



Original Article

Utilizing Digital Marketing for Business Competitive in Achieving Sustainable Development Goals in Small, Medium Enterprises

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Abstract: Digital marketing has become one of the most crucial market mechanisms for many brands spread across various countries worldwide. With digital marketing, a brand can reach many potential people to become its strategic market share entity. Digital marketing has a significant impact on many business process mechanisms. Several digital marketing mechanisms are used to significantly impact market business processes and trading mechanisms, such as web analysis, gamification, social network analysis based on recommendations, and digital marketing with computer software to increase market reach capabilities. Data were collected using a questionnaire distributed to 339 SMEs respondents in the textile sector in Central Java Province, Indonesia. Data are processed using LISREL. This research will produce several results and empirical findings on using digital marketing for business competitiveness in achieving sustainable development goals.

Keywords: Digital marketing; Brands; Business process; Market; Trade mechanism.



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1. Introduction

The whole world is undergoing the industrial era 4.0, which will lead to the era of society 5.0 at this time. This circumstance also affects every line of market mechanism, especially for aspects of trade in every country's life. Many countries worldwide have implemented digitalization in their business process as well as in the life of Their market and trade mechanisms. One of the significant issues that is implemented for market and trade circumstances is digital marketing. Implementation of digital marketing can be a trigger for business competitiveness in achieving sustainable development goals. Exploring digital marketing applications based on information technology can help a business activist optimize their selling

performance worldwide. Several examples of brands that use digital marketing to expand their market into the world, such as ZARA, H&M, and UNIQLO, use big data as their fundamental data set in their marketing strategies (Al, 2019). Brand communication tools transformation in digital society has also been developed to help enhance the probability of reaching deeper analysis and detailed segmentation from people who will become a significant target audience (Sharakhina, 2018). With this description regarding the mapping of world market circumstances, several information technologies are used for digital marketing.

Examples of information technology are used to expand digital marketing, such as the enhancement of machine learning (Kuchta et al., 2019), search engine optimization (Matta, 2020), web analytics (Bengel, 2015), trend analysis on social media (Bhor, 2018), and many more. These proven mechanisms can enhance the ability of several brands to gain and increase capital market through digital marketing. Several fundamental things that can be used for digital marketing are computers, smartphones, internet networks, the ability to use digital social media, and many more (Bhor, 2018; Rathod, 2020; Soldatova, 2020; Tamanna, 2021; Zhang, 2020). These several entities can be combined and formulated as a sharp digital marketing mechanism. After being combined and formed, all of these entities can be embedded into the brand or product business process lifecycle. According to the result, digital marketing can help gain market share by increasing the expansion and reachability of several brands.

This study will formulate all of the digital mechanisms based on information technology to enhance the utilization of digital marketing for business competitiveness in achieving sustainable development goals. The rest of this study is organized as follows. Section II presents the study of literature. Section III presents the research method that used the study literature approach. Section IV explains the analysis and discusses the digital marketing process based on information technology. Section V will present the findings and results that become the conclusion of this study.

2. Literature Review

In exploring some studies about digital marketing based on information technology to help enhance utilizing digital marketing for business competitiveness in achieving sustainable development goals as the focus topic of discussion, many studies, issues, methodologies, frameworks, and models have been developed and researched. The authors describe and investigate the problem based on the literature as follows. Several examples of brands that use digital marketing to expand their market into the world, such as ZARA, H&M, and UNIQLO, use big data as their fundamental data set in their marketing strategies. This study aligns with the transformation and combination of traditional enterprise financial marketing into digital marketing with the development of big data and the digital transformation of traditional corporate finance (Al, 2019; Zhang, 2020).

Digital marketing mechanisms with web-based technology are deployed. This study proposes a framework that provides a competitive advantage for an organization's marketing by giving analysts real-time visibility into the tagging behavior on their organization's site. A tag is a code embedded on web pages to collect site and visitor's browsing behavior. It aligns with exploring search engine optimization from the managerial perspective and identifying the role and importance of SEO in increasing firms' profitability. It also analyzes the present scenario and future scope of search engine optimization in digital marketing (Bengel, 2015; Matta, 2020; Sheshasaayee, 2017).

Information technology entities like machine learning are also deployed as digital marketing mechanisms. Machine learning can predict future developments and support decision-making in digital marketing by extracting insights from large amounts of generated data. Machine learning can be used for information technology classification to manage functions of digital marketing communications in terms of solving analytical problems in digital marketing (Kuchta et al., 2019; Soldatova, 2020).

Social media has also become a fundamental dataset for enhancing and expanding digital marketing, such as doing a trend analysis on social media to create an application that would help market products and services over social media platforms. This study aligns with a comparative analysis of digital social media content marketing competency in Singapore and Thailand. Both of them also line with the analysis of social media and email marketing for digital marketing, and digital content by online media and its effects on brand trust, brand credibility, brand commitment, and brand advocacy, which are all of that study use a social media digital as the object of their digital marketing (Bhor, 2018; Bismo, 2019; Siddo, 2020; Sul-toni et al., 2019)

The gamification method has also become a significant mechanism in enhancing digital marketing lifestyles. This study aligns with improving the organizational agility of micro, small, and medium enterprises through digital marketing strategy. Both studies used gamification essence to improve and enhance digital marketing (Ken & Lee, 2016; Kosasi, 2017). A recent phenomenon is that practitioners and academics are attracted to digital innovation in various disciplines, such as marketing, strategy, and economics (Beltaqui, 2020; Konya-baumbach et al., 2019).

Digital technology is increasingly widespread, changing strategy formulation and creating innovations, as stated by Lyytinen et al. (2016). Besides, digital technology can create new combinations digitally and physically to create unique products (Yoo, 2012), which has changed the nature of innovation (Nabisan, 2020). Digital technology is fundamentally changing the way companies work. The success of implementing new technologies will ultimately depend on how quickly employees can learn to work well with them. Companies are increasingly aware that introducing new digital tools and instruments will not be enough to make the digital transformation successful unless people in the organization enhance their ability to use digital technology (Bongiorno & Rizzo, 2018). The fast-moving and complicated digital world influencing the new learning reality offers a guided pathway through which people can study and operate successfully (Bartlett-Bragg, 2017). Digital adaptability is an important driver of digital agility (Dubey, 2023).

Many scientists have recently shifted their interest to research on innovation capacity. The most essential element in competitive advantage is a company's ability to innovate effectively, allowing it to meet unpredictable market demands (Ferreira, 2020; Rajapathirana & Hui, 2018). Leanness and innovation directly impact financial and environmental performance, but their indirect impacts are mediated by innovation (Shekhar, 2019). Offering a new perspective on how elements of strategic management and corporate social responsibility relate to an organization's innovation capabilities are discussed in the research (Ramos, 2023). The meaning of innovation capabilities at the firm level is an important topic in the current innovation management literature—using an ex-ante theoretical perspective and referring to capabilities built using a willingness-ability approach and a dynamic capabilities lens. Organizational tendencies towards innovation, actions taken, and the capacity of organizational resources used and changed to produce innovation (Daronco, 2023).

Innovation capability, SME success, and innovation in human resource practices are achieved through the mediation of innovative capabilities and competitive advantage. Human resource practices are vital to innovation success and indirectly affect SME performance. These findings contribute to organizational effectiveness and long-term performance growth, including the critical elements of human resources and practice. With the advent of digital disruption, innovation capabilities in today's fiercely competitive industries will also grow steadily (Wongsansukcharoen & Thaweepaiboonwong, 2023). According to several studies, e.g., Ahmed (2020), Migdadi (2022) and Mulyana (2022), innovation capability (IC) refers to an organization's capacity to provide new goods, services and processes as well as strategies. Innovative marketing. It also refers to offering a distinctive value proposition to maintain an organization's CA through continuous innovation. Companies are now using IC to increase revenue, increase CA, and respond to customer satisfaction (Mulyana, 2022). Changes in marketing and process innovation are quick reactions to customers, partners and stakeholders (Chi, 2021), as well as service innovation in customer service and after-sales service.

3. Materials and Methods

On the basis of information technology-based digital marketing, formulated through a literature review in the previous section (part two), the author can agglutinate the problems, methodologies, frameworks, and models that have been developed and adapted to existing research so that the results will be obtained. Help find mechanisms that can increase the use of digital marketing for business competitiveness in achieving sustainable development goals as a focus topic for discussion. A complete explanation of the research findings is in the next section, namely section four (IV), namely results and evaluation. It is crucial to ensure the proposed theoretical framework does not have reliability or validity issues before testing it. This research uses data from survey results with a total of 339 respondents. The questionnaires were distributed randomly among all SMEs. Discussions were also held with various parties related to the research theme to obtain relevant data. The number of variables in the data consists of 10 indicators and three latent/dimensional variables. Thus, this study examines the influence of the DM and IC relationship on the sustainable performance of the SME sector on Java Island. Quantitative approaches help in addressing specific issues related to well-defined events. The data obtained was then analyzed using LISREL 8.72 software.

4. Results

This study uses LISREL 8.72 to analyze the collected data. The result of the analysis can be seen in Table 1 below:

Table 1. Result of Construct Validity

Variable	Construct	Loading	p-value
Innovation Capabilities	Computer Software (CS)	0.29	0.000
	Gamification (GM)	0.50	0.000
	Real Time Online Process (RTOP)	0.31	0.000
Digital Marketing	Digital Social Media (DSM)	0.43	0.000
	Machine Learning (ML)	0.43	0.000
	Web-based Analytics (WBA)	0.39	0.000
	Search Engine Optimization (SEO)	0.72	0.000
Sustainable Industry Performance	SIP Economic (SIPEC)	1.00	0.000
	SIP Environment (SIPENV)	0.78	0.000
	SIP Social (SIPSC)	0.32	0.000

Table 1 indicates the construct validity. This study found that several indicators still have loading values below 0.50 (not good), even though the p-value is significant. These indicators will remain in the analysis because they cannot be excluded based on the model framework.

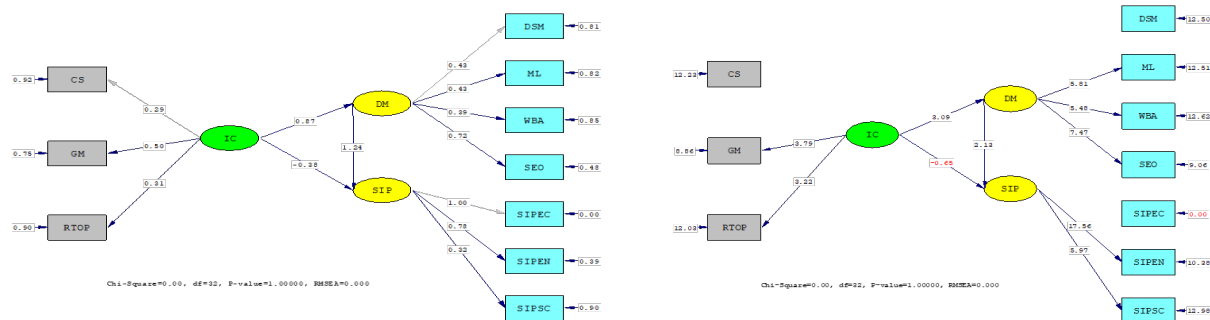
Table 2. Hypothesis testing

Hypothesis	Relationship	Path Coefficient	t-value	p-value	Conclusion
H1	Innovation Capabilities → Digital Marketing	0.87	3.09	0.002	Accepted
H2	Innovation Capabilities → Sustainable Industry Performance	-0.38	-0.65	0.260	Rejected
H3	Digital Marketing → Sustainable Industry Performance	1.24	2.13	0.020	Accepted

Note: *) Hypotheses 1-3 will be accepted if the p-value is below 0.05 and the path coefficient value is positive

Table 2 shows the relationship between Innovation Capabilities and Digital Marketing has a p-value of 0.002 ($p < 5\%$) and a path coefficient value of 0.87 (positive), so it can be concluded that there is a significant positive influence of Innovation Capabilities on Digital Marketing. Thus, Hypothesis 1 is accepted at an error level of 5%. Also, the relationship between Innovation Capabilities and Sustainable Industry Performance has a p-value of 0.260 ($P > 5\%$) and a path coefficient value of -0.38 (negative), so it can be concluded that there is no significant positive influence from Innovation Capabilities on Sustainable Industry Performance. Hypothesis 2 is rejected at an error level of 5%.

In addition, the relationship between Digital Marketing and Sustainable Industry Performance has a p-value of 0.020 ($p < 5\%$) and a path coefficient value of 1.24 (positive), so it can be concluded that there is a significant positive influence from Digital Marketing on Sustainable Industry Performance. Thus, Hypothesis 3 is accepted at an error level of 5%. This study discovered that most studies used digital social media as fundamental media to enhance utilizing digital marketing for business competitiveness in achieving sustainable development goals (Bhor, 2018; Bismo, 2019; Siddo, 2020; Sul-toni et al., 2019). Most used information technology techniques to enhance utilizing digital marketing for business competitiveness are machine learning, gamification, web-based analytics and search engine optimization (Bengel, 2015; Ken & Lee, 2016; Kosasi, 2017; Kuchta et al., 2019; Matta, 2020; Sheshasaayee, 2017; Soldatova, 2020).



(a)

(b)

Figure 1. LISREL Output Chart for SEM Model (a) standardized loadings; (b) t-statistics

5. Conclusions

This study concludes that there are several results and findings to enhance utilizing digital marketing for business competitiveness in achieving sustainable development goals, such as utilizing digital social media as fundamental media, machine learning, gamification, web-based analytics and search engine optimization. The use of computer software in SMEs needs to be increased because many SMEs still do not understand the use of computer software, so training is needed. In Figure 2, the ability to innovate using software is still lacking.

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