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MARKETING AND BUSINESS DEVELOPMENT STRATEGIES TO IMPROVE THE QUALITY OF DIGITAL MARKETING AND DIGITAL INNOVATION IN MICRO, SMALL, AND MEDIUM ENTERPRISES OMAH KEPITING IN SURABAYA

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ABSTRACT

A business that can build a ready innovation ecosystem will tend to have better digital marketing capabilities than other competitors. Digital marketing adoption indicates the level of use of digital marketing technology in an organization. The research aims to determine the effect of digital marketing adoption on digital marketing capabilities in Omah Kepiting Micro, Small, and Medium Enterprises in Surabaya. In this research, the data were analyzed using the PLS-SEM statistical method to determine the weight of each research indicator. The PLS-SEM method was chosen because there was an abnormality in the distribution of the data and the research required latent variable scores for further analysis. These findings are interesting because although the readiness of the innovation ecosystem does not have a direct effect on digital marketing adoption (β= 0.114; P-value > 0.05), digital marketing adoption turns out to have a significant positive impact on the company's digital marketing capabilities (β= 0.125; P- value < 0.05). Conclusion of digital transformation in improving the company's digital marketing capabilities, which can be the main driver in facing increasingly complex market dynamics and increasingly fierce competition.

INTRODUCTION

Marketing management is a process of determining marketing objectives for a company or organization by considering internal resources and creating, and maintaining profitable exchanges with target markets that intend to achieve the company's main objectives. In marketing, there are concepts in carrying out its activities, including the concept of production, product concept, sales concept, marketing concept, social marketing concept, and global marketing concept. Along with the advancement of technology, science, and economic development, it is so rapid that it creates fierce competition. To be able to survive and be able to compete in this competition, a business or company must pay attention to effective service and efficiency in utilizing its resources to achieve predetermined business or company goals.

Micro, Small, and Medium Enterprises (MSMEs) have an important role in improving the regional economy and the economy of a country. According to (T. Tambunan, 2012) in Indonesia, MSMEs have proven to have an important role in overcoming the consequences and impacts of the economic crisis that occurred in 1997 when many large companies went

bankrupt, while MSMEs were able to survive the crisis conditions. In addition, this sector can increase the per capita income or Gross Domestic Product (GDP) of the community because it can absorb a large number of workers (Alfrian & Pitaloka, 2020). Small businesses are productive economic businesses that stand alone, carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or are part of either directly or indirectly from micro businesses or large businesses that meet the criteria for small businesses as referred to in the law (Was'an et al., 2023).

Medium-sized enterprises are productive economic businesses that stand alone, carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or part of either directly or indirectly micro, small, or large businesses that meet the criteria for medium-sized businesses as referred to in Law Number 20 of 2008 concerning MSMEs (Wibowo, 2021). In the law, the criteria used to define MSMEs as stated in Article 6 are net worth or asset value, excluding land and buildings of the place of business, or annual sales proceeds. With this criterion, a micro-enterprise is a business unit with an asset value of IDR 50,000,000 or annual sales revenue of IDR 300,000,000 at most. Small businesses with an asset value of more than IDR 50,000,000.00 up to a maximum of IDR 500,000,000.00 or with annual sales revenue of more than IDR 300,000,000.00 up to a maximum of IDR 2,500,000,000.00. Medium-sized enterprises are companies with a net worth of more than Rp 500,000,000,000.00 to a maximum of Rp 10,000,000,000,000.00 or have annual sales results above Rp 2,500,000,000,000.00 to a maximum of Rp 50,000,000,000.00 (T. Tambunan, 2012).

According to (T. T. H. Tambunan & Purwoko, 2002), the quality of human resources, including the behavior of business actors, can affect business success. a business can be said to be successful if business actors have honest, creative, and innovative personality characteristics to build trust with consumers, the more motivation and good behavior a business actor has, the more likely an MSME can develop. To develop an MSME so that the business is successful, business actors must be able to think creatively and innovatively to further develop their business. According to (T. T. H. Tambunan & Purwoko, 2002), capital strength can affect business success.

Business capital is necessary to conduct business activities. Therefore, a certain amount of funds is needed as a basis for the business's financial size. Sources of business capital can be obtained from own capital, government assistance, and financial institutions both banks and non-bank institutions. Capital is a business factor that must be available before carrying out activities. The size of the capital will affect the development of the business in achieving income (Riyanto et al., 2001).

The government pays great attention to the development of MSMEs to survive the global crisis. Various initiatives are always sought by the government through the Ministry of Cooperatives and Small and Medium Enterprises so that more and more individuals want to pursue entrepreneurship in the form of establishing MSMEs (Holiseh & Izzatusholekha, 2023). The government's huge attention to MSMEs is the right strategic step needed by the Indonesian people. The seriousness of the government's concern for MSMEs with programs to grow MSMEs in Indonesia. Although the Indonesian government's support is very large to make

MSMEs succeed and develop, it does not mean that it is without obstacles. One of the obstacles is the digital transformation that has begun to enter the business world (Utama, 2019). This transformation involves inevitable difficulties, which are rooted more deeply in the realities of small businesses. Factors such as lack of funding, high labor costs, structural problems, slow bureaucracy, and limited technology diffusion, can slow down the evolutionary path of Micro, Small, and Medium Enterprises (MSMEs). The use of technology to improve efficiency in the organization is a major problem that these enterprises must overcome. Lack of knowledge about the development and application of technology in the business world, one of which is in terms of marketing. Therefore, actors must make a complicated choice, continue to apply strategies and techniques that have been effective so far or accept change through new products that allow them to fully develop and thrive thanks to the digital transformation (Karyani et al., 2021).

Businesses as producers, facing a new marketing paradigm, must adapt to unprecedented changes in the marketing landscape. The new marketing landscape has brought companies to conditions that require them not only to exist in the conventional competitive arena but also in the digital-based marketing arena. Businesses are preparing themselves to provide the right answers to consumers' needs and interests, businesses are also learning how to reach and engage their consumers through valuable information.

In other literature, digital marketing capability is the competence of businesses in using the Internet and other information technologies to facilitate in-depth interactions with customers. These interactions give customers access to company resources and information and provide companies with information about their customers. Based on this explanation, it can be concluded that digital marketing is not only about the adoption of digital marketing technology, but also about how companies can plan, implement, and manage their digital marketing. Companies must have digital marketing capabilities because they can improve business performance. According to Field's findings, businesses can achieve impressive results by improving their digital marketing capabilities, lowering campaign costs by 30%, and increasing revenue by 20%. Even when companies use advanced technology and human resources with superior supervisory skills, campaign performance can improve by 30%. A research model for improving a company's digital marketing capabilities has been established. The model states that an enterprise's digital marketing capabilities can be improved through innovation ecosystem readiness, digital marketing technology adoption, and digital transformation.

Innovation ecosystem readiness shows the level of readiness of the business innovation ecosystem in responding to changes in the company's external and internal business environment. A business that can build innovation ecosystem readiness will tend to have better digital marketing capabilities than other competitors. Digital marketing adoption indicates the level of use of digital marketing technology in the organization. A business that can adopt effective digital marketing technology will tend to have a higher level of digital marketing capabilities. Finally, digital transformation shows the process undertaken by businesses to integrate technology into their business processes.

To create an MSME such as a catering business at Omah Kepiting which provides a variety of foods with certain characteristics, both traditional and modern foods. Omah Kepiting

strives for several innovations and creations in food to attract consumers. Omah Kepiting also always tries to improve the quality of food products so that consumers are satisfied with the taste of food and service. In addition, they also utilize technology as a strategy to improve their business development.

The purpose of the study was to determine the effect of digital marketing adoption on digital marketing capabilities at Omah Kepiting Micro, Small, and Medium Enterprises in Surabaya. The benefits of this research With this research, it is hoped that it can provide meaningful input for business progress related to digital transformation, ecosystem innovation readiness, and digital marketing so that it can evaluate and improve marketing capabilities and digital innovation.

RESEARCH METHODS

In this study, the data were analyzed using the PLS-SEM statistical method to determine the weight of each research indicator. According to Rambut, the PLS-SEM method was chosen because there was an abnormal distribution of data and the research required latent variable scores for further analysis. latent variables for further analysis. PLS-SEM is a statistical method to understand, describe, and determine the role of each indicator that accompanies it. that accompanies it. The number of samples or respondents obtained in this study This study exceeds the recommended sample size for PLS-SEM analysis given by Cohen and recommended by Rambut. given by Cohen and recommended by Hair. on statistical power analysis. If the maximum number of independent variables is six, and a statistical power of 80% is required to detect a minimum R2 of 0.10 with a 1% chance of error, then a minimum sample of 179 samples is required. sample of at least 179 samples. A larger sample size will increase the precision of the PLS-SEM coefficient estimates (Sri & Ahmad, 2017).

RESULTS AND DISCUSSION

PLS-SEM tests and estimates whether the data collected can explain the causal relationship that occurs in the model. The quality of the PLS-SEM results model will be explained by evaluating the measurement model and structural model. Measurement model testing will refer to the results of empirical measurements of the relationship between indicators and their constructs (variables), while structural model testing will explain the relationship between constructs.

Furthermore, the PLS-SEM evaluation summary table displays the internal consistency reliability, convergent validity, discriminant validity, collinearity, magnitude and significance of path coefficients, magnitude and significance of external loading, and coefficient of determination, which are all testing criteria for the reflective measurement model and structural measurement model.

Table 1
Summary of PLS-SEM Evaluation

Evaluation	Criteria	Output	Results
Step 1: Reflective Measurement Model Evaluation			
1. Internal consistency reliability 2. Convergent validity 3. Discriminant validity	Cronbach's alpha =0.6-0.9 or less than 0.95	0,89 – 0,905	Supported
	Composite reliability >0.70	0,915 – 0,921	Supported
	Outside loading > 0.708	0,574–0,848	Supported
	Average Variance Extracted (AVE) >0.5	0,544–0,624	Supported
	Heterotrait-Monotrait Ratio (HTMT) < 0.90	0,371–0,894	Supported
Step 2: Structural Model Evaluation			
1. Collinearity 2. Size and significance of path coefficients 3. Coefficient of determination (R2)	Variance Inflation Factor (VIF) = 0.20-5 P-value <0.05	1.227–2.615	Supported
	Weak = 0.25-0.50, medium = 0.5-0.75, strong > 0.75	*P-value <0.05*	Supported
		0,185–0,695	The weak and medium category
Step 3: Model Fit Evaluation			
1. Standardized root mean square residual (SRMR)	SRMR < 0,08	0,067	Supported

The table above presents a summary of the results of testing the PLS-SEM model in the study. The standardized root mean square residual (SRMR) value = 0.067 obtained in this study shows a good fit model because the SRMR value is less than 0.08, which means it meets the criteria for evaluating the fit model. The standardized root mean square residual is a measure of model fit, defined as the root mean square difference between the observed correlation and the correlation implied in the model. Since SRMR is an absolute measure of fit, a value of zero indicates a perfect fit.

Evaluation of the Reflective Measurement Model

Based on Table 1, it can be concluded that all components of the reflective model evaluation test provide results that support this research. This can be seen from the internal consistency reliability value, convergent validity, and discriminative validity that meet the test criteria.

All indicators in the study show the significance and relevance of outer loading on each research construct. The results show that the weights of all indicators on each construct are significantly different from zero, as evidenced by aPnilnya less than 0.05, as shown in Table 1.

Organizational readiness is the most important indicator in building innovation ecosystem readiness. Meanwhile, the most important indicator in the construction of digital

transformation is operational improvement (question: Our company's technological innovations have enabled customers to interact with our operational processes in new ways). Based on these indicators, we can conclude that the readiness of the innovation ecosystem is largely determined by organizational readiness, namely the readiness of resources, structures, systems, culture, skills, and organizational strategies in adopting digital marketing innovations. Digital transformation is largely determined by the ability of MSME players to utilize their core operational strengths, which means that MSME players can look for bottlenecks and inefficiencies in their business processes and can consider and apply digital technology to help achieve better business process analysis (Firmansyah et al., 2022).

In general, indicators with an outer loading value of less than 0.4 can be eliminated from the model immediately, while values between 0.40-0.70 can be removed from the measurement model if and only if their removal results in an increase in their composite reliability value. The results of this study show that some indicators have outer loading values between 0.4 and 0.7, so it is necessary to consider including or eliminating these indicators in each of the accompanying constructs. Technology leadership indicators in the digital transformation construct with an outer loading value of 0.688 are some of the indicators that must be considered to be included or removed from the accompanying construct. In addition, observability, opinion leadership, competitive pressure, and innovation infrastructure indicators with outer loading values of 0.685, 0.610, 0.590, and 0.574 on the innovation ecosystem readiness construct also need to be reconsidered.

Table 2
PLS-SEM Results: Size and Significance of External Loading

Items and Construction	Outside Loading	Statistic T	*P Values*
Innovation Ecosystem Readiness	0,779	24,145	0,000
1. Employees find it easy to implement digital marketing innovations	0,815	27,153	0,000
2. Digital marketing innovation benefits employees' work	0,842	38,648	0,000
3. Businesses are ready to implement digital marketing innovations	0,834	34,101	0,000
4. Business management actively introduces digital marketing innovations	0,590	20,131	0,000
5. Customers are already using digital marketing innovations	0,748	10,665	0,000

6. Competitors will be superior if they do not implement digital marketing innovations	0,574	11,048	0,000
7. The government has built adequate infrastructure to support the implementation of digital marketing innovations in Indonesia	0,610	12,086	0,000
8. In general, opinion leaders and the media talk about digital marketing innovations very often	0,825	29,340	0,000
9. Digital marketing innovation is easy to implement in business processes	0,685	16,191	0,000
10. It's easy to distinguish how digital marketing works from conventional marketing.			
Digital Transformation			
1. We use digital channels to market our products and services	0,723	18,755	0,000
2. Our technological innovations have enabled customers to interact with our operational processes in new ways	0,843	35,629	0,000
3. We have launched a new business model using digital technology	0,808	30,292	0,000
4. Our management has a vision to digitally transform the business for the future	0,736	19,060	0,000
5. We promote the cultural change required for digital transformation	0,797	18,033	0,000
6. We define it with clear	0,838	34,731	0,000

	roles and responsibilities between departments to execute digital initiatives.			
7.	The performance of the information technology unit has been able to fulfill the need to carry out digital transformation	0,688	14,460	0,000
Digital Marketing Adoption				
	Does your business use digital marketing techniques and methods?	1.000		

About the indicators mentioned above, we re-analyzed the PLS-SEM model, i.e. the modified model, by removing the indicators whose values ranged from 0.4 to 0.7, and then compared the new composite reliability value with the old composite reliability value. Based on the comparison of the composite reliability values in Table V.3, removing these indicators does not affect the composite reliability values. As a result, it can be determined that there are not enough compelling reasons to remove the indicator from the original model, as doing so would change the content validity of the accompanying construct but not improve the composite reliability (CR).

Tabel 3
Nilai Reliabilitas Komposit Lama dan Baru

Variabel	CR lama	CR baru	Cronbach Alfa	Jalan
Kesiapan ekosistem inovasi	0,921	0,928	0,905	0,544
Transformasi digital	0,915	0,913	0,890	0,606
Indeks adopsi pemasaran digital1	1.000	1.000	1.000	1.000
Kemampuan pemasaran digital	0,920	0,913	0,899	0,624

Manifest variable

This study shows a high level of internal consistency reliability of all research variables, indicated by a Cronbach's alpha value greater than 0.89 and a Composite Reliability value greater than 0.90 but less than 0.95, indicating that the indicators in this research questionnaire can be relied upon to measure the same thing in a construct. Furthermore, this study has good convergent validity, evidenced by AVE values greater than 0.50, indicating that the constructs of this study explain more than 50% of the diversity contained in the research indicators. The digital marketing adoption index variable, as the only manifest variable in the study, has a value of one for CR, Cronbach's alpha, and AVE. This is understandable given that the digital

marketing adoption index only has one response value. The HTMT values are also between 0.371 and 0.894, less than 0.90. This means that based on these indicators, each construct has shown good discriminant validity, or each variable has its uniqueness. Table V.4 shows the specific discriminant validity results for each variable.

Table 4
Heterotrait - Monotrait Ratio (HTMT)

Variable	DMA	IER	DMC	DT
Digital marketing adoption index (DMA)1 Innovation ecosystem readiness (IER)	0,371			
Digital marketing capabilities	0,486	0,790		
(DMC) Digital Transformation (DT)	0,446	0,834	0,894	

Structural Model Evaluation

Based on Table 2, it can be concluded that all test components for structural model evaluation provide results that support this research. This can be seen from the value of collinearity, the coefficient of determination, and the significance of the path coefficient that meets the test criteria. The average VIF value in this study is less than 3, which indicates that there is no collinearity between constructs, and path coefficient measurement bias can be avoided.

Each relationship in the structural model also has a significant effect on improving digital marketing capabilities. Table 5 displays the magnitude and significance of the path coefficients in the structural model for each relationship while answering various hypotheses in Masrianto's previous research [6]. The readiness of the innovation ecosystem has a significant positive effect on the company's digital marketing capabilities (H3: $\beta = 0.259$; P-value < 0.05), as does digital transformation (H5: $\beta = 0.555$; P-value < 0.05), and digital marketing adoption (H6: $\beta = 0.125$; P-value < 0.05). The findings of this hypothesis testing support the authors' opinion that innovation ecosystem readiness, digital transformation, and digital marketing as components of DMUI are factors that can significantly improve digital marketing capabilities.

Table 5
PLS-SEM Results: Size and Significance of path coefficients

Hypothesis	Path Coefficient	Statistic T	P Values	Results
H1	0,772	24,719	0,000	Supported
H2	0,114	0,999	0,318	Not Supported
H3	0,259	3.440	0,001	Supported
H4	0,336	3,102	0,002	Supported
H5	0,555	7,405	0,000	Supported
H6	0,125	3,015	0,003	Supported

The hypothesis was developed from Masrianto's research.

Other hypothesis testing results show that the readiness of the innovation ecosystem has a direct influence on digital transformation (H1: β = 0.772; P-value < 0.05), and digital transformation has a direct influence on the adoption of digital marketing (H4: β = 0.336; P-value < 0.05). The findings of this study are interesting because innovation ecosystem readiness does not have a direct effect on digital marketing adoption (H2: β = 0.114; P-value > 0.05). MSME players with mature innovation ecosystem readiness will not adopt digital marketing before digital transformation; they understand that good digital marketing capabilities will never be achieved without going through digital transformation.

The coefficient of determination R2 shows a value of 0.695 for digital marketing capabilities, which means that the explanatory power of the model is relatively moderate. Hair states that the value of R2 which is between 0.50-0.75 indicates that endogenous variables can be explained by exogenous variables with a moderate level of determination (Simamora & Saputra, 2023).

Rumus Indeks Pemanfaatan Pemasaran Digital (DMUI)

The Digital Marketing Utilization Index (DMUI) is introduced in this study to measure the level of digital marketing utilization by a company using three aspects of digital marketing capability improvement, namely: innovation ecosystem readiness, digital transformation, and digital marketing adoption. The three aspects of improving a company's digital marketing are derived from the digital marketing capability improvement model of a company.

As mentioned earlier, digital marketing capabilities are focused on strategy rather than technology. The three fundamental aspects of improving digital marketing capabilities discussed in this study are closely related to the relationship between digital marketing planning, implementation, and management. MSME players can identify the factors that contribute to high and low levels of digital marketing capability, allowing them to take corrective actions to improve their digital marketing capability immediately. DMUI is presented to fulfill such requirements.

The 32 indicators used to calculate the digital marketing utilization index come from 10 indicators that show the readiness of the innovation ecosystem, 15 indicators that show the adoption of digital marketing, and 7 indicators that show digital transformation, as shown in the figure below DMUI is a composite index that measures three aspects of a company's digital marketing capabilities.

The first step in calculating DMUI is to create three separate indices for each dimension. These index dimensions (one for innovation ecosystem readiness, one for digital marketing adoption, and one for digital transformation) are then used to calculate the total DMUI using geometric means. The loading factor of each significant indicator generated by PSL-SEM is used to analyze the index value of each variable, such as the innovation ecosystem readiness index, digital transformation index, and digital marketing capability index. The loading factor determines the absolute contribution of an indicator

to a construct. The absolute contribution of each reflective model indicator then becomes an item weight to produce a variable score. Furthermore, for the weighted digital marketing adoption indicator, the digital marketing usage index approach is used. The max-min procedure is then used to convert each score on each dimension into an index score with a value distribution ranging from 0 to 100.

Figure 1
DMUI components and subcomponents

The basic formula for converting indicator score values (V) into index scores (I) is:

$$SAYA = 100 \times \frac{V\text{- }minute\_value}{max\_value - min\_value}, \quad (1)$$

Where value_min is the lowest possible score (lower limit) and value_max is the highest possible score (upper limit).

The second step is to calculate the total DMUI, which is the result of multiplying the three indices and then calculating the geometric mean to produce the final DMUI number. The formula for calculating DMUI is:

$$DMUI : \sqrt[3]{SAYA_{SAYA} \times SAYA_D \times SAYA_A}, \quad (2)$$

Where $SAYA_{SAYA}$ is the innovation ecosystem readiness index, $SAYA_D$ is the digital transformation index, and $SAYA_A$ is the adoption of digital marketing index.

Economic Ecosystem Readiness Index

The innovation ecosystem readiness index is obtained from the exogenous latent variable of innovation ecosystem readiness measured by indicators that characterize ecosystem readiness in using digital marketing innovations. Innovation ecosystem readiness is measured using ten key indicators derived from five interacting ecosystem dimensions, namely employee perceptions and attitudes, internal characteristics and external characteristics, industry characteristics, country and society characteristics, and digital marketing technology characteristics. Based on the PLS-SEM weighting results, we applied the following to each indicator: organizational readiness and manager innovation

were assigned a weight of 0.12; perceived ease of use, perceived usefulness, and flexibility were assigned a weight of 0.11; customer needs were assigned a weight of 0.10; observability was assigned a weight of 0.09; and residual competitive pressure, innovation infrastructure, and opinion leadership were assigned a weight of 0.08.

Innovation ecosystem readiness indicators are measured using a Likert scale with values ranging from 1 (strongly disagree) to 5 (strongly agree). The total score of innovation ecosystem readiness is then calculated by weighting each indicator. Furthermore, the maximum-minimum procedure is used to convert the total score of innovation ecosystem readiness into a 0-100 score index.

The innovation ecosystem readiness index value obtained from MSME actors included in this study based on the score index calculation steps above shows that the score index value ranges from 33 to 100. A total of 25% of companies have an innovation ecosystem readiness score index value of less than 67, 50% have a score index value of less or more than 78, and the remaining 25% have a score index value greater than 92.

Business Digital Transformation Index

The digital transformation index is obtained from the endogenous latent variable of digital transformation measured by indicators that characterize the digital transformation of a company. Digital transformation is measured using seven key indicators derived from two interacting dimensions of digital transformation, namely building digital capabilities and building leadership capabilities. Based on the PLS-SEM weighting results, we applied the following to each indicator: operations improvement, business model reinvention, organizational engagement, and transformation setting were assigned a weight of 0.15; digital vision was assigned a weight of 0.14, and customer experience and other technology leadership were assigned a weight of 0.13.

Digital transformation indicators are measured using a Likert scale with values ranging from 1 (strongly disagree) to 5 (strongly agree). The total digital transformation score is then calculated by giving weight to each of its indicators. Furthermore, the minimum maximum procedure is used to convert the total digital transformation score into a 0-100 score index.

The digital transformation index value is obtained from all companies in Indonesia included in this study using the index score calculation steps above, which shows that the index score value ranges from 14 to 100. A total of 25% of companies have a digital transformation score index value of less than 61, 50% have a score index value of less or more than 75, and the remaining 25% have a score index value greater than 93.

Business Digital Marketing Adoption Index

Digital marketing adoption was measured using fifteen key indicators derived from digital marketing techniques used by MSME players, namely (1) websites, (2) eCommerce, (3) social media marketing, (4) email marketing, (5) SEO, (6) SEM, (7) digital PR, (8) digital advertising, (9) digital CRM, (10) content marketing, (11) affiliate

marketing, (12) online newsletters, (13) display advertising, (14) mobile marketing, and (15) digital analytics. For each indicator, we applied the digital marketing usage index approach as follows: content marketing is weighted 0.09; search engine optimization, search engine marketing, social media marketing, affiliate marketing, mobile marketing, digital analytics, and digital customer relationship management are weighted 0.08; digital advertising, digital public relations, display advertising, and eCommerce are weighted 0.06; email marketing is weighted 0.05; newsletters are weighted 0.04, and other websites are weighted 0.02.

Digital marketing adoption indicators are measured using binary data with values ranging from 0 (not used) to 1 (used). The total digital marketing adoption score was then calculated by weighting each of the indicators. Next, the maximum-minimum procedure was used to convert the total digital marketing adoption score into a 0-100 score index.

The digital marketing adoption index value was obtained from the MSME players included in this study using the index score calculation steps above which showed that the index score value ranged from 0 to 100. A total of 25% of companies have digital marketing adoption index score values of less than 49.5, 50% have index score values of less or more than 74, and the remaining 25% have index score values greater than 91.

After the three indices in the DMUI component are calculated, the DMUI value can be calculated using the formula previously presented. The digital marketing utilization index value obtained from MSME players included in this study using the above DMUI score index calculation steps shows that the score index value ranges from 27 to 100. A total of 25% have a digital transformation score index value of less than 60, 50% have a score index value of less or more than 74, and the remaining 25% have a score index value greater than 84.

Based on the clustering results above, further investigation of the constituent components of DMUI is conducted. According to Table V.6, companies with a low category of digital marketing utilization index will also have a low level of innovation ecosystem readiness, digital transformation, and digital marketing adoption.

Similarly, companies with a high digital marketing utilization index are better prepared for innovation ecosystem readiness, digital transformation, and digital marketing adoption.

Table 6
Average Index Score

Component 1	Average
Innovation Ecosystem Readiness Index	91
Digital transformation index	92
Digital marketing adoption index	81
Digital marketing utilization index	86

DMUI Implementation

The previous discussion explains how the index score is calculated. This research produces a DMUI index score calculator that is useful for identifying a company's level of digital marketing usage, predicting the company's level of digital marketing

capability, and then parsing the causes of the company's high level of digital marketing capability to identify things that the company should improve to enhance its digital marketing capability.

Based on Table 6, the digital marketing capability index is 100, with a digital marketing utilization index of 100 as well. The digital value of the marketing capability index and the digital marketing utilization index of Omah Kepiting MSMEs in Surabaya is classified as a high category (very good) because both DMUI>84.

According to the DMUI index score calculator, the high digital marketing capability of Omah Kepiting MSMEs in Surabaya is due to the high utilization of digital marketing in all aspects of its digital marketing capability. In this example, it can be concluded that Omah Kepitiong MSMEs in Surabaya are very good at managing every aspect that can improve their digital marketing capabilities.

This study found that digital transformation has a direct impact on digital marketing adoption as well as digital marketing capabilities, but similar findings were also found in other studies. Furthermore, contrary to previous studies, innovation ecosystem readiness does not have a direct impact on digital marketing adoption. The readiness of the innovation ecosystem of Omah Kepiting MSMEs in Surabaya does not guarantee the adoption of digital marketing but provides more awareness to Omah Kepiting MSMEs in Surabaya to carry out digital transformation so that Omah Kepiting MSMEs in Surabaya can choose digital marketing adoption methods that are more in line with the business processes of Omah Kepiting MSMEs in Surabaya. Therefore, the role of digital transformation in mediating the readiness of the innovation ecosystem and digital marketing adoption is very important.

This research can formulate and apply a digital marketing utilization index to evaluate and improve the digital marketing capabilities of Omah Kepiting MSMEs in Surabaya. DMUI can be created by combining the innovation ecosystem readiness index, digital transformation index, and digital marketing adoption index. Based on this research, all of these variables have a direct impact on the company's digital marketing capabilities.

This research also identifies and presents practical ways to improve the digital marketing capabilities of Omah Kepiting MSMEs in Surabaya. DMUI Index score calculator can calculate and then identify the level of digital marketing capability of Omah Kepiting MSMEs in Surabaya. DMUI Calculator can also show the factors that contribute to the level of digital marketing capabilities of Omah Kepiting MSMEs in Surabaya. This will certainly help Omah Kepiting MSMEs in Surabaya identify and understand their weaknesses, allowing them to take corrective actions. DMUI differs from existing digital capability indices in that it involves the overall adoption and techniques of digital marketing, and links it to digital transformation and ecosystem readiness.

CONCLUSION

Based on the data analysis, we conclude that innovation ecosystem readiness has a significant direct effect on digital transformation ($\beta = 0.772$; P-value < 0.05). This finding is interesting because although the readiness of the innovation ecosystem does not directly affect

the adoption of digital marketing (β = 0.114; P-value > 0.05), the adoption of digital marketing has a significant positive impact on the company's digital marketing capabilities (β = 0.125; P-value < 0.05). In addition, digital transformation is also proven to have a positive and significant direct influence on the company's digital marketing capabilities (β = 0.555; P-value < 0.05), and has a direct influence on digital marketing adoption (β = 0.336; P-value < 0.05). This illustrates the importance of digital transformation in improving the company's digital marketing capabilities, which can be a key driver in facing increasingly complex market dynamics and increasingly fierce competition (Rasid & Rizal, 2021).

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