

Digital Marketing and Competitive Advantage: Moderated by Digital Transformation

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Abstract: This study aims to determine the development of competitive advantage studies from a digital marketing perspective as a variable influencing factor, besides that the digital transformation variable is also placed as a moderating variable. The approach used is descriptive quantitative using a questionnaire as a data collection tool which is distributed to 205 SMEs in West Java Province, Indonesia. Structural Equation Modeling with simple moderation is used in analyzing data that has been collected, which has previously been tested for validity by Confirmatory Factor Analysis. This study found that digital transformation variables are able to mediate the effect of digital marketing on the competitive advantage of SMEs in West Java province, Indonesia. This is something new or new, because there has been no previous research that places digital transformation as a moderator variable for the influence of digital marketing on competitive advantage. This research has the opportunity to conduct more in-depth studies on larger units of analysis or in more complex industries, so that more interesting and useful things will be found in scientific development efforts, especially in the field of management science.

Keywords: Competitive Advantage, Digital Marketing, Digital Transformation, Simple Moderation Model, SME.

A. Introduction

Over time, studies related to competitive advantage have produced many works that have been published by previous researchers and are still an interesting topic to study in more depth. Competitive advantage is an interesting thing because it is able to provide many advantages for the business it is in. There are several benefits that may be obtained from competitive advantage, including: increasing market share (Shen et al, 2022); increase in revenue and profitability (Wang & Gao, 2021); higher customer satisfaction (Saeidi et al, 2015); reduce the threat of competitors (Yang et al, 2020); long-term innovation and excellence (Afraz et al, 2021); international competitiveness (Hossain et al, 2022); and business continuity (Farida & Setiawan, 2022). The condition of the struggle to uphold a business so that it can run, stand alone and excel in competition, many factors influence one of the influences that has occurred recently,

namely the COVID-19 pandemic. The COVID-19 pandemic has had a significant impact on business competition in various sectors.

This is closely related to competitive advantage which can be seen from several aspects, including: First, Changes in Customer Demand and Priorities: The pandemic has drastically changed consumer behavior patterns. Customers have new needs and preferences that have arisen in response to the pandemic situation. Companies that are able to understand these changes and adapt their products or services quickly can have a competitive advantage. For example, companies that can provide solutions or products that are relevant to their health, hygiene, or work from home needs can gain an edge in meeting new customer needs (Petrovic et al, 2020); Second, Adaptation with Flexibility: The pandemic demands rapid business changes and adaptations. Companies that have the ability to adapt quickly to changes in regulations, markets, or the work environment can gain a competitive advantage. The ability to shift to an online business model, work remotely, or adapt the supply chain are some examples of important adaptations. Companies that can change strategies quickly can take advantage of the opportunities that have arisen during the pandemic (Khalilpour, 2018).

Third, Digital Innovation and Transformation: The pandemic has accelerated technology adoption and digital transformation in various sectors. Companies that previously invested in digital technology and have strong innovation capabilities, such as e-commerce, food delivery, or telemedicine, have a competitive advantage during a pandemic. Innovation in the use of technology to increase operational efficiency, provide better customer service, or create engaging digital experiences, can provide an edge in these challenging times (Oberlander et al, 2021); Fourth, Financial Stability and Resilience: The pandemic has had a significant economic impact, and companies with good financial stability or who can manage cash effectively can maintain a competitive advantage. Being able to survive difficult financial situations and take advantage of investment or acquisition opportunities can give a company a long-term advantage (Nguyen, 2022); Fifth, Changes in Supply Chain and Distribution: The pandemic has disrupted the supply chain and distribution of global products. Companies that can overcome these challenges by optimizing their supply chain, maintaining supply reliability, or adapting their distribution model can have a competitive advantage. Having better access to resources, maintaining smooth supply, or offering safe and efficient shipping solutions can all be important factors in beating the competition. The COVID-19 pandemic has created new challenges and changed the dynamics of business competition. Companies that are able to recognize and respond quickly to changes that occur, as well as adjust their business strategy, will have the opportunity to gain a competitive advantage in this difficult situation (Lyu et al, 2023).

Micro and medium enterprises for Indonesia are an important sector to encourage the realization of an Indonesia that is independent, advanced, just and prosperous in the upcoming 2025 phase, this is in accordance with the mandate of Law Number 17 of 2007 concerning the National Long-Term Development Plan. Development Plan (RPJPN) 2005–2025. Micro and medium dam business is an important sector to develop, firstly because it contributes to the national economy. With the creation of 5.4 million creative businesses, most of which are SMEs, and 17% of total domestic household consumption is consumption of creative products. Second, elevating the image and identity of the Indonesian nation. Third, preserving the environment and natural resources. Fourth, encourage the creation of innovations which are creative solutions to the problems and challenges faced by the Indonesian nation. Fifth, preserving Indonesian culture and increasing social tolerance. consists of various ethnic groups.

The embodiment of plans that may continue to be carried out, it is very possible to collaborate with aspects of digital technology that continue to develop towards competitive advantage. Therefore, it is necessary to conduct a study related to the involvement in the development of digital aspects associated with marketing strategies in the SME sector. And on this occasion the researchers conducted research related to this with locations in the province of West Java - Indonesia.

B. Methods

This study used a quantitative descriptive method which was preceded by a Confirmatory Factor Analysis (CFA) test to determine the Goodness of Fit test of the model being studied and to test the validity and reliability of the instruments used. Then a linear regression analysis was performed using SPSS and also Amos version 23 as a Structural Equation Modeling (SEM) calculation tool. The number of respondents used in this study amounted to 205 SMEs in West Java - Indonesia. Furthermore, after the fit model is generated, an analysis will be carried out using the Product of Coefficient Strategy: Simple Moderation Model - The Normal Theory Approach 19-24.

C. Results and Discussion

This research was conducted by starting the testing of research instruments and models with the Confirmatory Factor Analysis (CFA) test concept, by testing each indicator of the variable studied. The explanation is as follows.

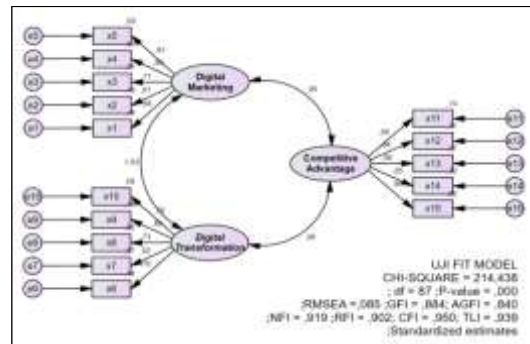


Figure 1. Measurement Model Test

Table 1. Standardized Regression Weights

		Estimate
x1	<--- Digital Marketing	,661
x2	<--- Digital Marketing	,669
x3	<--- Digital Marketing	,715
x4	<--- Digital Marketing	,795
x5	<--- Digital Marketing	,830
x6	<--- Digital Transformation	,700
x7	<--- Digital Transformation	,818
x8	<--- Digital Transformation	,726
x9	<--- Digital Transformation	,690
x10	<--- Digital Transformation	,760
x11	<--- Competitive Advantage	,859
x12	<--- Competitive Advantage	,842
x13	<--- Competitive Advantage	,875
x14	<--- Competitive Advantage	,850
x15	<--- Competitive Advantage	,957

Based on the results of the estimated standard output loading above, overall the factor loading is statistically significant and the value of the factor loading is above 0.50. In confirmatory factor analysis, the process of average Variance Extracted (AVE) between items or indicators from a set of latent constructs is a summary of convergent indicators. The calculation results produce AVE values for latent constructs, as well as construct reliability values using the Construct Reliability (CR) values can be presented as follows:

Table 2. Summary of AVE and Construction Reliability

Variable	Questionnaire	Item Number	AVE	Alpha Coefficient **
DM	Scale DM	1 - 5	0.828	0.977
DT	Scale DT	6 - 10	0.843	0.981
CA	Scale CA	11 - 15	0.936	0.996

* The Estimate of Standardize Regression Weight <0.50.

** Testing is done after an invalid item has been dropped.

The results above show that all latent constructs, both DM, DT and CA, meet the AVE criteria > 0.50. It can be shown that the convergent validity value for each construct has a value above 0.50 so that it can be said that the instrument has good validity. Furthermore, for the reliability value of the instrument, the alpha coefficient value for the two DM, DT and CA variables each has a value above 0.90 so that it can be categorized as having high reliability. After knowing the validity and reliability of the research instrument then describes a simple model to determine the analytical tool to be used. In this study, a simple moderation model is used. The design is as follows:

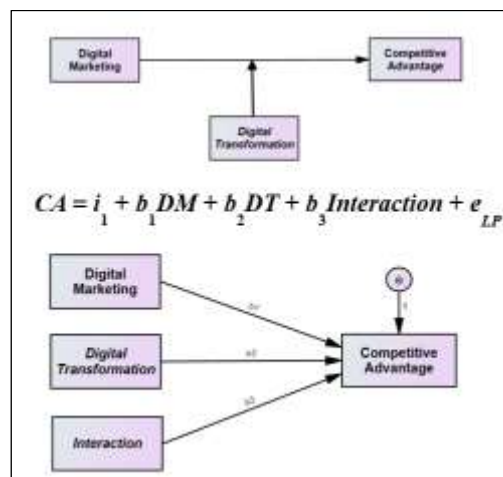


Figure 2. Simple Moderation Model

The image above shows the relationship between management information systems and sustainable performance moderated by artificial intelligence variables, while the results of the initial analysis by estimating the model without interaction variables to obtain the loading factor and error variance values of each exogenous latent variable with the model as shown below this.

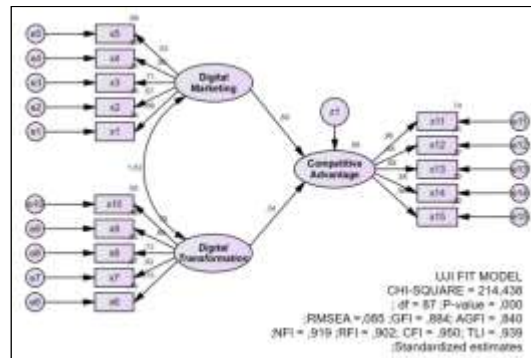


Figure 3. Model Without Moderation

The analysis above produces data that can be used to calculate the loading factor of the interaction latent variable (ie the interaction between management information systems and sustainable performance) and its error variance value, while the loading factor of the interaction latent variable is 10.988. While the error variance value is:

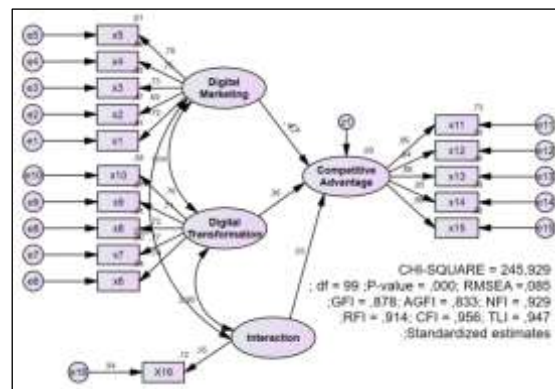


Figure 4. Analysis Model

Table 3 Testing the Goodness of Fit Research Model

No.	Goodness of Fit Index	Result	Conclusion
1	Chi-Square	245,929	Good Fit
2	P-Value	0,000	Good Fit
3	RMSEA	0,085	Marginal Fit
4	GFI	0,878	Marginal Fit
5	AGFI	0,833	Marginal Fit
6	NFI	0.929	Good Fit
7	RFI	0.914	Good Fit
8	CFI	0,956	Good Fit
9	TFI	0.947	Good Fit

Based on the output, it can be seen that the model meets the goodness-of-fit criteria with a Chi-square value = 245.929 with df = 99, P-value = 0.000. Other suitability criteria have met the requirements of NFI, RFI, CFI and TLI, each of which is above 0.90. but

the GFI and AGFI values were 0.878 and 0.833 respectively in the marginal fit category, and the RMSEA value was 0.085 because what was needed was below 0.080. Digital marketing turns out to have a direct effect on competitive advantage with a parameter coefficient of 0.468 and significant at 0.000. Digital transformation has a direct effect on competitive advantage with a parameter coefficient of 0.375. The interaction variable between digital marketing and competitive advantage has a significant effect on sustainable performance with a parameter coefficient of 0.032 with a probability of 0.000. So it can be concluded that the digital transformation variable is a moderating variable or a variable that moderates the relationship between digital marketing variables and competitive advantage variables.

Several previous studies that support this research include digital marketing in SMEs (Setkute et al, 2022); competitive advantage in SMEs (Gassmann & Keupp, 2007) and those related to digital transformation in SMEs (Costa et al, 2023). These findings strengthen research related to digital marketing related to competitive advantage, while previous research was conducted by (Ioannis et al, 2023), although this research shares similarities with previous studies, its uniqueness lies in the fact that it was conducted on all types of SMEs in a specific region, with the common condition being the utilization of a digitization system. This distinguishes it from prior research that focused on only one type of SME. Consequently, the novelty of this study is twofold. Firstly, it is the first of its kind to encompass all SME types with a digitization system. Secondly, it establishes digital transformation as a moderating factor in the relationship between digital marketing (Melovic, 2020) and competitive advantage. Previous research did not explore this specific aspect, making it a new and unexplored area. However, it is essential to acknowledge that several studies have touched upon digital transformation in connection with digital marketing and competitive advantage (Gao et al, 2023).

D. Conclusion

This research is intended to examine related to competitive advantage. As explained in the discussion column, this study was able to find a positive effect of digital marketing on competitive advantage. In addition, digital transformation variables are able to moderate the influence between these variables. In order for this research to contribute in the form of recommendations so that SMEs are able to maximize their competence in utilizing technology in the ever-evolving digital era, transformation in the aspect of digital development must always be aligned with the development of marketing strategies planned and implemented by SMEs in West Java. The implications of the results of this study, the authors appeal to the two business actors in the SME environment, especially business managers, not to be anticipatory towards the development of digital technology which is accompanied by such an appropriate transformation. This is important to note in addition to the success of the marketing strategy, this will boost the competitiveness of fellow SME activists.

Every research will not be separated from research limitations. The author realizes that one study will not be able to answer all questions related to the variables studied. Therefore, some of the limitations that the authors and research implementers have include: this research only has several loci in several regions in West Java Province, by testing three variables, namely digital marketing, digital transformation and also competitive advantage. This provides an opportunity for future researchers to develop further research using more variables and a wider research area, not only several cities in one province but can compare the conditions of two different provinces, or even a national scale study. comparison between countries. In addition, because the research was carried out on SMEs, it is also an opportunity to carry out more in-depth research using the same research schema and model but carried out in larger businesses and industries.

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