	2.316	73.110
11	1.089	1.650	75.204	1.089	1.650	75.204	1.382	2.095	75.204

Source: SPSS.26 output processed by the Author (2022).

Next, the CFA step is repeated with all valid indicators, and the results of the value are obtained. Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO-MSA) obtained a score of 0.874, which is higher than 0.50. Meanwhile, the score on Bartlett's Test is lower than 0.05. Then the next analysis factor could done.

The anti-image correlation value for all indicators is greater than 0.50, meaning that the assumption of MSA is met. The second test of these 36 indicators produces extraction values for all indicators which is higher than 0.50. Therefore, the assumption of commonality is met. It is known that 36 indicators

Table 9. Variable indicators.

Variable	Indicator
Marketing Efficiency (X1)	(x1.1) Able to measure expenses
	(x1.2) Able to measure the investment costs for a product or service
Marketing Effectiveness (X2)	(x2.4) Regular evaluations to monitor the achievement of goals
	(x2.5) Current market share in accordance with the target set
	(x2.6) Measurement of marketing effectiveness
	(x2.7) Customer satisfaction
Adaptive (X3)	(x3.1) Able to evaluate competitors,
	(x3.2) Efforts to monitor the progress of your business competitors
Product Market Level (X4)	(x4.1) Measure target market
	(x4.2) Identify customer needs
	(x4.3) The company's special characteristics based on the company's capabilities
	(x4.4) The company's special features based on market demand
	(x4.12) Evaluate the suitability of the product for the market
Customer (X5)	(x5.4) Manage word of mouth from business
	(x5.5) Customer details or loyal customers
	(x5.7) Measure customer satisfaction
	(x5.8) Complaints
	(x5.9) Customer loss rate data,
	(x5.10) Complaints have been handled properly
	(x5.11) Unhandled complaints
	(x5.12) Specific measurements of customer expectations
	(x5.13) A communication channel to follow the customer's expectations
	(x5.14) Digital services for measuring the level of achievement of business
	(x5.15) Measure service performance according to standard (SOP)
Financial Performance (X6)	(x6.5) Monitor business income
	(x6.6) Monitor business profits
	(x6.7) Monitor the flow of funds
	(x6.8) Monitor your company's fixed costs over time
	(x6.9) Monitor the company's debt
	(x6.10) Monitor the company's capital
	(x6.11) Measure the return on investment
	(x6.12) Measure the cost of capital
	(x6.13) Measure the payment
	(x6.14) Measure interest debt payments
	(x6.15) Measure the level of risk of an investment
	(x6.16) Measure the level of risk of the assets purchased

Source: Author (2022).

Table 10. Reliability test.

Variable	Amount Indicator	Cronbach's Alpha
X1	2	0.756
X2	4	0.854
X3	2	0.654
X4	5	0.875
X5	11	0.945
X6	12	0.970

Source: SPSS.26 output processed by the Author (2022).

formed as many as six factors with an Eigenvalue of more than 1. This means that it follows the number of construct variables studied. The next is the calculation of the loading factor value. It can be seen that each indicator has a loading factor greater than 0.55 and is clustered on the same 1 factor. Therefore, it can be concluded that the indicators used are consistent in these variables and are feasible to use.

Based on the loading factor results, it was also found that the financial performance indicator (X6) entered into factor 1, customer (X5) entered into factor 2, product market level (X4) entered into factor 3, marketing effectiveness (X2) entered into factor 4, marketing efficiency (X1) entered into factor 5, and adaptability (X3) entered into factor 6. The reliability test uses Cronbach Alpha. If the reliability coefficient is greater than 0.60, then all of the questions are reliable. Table 10 shows the results of the reliability test for each variable.

Table 10 shows that the Cronbach's Alpha value of all variables is higher than 0.6, so it can be said that all indicators are reliable.
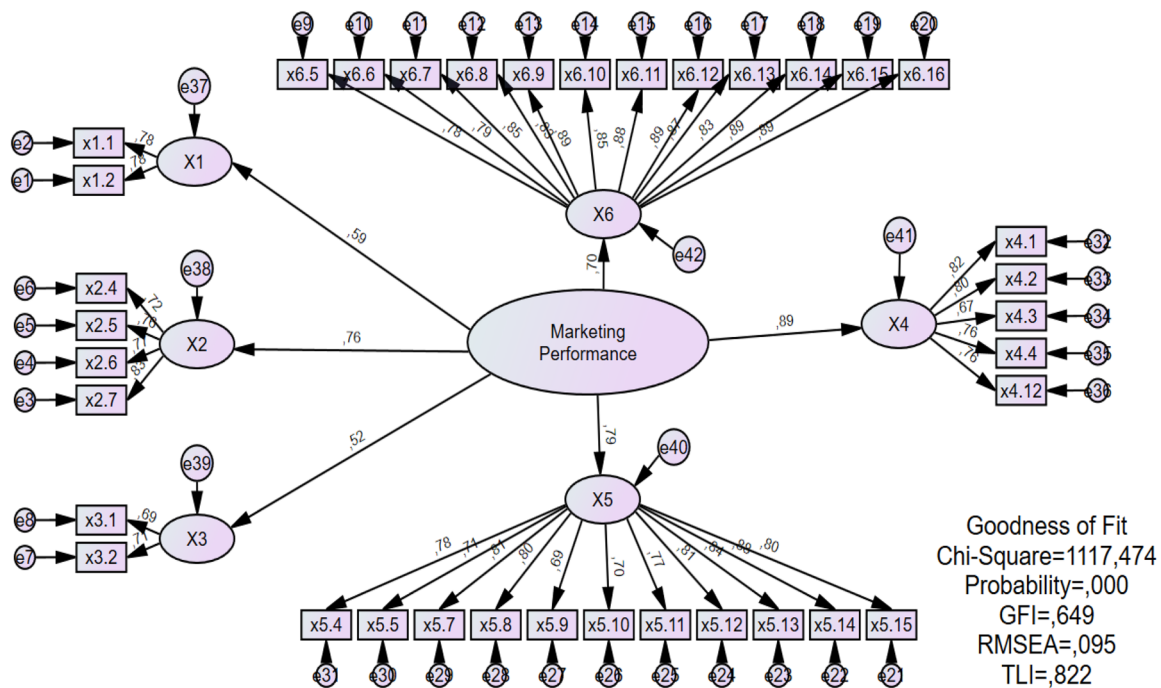
Figure 6. CFA diagram of the marketing performance.
Source: Questionnaire results processed by the Author (2022).

Confirmatory factor analysis: Second-order

Next, a second-order CFA was carried out to find out whether the six variables with each indicator describe a constructed variable in measuring marketing performance in SMEs in Malang City. The results are presented in Figure 6.

Figure 6 shows that for all indicators in each variable, as many as 36 indicators have a factor loading with a value higher than 0.55. Therefore, it can be said that all indicators in each construct variable are feasible to use. Likewise, the factor loading on each variable has a value of more than 0.55, except for the X3 (the adaptability variable).

For the goodness of fit from the above model, it can be said that the model is not fit because the Chi-Square, probability, GFI, RMSEA, and TLI values do not meet the criteria. So, it is necessary to make modifications to increase the goodness of fit by using modification indices of errors with high covariance values. The modified CFA model is shown in Figure 7.

From the CFA model, it can be seen that the Chi-Square value is still high but lower than the previous model. Meanwhile, the probability value is still 0.000. This is because the sample used is large (n = 101). Therefore, the probability results tend to be significant. However, the RMSEA is smaller than 0.08 (0.07 < 0.08), and the TLI is greater than 0.90 (0.902 > 0.90), so it can be said that the model is fit.

The second goal of this study is to determine which dimensions most accurately reflect marketing performance. This can be demonstrated by displaying the loading factor values in descending order, beginning with the largest, namely product market level (X4), marketing effectiveness (X2), customers (X5), financial performance (X6), marketing efficiency (X1), and adaptability (X3).

Hypothesis testing

This study analyzes the relationship between variables and their dimensions and indicators. The data accuracy is ensured through the loading factor values between latent variables and their indicators. The CFA test results on latent variables, namely marketing efficiency, marketing effectiveness, adaptability, product market level, customers, and financial performance, as seen from the factor loading aspect, prove the six variables valid to represent their indicators. Thus, all six existing hypotheses are accepted.
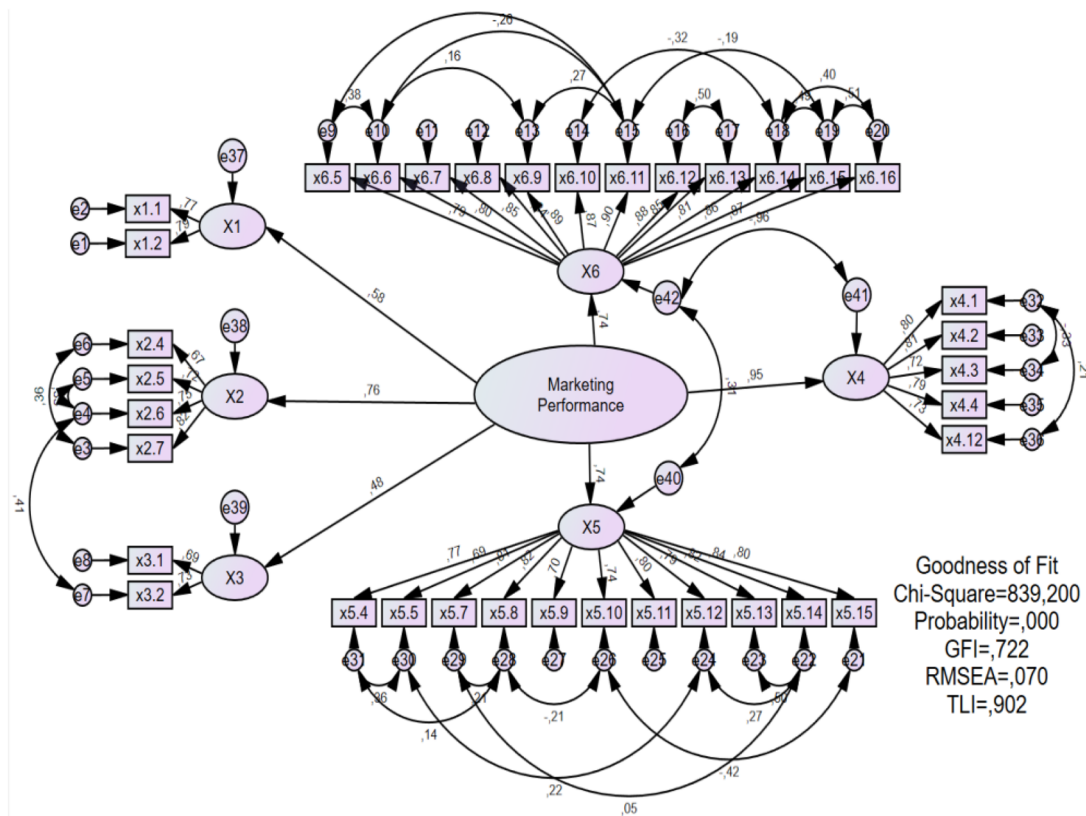
Figure 7. Modified CFA diagram of the marketing performance.
Source: Questionnaire results processed by the Author (2022).

The factor loading results have met the minimum standard of 0.5. Therefore, 36 questions asked based on the indicators can explain the variables. The RMSEA is smaller than 0.08 (0.07 < 0.08), and TLI is greater than 0.90 (0.902 > 0.90), so the model is fit. The results of this CFA conclude that the six variables in measuring marketing performance in SMEs in Malang City are appropriate and feasible to use. The 36 indicators have loading factor values of more than 0.55, so all indicators on each construct variable are feasible to use. Factor Loading values in order starting from the largest are product market level (X4), marketing effectiveness (X2), customers (X5), financial performance (X6), marketing efficiency (X1), and adaptability (X3).

Discussion

The study results confirmed that all dimensions reflect the measurement of marketing performance. The dimensions are based on the results of research by Lamberti and Noci (2010) and Katsikeas et al. (2016), consisting of both financial and non-financial performance, accommodating the initial idea of Bruce H. Clark (1999), stating that there is a perspective of measuring financial to non-financial, output to input, and one dimensional to multidimensional aspects. The initial test contained 66 indicators, but some of them were invalid, so they were eliminated from the study. The next test used 36 valid indicators to measure marketing performance. Most indicators that reflect the measurement of marketing performance are from the dimensions of financial performance, customer, and product market level.

The result of this study supports that financial factors play an essential role in shaping the measurement of marketing performance proposed in previous studies by Bruce H. Clark (1999), Goodman, Sam R (1970), Feder, Robert A. (1965), and Buzzell, Robert D. and Gale, Bradley T. (1987). The customer dimension refers to the study by Lamberti and Noci (2010) and O'Sullivan and Abela (2007), while the product market level is an adaptation of the dimensions. The marketing efficiency dimension refers to the measurement of productivity analysis, which adopts an efficiency perspective, where the input size

(marketing expenses, investment level, quality) is compared with the output (profit or sales). Marketing effectiveness (Ortiz-Rendon et al., 2022) is where marketing performance is measured by the dimensions of strategy execution, effectiveness, user satisfaction, and organizational and learning dimensions of the company.

The adaptability dimension (Morgan et al., 2002) measures the organization's ability to sense and respond to changes in customer needs and hence lead to adaptive marketing. The product market level dimension measures how successful the product is based on the size of the target market, whether the company can identify customer needs, the value proposition of the impact of the product on the customer, and whether the product works properly. Expectations and feedback measure the product launched and whether it is received by the market. The business operations, in terms of growth rate, measure growth when the market accepts the business. As for the customer dimension, it measures a company's success from the consumer side based on perceived quality, satisfaction, and loyalty. Lastly, financial performance measures sales revenue, revenue growth, costs, profits, margin, cash flow, and leverage.

Our theoretical discussion suggested that the marketing performance assessment consists of categories of items to measure marketing performance. In the case of SMEs in Malang City, these are product market level (X4), marketing effectiveness (X2), customers (X5), financial performance (X6), marketing efficiency (X1), and adaptability (X3).

For the adaptive dimension, the result is in line with Onyinyi and Kaberuka (2019), stating that transformation capability is needed to be adaptive in supporting the performance of SMEs. The customer dimension in marketing performance measurement is in line with a study involving SMEs in Indonesia (Udayana et al., 2021), stating that the ability to influence customers can improve marketing performance.

According to the study's findings, the six dimensions that assess marketing performance that have the highest value in order are product market level (X4), marketing effectiveness (X2), customers (X5), financial performance (X6), marketing efficiency (X1), and adaptability (X3). The maximum value is at the product market level, adapted from Katsikeas et al. (2016). Measurement items from this dimension include measuring the target market, identifying customer needs, value proposition, product impact on customers, whether the product works as expected, feedback from customers about the product launched, the average profit metrics obtained from customers, and whether a product is in accordance with the market and the business operations, and the growth rate, which indicates the market's acceptance.

Based on the characteristics of respondents who filled out the questionnaire, 71% of respondents have a business license. This means that SMEs with a business license contribute to the formation and suitability of measurements at the product market level. The second highest value that describes the measurement of marketing performance is from the marketing effectiveness dimension, measured by strategy execution, effectiveness, user satisfaction, organization, and learning by the company. Effectiveness is considered a determinant of marketing performance based on a survey conducted in Malang, Indonesia, which is in line with a previous study by Ortiz-Rendon et al. (2022).

Based on the characteristics of the city, Malang can be said as a productive city, with a population of 866,118 people in 2021 and many higher education institutions, as well as natural and artificial tourism spots. It should also be noted that the sample in this study focuses on MSMEs in the culinary, agribusiness, creative business, fashion, and a small portion in other business fields. Based on the city characteristics, Malang is a tourism city and a city of education, so food businesses thrive with a percentage of 61%, fashion at 18%, and agribusiness or food processing at 12%. The characteristics of this line of business can represent the measurement of marketing performance in general, although this study is limited in terms of regional coverage. The large number of MSMEs in the food sector in this research sample is most likely due to the strong traditional culinary characteristics of the city and the openness to new types of food. This is because there are a lot of migrants in Malang City, both students and tourists. Therefore, this study shows that the highest marketing performance measurement is the product market level dimension, which measures the target market and identifies customer needs, business special characteristics based on capabilities, special features based on market demand, and suitability of the product for the market.

We modeled the measurement of these six dimensions that are suitable for SMEs, although there are still many other marketing performance measurement studies, including dimensions that measure the innovativeness of SMEs in the marketing performance (Bamfo & Kraa, 2019; Makate et al., 2019). In this study, we limit the scope to these dimensions, assuming that further measurements are needed, such as innovation. SMEs tend to lack the capital to innovate, so the innovation dimension is not included in the measurement.

In addition to comparing the results of this study with previous research, we also elaborate on the results of this study based on the SME performance research in other developing countries. The results of this study provide academic and practical implications for marketing measurement practices, especially in the context of a business world experiencing high dynamics in terms of marketing technology, the existence of social media, online marketing patterns, and the changing marketing measurement. A study by Qalati et al. (2022) on the challenges of SME change in an environment where digital technology and social media are required found that social media adoption has a significant effect on SME performance. This suggests that social media can be an effective tool for SMEs in developing countries to improve their performance. However, SMEs in developing countries face problems and challenges, such as rapid changes in market demand, uncertainty, and lack of resources. The marketing measurement from this research can be a practical solution the dimensions include digital marketing and social media.

This is the innovative aspect of this study. The integrated measurement categories for SMEs' marketing performance are based on SMEs' characteristics. This finding supports previous research (Ortiz-Rendon et al., 2022; Morgan, 2012; Klinčeková & Šalgovičová, 2014; Morgan et al., 2002; Lau et al., 1999; Lamberti & Noci, 2010; Wu et al., 2015, Morgan et al., 2002; Lamberti & Noci, 2010; Katsikeas et al., 2016; Bruce H. Clark, 1999; Ambler et al., 2004). The difference in this study lies in the specificity of marketing performance measurements that are in accordance with SMEs.

This study's findings have two significant implications. The first is for SMEs, where marketing performance measurement can provide chances for self-learning procedures. SMEs can assess their marketing performance, identify their shortcomings and strengths, and comprehend their commercial positioning. The second implication is for academics and policymakers. The findings of this study can provide insight into the current status of SMEs, the level of maturity, whether SME players are stable, and market preparedness. Another implication is that this research provides support to the "MSMEs go upmarket" program by the Indonesian government. Appropriate and easily replicable performance measurement in MSMEs provides practical benefits in performance evaluation and facilitates MSMEs to determine the right strategy for their business.

The coverage area becomes the limitation of this study, i.e. Malang City and Regency, which limits the generalizability of the findings. It cannot be employed at the national level as the quantity of samples and representativs from various regions in Indonesia is not sufficient.

Nonetheless, the results of the confirmatory analysis in this study provide opportunities for further research, including further exploring the adaptability dimension because it has the lowest value. The dimension has two indicators, namely evaluating competitors and monitoring the progress of business competitor's efforts. Past studies have examined the innovativeness of SMEs in developing countries that support marketing performance (Majali et al., 2022), which is relevant to the adaptability dimension of this study. Further research opportunities based on transformational leadership also have the opportunity to enrich further studies, such as a study by Asad et al. (2022), as well as examine Islamic financing factors for SME performance, such as a study by Bilal and Sulaiman (2021).

Conclusion

This study has shown six characteristics that describe the marketing performance of SMEs in Malang, including product market level (X4), marketing effectiveness (X2), customers (X5), financial performance (X6), marketing efficiency (X1), and adaptability (X3). The 66 indicators were measured during the first model testing. However, only 36 could be used for subsequent research as a measure of marketing performance in SMEs. The second goal was to identify the most powerful factors in measuring marketing performance. According to the findings of this study, the most influential factors that reflect marketing performance for SMEs are product market level, marketing effectiveness, and customers.

Future research

From our study of marketing performance, future research can test the six variables and 36 indicators that determine SMEs' marketing performance. The research can also apply this model to start-up businesses that are familiar with digital technology or SMEs in the middle category. Furthermore, this measurement of marketing performance can also be enriched with measurements from the branding side (as a separate variable) because brand measurement as part of the customer dimension shows invalid results and has been eliminated from this model. In addition, past studies have tried to examine what factors leverage the performance of SMEs. For example, Sari et al. (2023) prove that innovation capability is a determinant of performance in SMEs even during a pandemic. This study examines SMEs in Indonesia in the West Java region, which can be a reference for further research by including elements of innovative capability.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Data availability statement

Underlying Data:
This project contains the raw data of respondent responses
10.6084/m9.figshare.21786074
This project contains data Results that analyzed using Confirmatory Analysis
10.6084/m9.figshare.21805065
Extended data
Questionnaire for SMEs to confirm the model
10.6084/m9.figshare.21805035
Ethics clearance
10.6084/m9.figshare.21820083

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Appendix. CFA result

Validity Test
6 Variable with 66 Indicator

1. *Marketing Efficiency* (X1) consists of 5 indicators,
2. *Marketing Effective* (X2) consists of 10 indicators,
3. *Adaptiveness* (X3) consists of 6 indicators,
4. *Product Market Level* (X4) consists of 14 indicators,
5. *Customer* (X5) consists of 15 indicators, and
6. *Financial Performance* (X6) consists of 16 indicators.

KMO-MSA Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.838
Bartlett's Test of Sphericity	Approx. Chi-Square	6795.314
	Df	2145
	Sig.	<,001

Source: SPSS.26 Output Processed by the Author (2022).

Anti-Image Correlation

Variable	Indicator	Anti-image Correlation	Variable	Indicator	Anti-image Correlation
X1	x1.1	0.704	X5	x5.1	0.900
	x1.2	0.746		x5.2	0.887
	x1.3	0.623		x5.3	0.832
	x1.4	0.613		x5.4	0.775
	x1.5	0.706		x5.5	0.800
X2	x2.1	0.837		x5.6	0.906
	x2.2	0.820		x5.7	0.908
	x2.3	0.819		x5.8	0.917
	x2.4	0.776		x5.9	0.784
	x2.5	0.708		x5.10	0.813
	x2.6	0.824		x5.11	0.836
	x2.7	0.847		x5.12	0.832
	x2.8	0.809		x5.13	0.886
	x2.9	0.873		x5.14	0.834
	x2.10	0.846		x5.15	0.808
X3	x3.1	0.631	X6	x6.1	0.864
	x3.2	0.654		x6.2	0.900
	x3.3	0.766		x6.3	0.885
	x3.4	0.774		x6.4	0.884
	x3.5	0.807		x6.5	0.886
	x3.6	0.790		x6.6	0.874
X4	x4.1	0.801		x6.7	0.835
	x4.2	0.783		x6.8	0.927
	x4.3	0.835		x6.9	0.909
	x4.4	0.799		x6.10	0.862
	x4.5	0.905		x6.11	0.889
	x4.6	0.776		x6.12	0.868
	x4.7	0.854		x6.13	0.867
	x4.8	0.924		x6.14	0.832
	x4.9	0.804		x6.15	0.881
	x4.10	0.869		x6.16	0.834
	x4.11	0.850	Criteria:		
	x4.12	0.873	*anti-image correlation > 0.50*		
	x4.13	0.692			
	x4.14	0.882			

Source: SPSS.26 output processed by the Author (2022).

Communalities

Variable	Indicator	Extraction	Variable	Indicator	Extraction
X1	x1.1	0.738	X5	x5.1	0.745
	x1.2	0.748		x5.2	0.737
	x1.3	0.709		x5.3	0.678
	x1.4	0.695		x5.4	0.734
	x1.5	0.717		x5.5	0.797
X2	x2.1	0.668		x5.6	0.767
	x2.2	0.654		x5.7	0.767
	x2.3	0.647		x5.8	0.753
	x2.4	0.815		x5.9	0.689
	x2.5	0.758		x5.10	0.684
	x2.6	0.774		x5.11	0.687
	x2.7	0.727		x5.12	0.707
	x2.8	0.741		x5.13	0.773
	x2.9	0.744		x5.14	0.797
	x2.10	0.741		x5.15	0.763
X3	x3.1	0.604	X6	x6.1	0.822
	x3.2	0.731		x6.2	0.824
	x3.3	0.677		x6.3	0.833
	x3.4	0.718		x6.4	0.872
	x3.5	0.789		x6.5	0.839
	x3.6	0.838		x6.6	0.830
X4	x4.1	0.750		x6.7	0.789
	x4.2	0.712		x6.8	0.825
	x4.3	0.677		x6.9	0.848
	x4.4	0.770		x6.10	0.759
	x4.5	0.735		x6.11	0.815
	x4.6	0.592		x6.12	0.838
	x4.7	0.738		x6.13	0.841
	x4.8	0.699		x6.14	0.800
	x4.9	0.738		x6.15	0.863
	x4.10	0.801		x6.16	0.856
	x4.11	0.693	Criteria:		
	x4.12	0.699	Extraction > 0.50		
	x4.13	0.676			
	x4.14	0.792			

Source: SPSS.26 output processed by the Author (2022).

Total Variance Explained

	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	28.518	43.206	43.206	28.518	43.206	43.206	11.928	18.072	18.072
2	4.692	7.109	50.315	4.692	7.109	50.315	11.091	16.804	34.877
3	4.132	6.261	56.576	4.132	6.261	56.576	6.004	9.097	43.973
4	2.134	3.234	59.810	2.134	3.234	59.810	4.502	6.822	50.795
5	1.970	2.986	62.796	1.970	2.986	62.796	4.314	6.536	57.331
6	1.662	2.518	65.314	1.662	2.518	65.314	2.523	3.823	61.154
7	1.453	2.202	67.516	1.453	2.202	67.516	2.251	3.411	54.565
8	1.398	2.117	69.634	1.398	2.117	69.634	2.186	3.312	67.876
9	1.351	2.046	71.680	1.351	2.046	71.680	1.926	2.918	70.794
10	1.236	1.874	73.554	1.236	1.874	73.554	1.528	2.316	73.110
11	1.089	1.650	75.204	1.089	1.650	75.204	1.382	2.095	75.204

Validity Test

Indicator	Factor Loading	Factor	Info
x1.1	0.767	8	Valid
x1.2	0.718	8	Valid
x1.3	0.623	9	Invalid
x1.4	0.497	4	Invalid
x1.5	0.762	4	Invalid
x2.1	0.435	3	Invalid
x2.2	0.436	4	Invalid
x2.3	0.369	3	Invalid
x2.4	0.740	4	Valid
x2.5	0.693	4	Valid
x2.6	0.617	4	Valid
x2.7	0.560	4	Valid
x2.8	0.681	7	Invalid
x2.9	0.569	7	Invalid
x2.10	0.474	5	Invalid

Indicator	Factor Loading	Factor	Info
x3.1	0.677	6	Valid
x3.2	0.814	6	Valid
x3.3	0.404	6	Invalid
x3.4	0.548	9	Invalid
x3.5	0.495	11	Invalid
x3.6	0.810	10	Invalid
x4.1	0.598	3	Valid
x4.2	0.610	3	Valid
x4.3	0.656	3	Valid
x4.4	0.627	3	Valid
x4.5	0.544	3	Invalid
x4.6	0.494	1	Invalid
x4.7	0.648	1	Invalid
x4.8	0.674	1	Invalid
x4.9	0.738	1	Invalid
x4.10	0.712	1	Invalid
x4.11	0.465	1	Invalid
x4.12	0.600	3	Valid
x4.13	0.414	1	Invalid
x4.14	0.550	1	Invalid
x5.1	0.617	3	Invalid
x5.2	0.558	3	Invalid
x5.3	0.516	1	Valid
x5.4	0.740	1	Valid
x5.5	0.729	1	Valid
x5.6	0.503	1	Invalid
x5.7	0.710	1	Valid
x5.8	0.663	1	Valid
x5.9	0.557	1	Valid
x5.10	0.654	1	Valid
x5.11	0.605	1	Valid
x5.12	0.711	1	Valid
x5.13	0.687	1	Valid
x5.14	0.737	1	Valid
x5.15	0.725	1	Valid
x6.1	0.712	5	Invalid
x6.2	0.646	5	Invalid
x6.3	0.578	5	Invalid
x6.4	0.637	5	Invalid
x6.5	0.626	2	Valid
x6.6	0.656	2	Valid
x6.7	0.738	2	Valid
x6.8	0.740	2	Valid
x6.9	0.821	2	Valid
x6.10	0.779	2	Valid
x6.11	0.809	2	Valid
x6.12	0.846	2	Valid
x6.13	0.853	2	Valid
x6.14	0.804	2	Valid
x6.15	0.845	2	Valid
x6.16	0.875	2	Valid

Indicator Variable

Variable	Indicator	Total
Marketing Efficiency (X1)	x1.1, x1.2	2
Marketing Effective (X2)	x2.4, x2.5, x2.6, x2.7	4
Adaptiveness (X3)	x3.1, x3.2	2
Product Market Level (X4)	x4.1, x4.2, x4.3, x4.4, x4.12	5
Customer (X5)	x5.4, x5.5, x5.7, x5.8, x5.9, x5.10, x5.11, x5.12, x5.13, x5.14, x5.15	11
Financial Performance (X6)	x6.5, x6.6, x6.7, x6.8, x6.9, x6.10, x6.11, x6.12, x6.13, x6.14, x6.15, x6.16	12
Total		36

KMO-MSA TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.874
Bartlett's Test of Sphericity	Approx. Chi-Square	3322.477
	Df	630
	Sig.	<.001

Anti-Image Correlation

Variabel	Indikator	Anti-image Correlation	Variabel	Indikator	Anti-image Correlation	Variabel	Indikator	Anti-image Correlation
X1	x1.1	0.738	X5	x5.4	0.847	X6	x6.5	0.873
	x1.2	0.821		x5.5	0.806		x6.6	0.920
X2	x2.4	0.815		x5.7	0.938		x6.7	0.936
	x2.5	0.796		x5.8	0.910		x6.8	0.959
	x2.6	0.858		x5.9	0.871		x6.9	0.893
	x2.7	0.836		x5.10	0.839		x6.10	0.943
X3	x3.1	0.632		x5.11	0.880		x6.11	0.919
	x3.2	0.686		x5.12	0.809		x6.12	0.897
X4	x4.1	0.904		x5.13	0.871		x6.13	0.908
	x4.2	0.882		x5.14	0.855		x6.14	0.913
	x4.3	0.848		x5.15	0.924		x6.15	0.893
	x4.4	0.772					x6.16	0,870
	x4.12	0.817						

Communalities

Variabel	Indikator	Extraction	Variabel	Indikator	Extraction	Variabel	Indikator	Extraction
X1	x1.1	0.719	X5	x5.4	0.669	X6	x6.5	0.665
	x1.2	0.751		x5.5	0.611		x6.6	0.776
X2	x2.4	0.752		x5.7	0.702		x6.7	0.766
	x2.5	0.735		x5.8	0.715		x6.8	0.773
	x2.6	0.693		x5.9	0.595		x6.9	0.834
	x2.7	0.721		x5.10	0.691		x6.10	0.754
X3	x3.1	0.644		x5.11	0.677		x6.11	0.81
	x3.2	0.792		x5.12	0.722		x6.12	0.82
X4	x4.1	0.681		x5.13	0.751		x6.13	0.802
	x4.2	0.672		x5.14	0.81		x6.14	0.716
	x4.3	0.66		x5.15	0.767		x6.15	0.818
	x4.4	0.713					x6.16	0,84
	x4.12	0.657						

Source: Output SPSS.26 Diolah Penulis (2022).

List of Total Variance Explained

	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.374	45.482	45.482	16.374	45.482	45.482	9.240	25.667	25.667
2	3.481	9.669	55.151	3.481	9.669	55.151	6.905	19.180	44.846
3	2.772	7.700	62.851	2.772	7.700	62.851	3.490	9.694	54.540
4	1.332	3.700	66.551	1.332	3.700	66.551	3.012	8.366	62.906
5	1.202	3.338	69.888	1.202	3.338	69.888	1.868	5.190	68.096
6	1.114	3.095	72.983	1.114	3.095	72.983	1.759	4.887	72.983

Factor Loading Indicator

Indicator	Factor Loading	Factor
x1.1	0.763	5
x1.2	0.762	5
x2.4	0.793	4
x2.5	0.726	4
x2.6	0.665	4
x2.7	0.698	4

Indicator	Factor Loading	Factor
x3.1	0.729	6
x3.2	0.862	6
x4.1	0.572	3
x4.2	0.623	3
x4.3	0.741	3
x4.4	0.687	3
x4.12	0.628	3
x5.4	0.706	2
x5.5	0.658	2
x5.7	0.733	2
x5.8	0.691	2
x5.9	0.680	2
x5.10	0.592	2
x5.11	0.593	2
x5.12	0.718	2
x5.13	0.782	2
x5.14	0.810	2
x5.15	0.793	2
x6.5	0.700	1
x6.6	0.727	1
x6.7	0.786	1
x6.8	0.786	1
x6.9	0.849	1
x6.10	0.787	1
x6.11	0.823	1
x6.12	0.840	1
x6.13	0.833	1
x6.14	0.790	1
x6.15	0.830	1
x6.16	0.869	1

Reliability Test

Variable	Total Indicator	Cronbach's Alpha
X1	2	0.756
X2	4	0.854
X3	2	0.654
X4	5	0.875
X5	11	0.945
X6	12	0.970

Confirmatory Factor Analysis Second Order
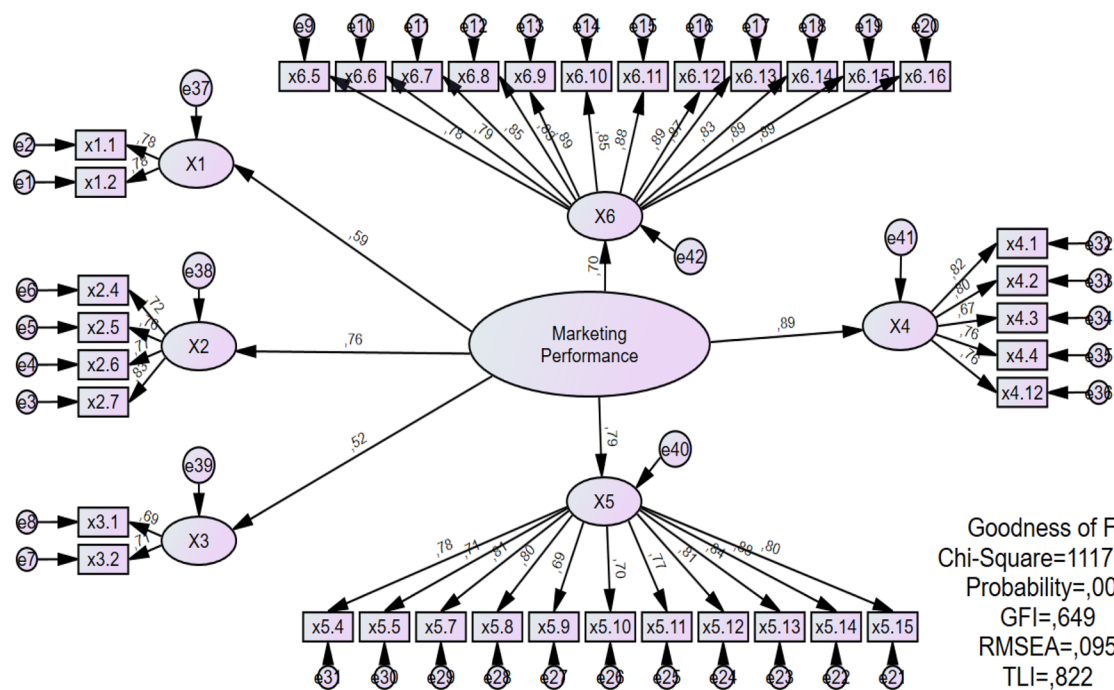
CFA *Marketing Performance Diagram*
CFA modified
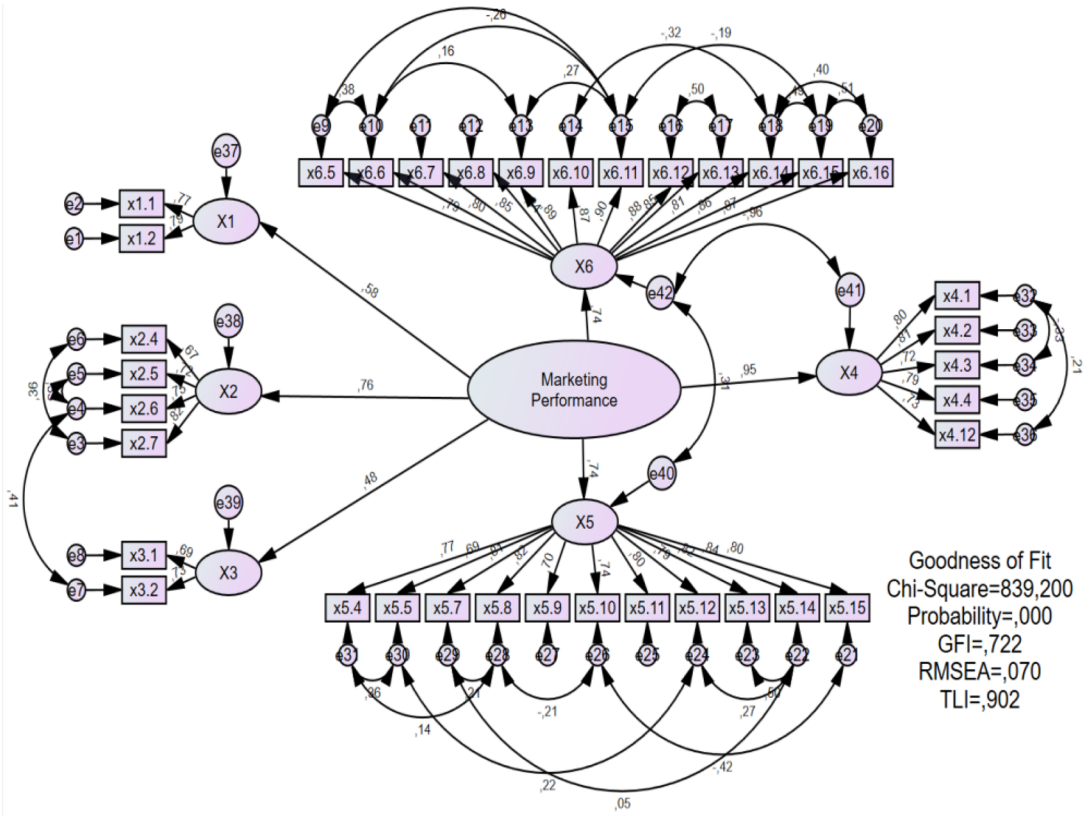
GCFA *Marketing Performance* **Modified**