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# Digital Marketing and Sustainable Marketing to Create Competitive Advantage in SMEs: The Moderating Effect of Value Co-creation

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## Abstract

**Research aims:** This investigation seeks to examine how the incorporation of digital marketing influences sustainable marketing orientation and competitive edge among small and medium enterprises in Palu City, while also investigating value co-creation's moderating function in enhancing this connection. Furthermore, this study endeavors to ascertain how sustainable marketing orientation directly affects competitive positioning within the digital marketing framework.

**Design/Methodology/Approach:** This study uses quantitative methods. The sample size of this study is 120 with sample characteristics, namely having been operating for at least one year, being micro, small, or medium scale, and having used digital marketing strategies. The respondents were chosen through probability sampling methodology, specifically employing the simple random sampling approach, to guarantee that all registered SME segments have equal opportunity for selection. The research analysis employs Structural Equation Model-Partial Least Square (SEM-PLS) methodological approach.

**Research findings:** Research findings show that digital marketing adoption influences sustainable marketing orientation and also influences competitive advantage. In addition, sustainable marketing orientation was found to influence competitive advantage. Finally, value co-creation can moderate the influence between digital marketing adoption and sustainable marketing orientation on competitive advantage.

**Theoretical Contribution/Originality:** Empirical evidence substantiates the connection between digital marketing implementation and sustainable marketing orientation, demonstrating their combined impact on competitive advantage within SMEs. This investigation further extends scholarly knowledge by identifying value co-creation's moderating function in amplifying digital marketing adoption's effect on competitive advantage through sustainable marketing orientation mechanisms. These findings provide a new perspective on the importance of collaboration with customers in digital marketing to achieve sustainable competitive advantage.

**Practitioners/Policy Implications:** This research guides SMEs on the importance of digital marketing adoption and collaboration with customers through value co-creation to strengthen sustainable marketing orientation and increase competitive advantage in the market.

**Research Limitations/Implications:** This study only covers SMEs in certain regions, thus possibly limiting the generalization of the results to geographic contexts and certain types of businesses.

**Keywords:** Digital Marketing Adoption; Sustainable Marketing Orientation; Competitive Advantage; Value Co-creation; SMEs

## **Introduction**

Presently, the MSME sector represents a priority area for governmental attention. At the global level, the SME sector has garnered recognition for its contributions to regional economic development through wealth generation, employment creation, and poverty reduction initiatives (Rahman et al., 2022; Wairimu, 2015). The MSME sector in Indonesia has garnered significant attention in recent times. Moreover, small and medium-sized enterprises represent the predominant business category in Indonesia and create the most significant employment prospects (Djakasaputra et al., 2021; Aggarwal et al., 2021). SMEs are the largest business sector in Indonesia, promoting the largest employment opportunities (Digdowiseiso & Sugiyanto, 2021). SMEs are considered the driving force behind Indonesia's national economy, as these units outnumber large businesses in quantity; they are widespread in rural areas and possess significant potential for job creation.

The emergence and development of these enterprises must be ensconced as an essential element in the policies designed to generate employment and yield bountiful revenues (Maksum et al., 2020). Despite their crucial role as strong labor absorbers and the backbone of the economy in developing nations, SMEs remain facing various long-standing problems, such as having no access to financing in the financial sector, making them unable to sell their products to wider communities and/or carry out export activities (Digdowiseiso & Sugiyanto, 2021). Other challenges include low levels of innovation and limited resources (OECD, 2018; Scuotto et al., 2017), as well as limited access and ability to use technology (Fanelli, 2021). Apart from that, the increasing number of competitors makes it difficult for SMEs to compete today (Gamage et al., 2020). In addressing these problems, digital marketing offers numerous measures, including the shift to online sales to overcome limited market access and the mitigation of the limiting geographical barriers, which will ultimately expand consumer reach. Sustainable marketing orientation allows MSMEs to integrate environmental, social, and economic practices by strengthening credibility and relationships with all stakeholders and communicating their sustainability values to consumers through digital channels (Mitchell et al., 2010). This will help form an intangible asset (brand image, trust, and others) that can help MSMEs operate competitively.

The importance of competitive capabilities for a business is extremely necessary today. The large number of competitors is one of the challenges for entrepreneurs to continue developing their businesses (Djakasaputra et al., 2021). Digital marketing and sustainability orientation emerge as strategic opportunities for MSMEs to transform challenges into competitive advantages, by leveraging digital technologies to expand market reach and develop more adaptive business models. Through this innovative approach, MSMEs can leverage digital platforms to overcome resource constraints, develop product differentiation, and build stronger relationships with consumers who are increasingly aware of sustainable values. Thus, businesses can make necessary efforts to innovate and transform, particularly in terms of marketing. Innovation in marketing represents a source of differentiation and competitive growth for most companies, especially SMEs (Eggers, 2020). Therefore, this study attempts to identify how digital

marketing and sustainability marketing orientation can serve as unique and innovative resources for SMEs to create their competitive advantage.

As a form of transformation, businesses, including MSMEs, can adopt a digital-based marketing strategy. Digital-based marketing methods have revolutionized how marketers interact with consumers in the current era. The vast majority of consumers worldwide now possess and utilize computers and/or mobile devices, which has catalyzed the growth in advertising expenditure through digital channels. Marketing professionals are rapidly recognizing the advantages of utilizing social networking platforms such as Facebook, YouTube, and etc for marketing communication purposes. Therefore, they invest large amounts of advertising funds in digital platforms (Cooper, 2023). Companies that can utilize or adopt digital-based marketing strategies can gain competitive advantages (Singh et al., 2022; Denga et al., 2022). By using digital marketing strategies and choosing the right digital media, companies can reach target markets effectively, thereby increasing sales volume and profits (Changalima et al., 2023).

Despite widespread acknowledgment of digital promotional benefits, comprehensive understanding regarding digital marketing's specific implications for small enterprises remains insufficient. Current digital marketing literature predominantly addresses large corporations and organizations (Ritz et al., 2019; Jarvinen et al., 2012). Meanwhile, the involvement and development of digital marketing strategies are also beneficial for small companies. Failure to implement digital-based marketing methods can worsen the comparison between large and small companies, in fact large businesses show several differences in implementing digital marketing strategies, compared to small businesses (Ritz et al., 2019; Nguyen et al., 2015). Consequently, investigations specifically examining digital marketing strategy implementation within small businesses are essential to comprehend and maximize technological utilization for supporting commercial growth and longevity, ultimately providing small enterprises with competitive capabilities and opportunities.

Apart from adopting and optimizing digital marketing strategies, another strategy that can create a competitive advantage for small businesses is focusing their efforts on sustainable marketing orientation (SMO). Sustainable marketing orientation (SMO) constitutes a tripartite construct encompassing environmental stewardship, social engagement, and economic viability (Hunt, 2017). The main idea of this concept is to encourage business owners or managers to look for sources of competitive advantage in the economic, social, and environmental dimensions based on marketing practices (Lucic, 2020). The marketing orientation framework encompasses comprehensive insight into customer needs, desires, and preferences to develop pertinent products, services, and marketing strategies. (Amin et al., 2016). Thus far, practitioners have been greatly interested in introducing sustainable corporate marketing strategies, particularly the decision to build a strategic reputation or adopt a source of positioning strategy (Lucic, 2020). Bhat and Darzi (2016) Additionally noted that an efficacious marketing orientation enables organizations to secure competitive advantage and establish robust customer relationships.

In creating a competitive advantage, consumer involvement in a company plays a key role. Value co-creation (VCC) is a concept where a customer will play a role and participate in creating a value in accordance with the consumer's expectations and experience (Zaborek & Mazur, 2019). Co-creation strategies aim to establish multiple collaborative initiatives with diverse business partners including suppliers, retailers, or customers, facilitating innovative capability development or solutions that enable brands to enhance consciousness and sustainability practices (Iglesias et al., 2023). MSMEs can implement the strategy by forming a digital community through social media or a dedicated platform that allows customers to provide direct feedback on products or services. It can also be done by using survey, polling, or comment features on digital platforms to get real-time feedback from consumers. Researchers argue that companies that apply the concept of value co-creation (VCC) will gain various benefits from customer involvement (Piligrimiene et al., 2015). Value co-creation additionally fosters innovation through knowledge exchange and recombination between customers and organizations, or by integrating customers into product design and development processes (Brynjolfsson & McAfee, 2014). However, value co-creation also has negative impacts, such as the relinquishment of control over product development to customers. In addition, companies will encounter various difficulties, particularly in creating products and solving cost problems (Zaborek & Mazur, 2019). Overinvolvement of consumers can also place a heavy workload on customers which can result in dissatisfaction (Chan et al., 2010). While numerous scholarly publications have identified various value co-creation dimensions, empirical investigations demonstrating tangible business outcomes related to value co-creation remain scarce. The empirical studies that offer strong arguments and insights for companies, particularly SMEs, to allocate resources to build the practice of co-creation with consumers also remain very limited.

The application of digital marketing strategies has been shown to provide significant benefits. Previous studies have identified that digital marketing can improve business performance (Deb et al., 2024; Saura et al., 2020). Nevertheless, comprehensive research regarding its application within small business contexts remains extremely limited. Existing literature primarily concentrates on large corporations possessing dissimilar resources and capabilities compared to small business entities (Gao et al., 2023). Significantly, small businesses constitute vital components within the global economy and possess distinctive characteristics potentially influencing their digital marketing strategy effectiveness. MSMEs often lack the resources to implement marketing strategies, especially digital marketing, that can help them grow their businesses. The concept of sustainable marketing orientation has indeed received significant attention in recent years, as businesses increasingly recognize the importance of aligning their brand values with consumer demand for environmental responsibility (Puvzhiarasi et al., 2024). However, literature examining how this orientation can shape competitive advantage is still very limited.

Several studies have recognized the importance of customer collaboration in enhancing marketing effectiveness (Zhang et al., 2022). However, current scholarly literature has not sufficiently explored how value co-creation can enhance the relationship between digital marketing implementation and sustainable marketing orientation, ultimately resulting in

competitive advantage. While customers were previously regarded as passive value recipients, today's dynamic market evolution has integrated them into collaborative value creation processes (Syah & Olivia, 2022). However, most MSMEs still do not fully understand the importance of consumer involvement in the value-creation process; they tend to maintain a traditional approach that prioritizes internal perspectives rather than collecting actual information about consumer desires. In addition, fear of potential risks such as negative reviews or detrimental comments on social media makes many MSME actors reluctant to be open and interact digitally (Indriyani et al., 2024). In alternative contexts, relatively few studies have investigated customer motivation factors for participation in online value co-creation processes, despite well-established understanding regarding value co-creation mechanisms within digital environments (Tajvidi et al., 2020). This creates a significant knowledge gap, especially since only a few companies and individuals apply this value co-creation approach in their business practices. The aforementioned reasons justify the urgency with which this study is conducted.

This research aims to identify effective digital marketing strategies for Indonesian SMEs to enhance competitive advantage while exploring sustainable marketing orientation's role in integrating environmental, social, and economic factors into marketing approaches. The findings will contribute to marketing literature with new insights on digital marketing implementation for SMEs, providing both academic value and practical guidance for entrepreneurs seeking to optimize digital technology for market reach, sales growth, and sustainable competitive advantages.

## **Literature Review and Hypotheses Development**

### **Dynamic Capabilities Theory**

The Dynamic Capabilities framework elucidates how enterprises leverage their capacities to sustain competitiveness within continuously evolving commercial landscapes (Bellner, 2013). According to Teece (2018), "the strength of a company's Dynamic Capabilities determines how quickly and accurately it can align its resources and business model with customer needs." This theory helps organizations recognize opportunities and threats, and make appropriate decisions (Barrales-Molina et al., 2013). Dynamic Capabilities also enable companies to transform resources and knowledge into products and services that meet customer expectations (Makkonen et al., 2014).

### **Digital Marketing Adoption**

Driven by the emergence of the internet and digital technologies, the evolution of new strategic approaches in the form of digital marketing is not merely an adaptation; it is also a fundamental transformation in marketing strategies that alter paradigms, channels, and methods of consumer interaction. The difference between SMEs and large companies lies in the challenges they face in using of digital marketing, where SMEs frequently face constraints related to limited resources, skills, or technologies (Sharabati et al., 2024).

Conversely, large companies particularly have a competitive advantage in these aspects, which can be reinvested in applicable innovations. Furthermore, SMEs adopt a more focused and cost-effective strategy by utilizing social media and content marketing, while large companies make substantial investments across various platforms, advanced analytics, and integrated cross-channel campaigns (Pollak & Markovic, 2021). Despite these differences, both large companies and SMEs have equal opportunities to utilize digital marketing strategies with the main objectives of driving sales, increasing brand awareness, and overcoming barriers to entering new markets (Saura et al., 2023; Mahto & McDowell, 2018). Digital marketing may be conceptualized as marketers' utilization of electronic channels to promote products or services to markets, aiming to attract customers and facilitate business engagement through digital platforms (Mkwizu, 2019). Thus, digital marketing is effective in increasing companies' reach to customers and positive influence on customer purchasing behavior (Bachri et al., 2023).

In practical application, large enterprises tend to possess mobile-friendly web platforms, and they may elect to enlist external specialists to oversee SEO projects, as well as social media marketing agencies to construct and execute campaigns. Conversely, smaller enterprises must develop, adapt, and enhance their own marketing initiatives, leveraging the utilization of social media channels and websites (Gao et al., 2023). Although SMEs often operate with limited resources and rely primarily on internal capabilities, they have opportunities to learn and acquire knowledge that ultimately determine whether they can advance to the next level or not (Pradhan et al., 2018). In this regard, SMEs possess tremendous potential to leverage digital marketing strategies, as these strategies offer several advantages such as being measurable, cost-effective, interactive, and hyper-targeted, making them particularly suitable for SMEs (Thaha et al., 2021). Therefore, it can be seen that there is a slight gap in digital marketing implementation and digital footprint between large companies and small companies (Nguyen et al., 2015). So there is a need for a more in-depth study of digital marketing practices, especially in small companies.

The marketing landscape for small businesses differs markedly from that of large enterprises. In this context, marketing tends to be more intuitive, competency-driven, network-centric, and constrained by time and financial resources (Gao et al., 2023). Various research on digital marketing suggests that small and medium-sized enterprises (SMEs) may derive multiple advantages from integrating Internet technologies into their marketing approaches. These include online product and service promotion, advertising across a broader array of markets at lower costs, leveraging email as a marketing tool, and potentially reducing the marketing expenditures that SMEs must bear. Additionally, they can enhance their reputation by developing a professional image by creating an effective website, answering questions regarding products and services in multiple languages, and conducting research on foreign markets (Koman et al., 2020). MSMEs demonstrating greater online marketing adoption typically exhibit enhanced business outcomes regarding customer expansion, revenue enhancement, and market position (Gao et al., 2023).

### **Sustainable Marketing Orientation**

At this time, companies are required to implement various types of sustainable strategies. One strategic approach that may be leveraged is that of sustainable marketing. Sustainable marketing strategies are critically important today as they enable companies to meet the expectations of increasingly environmentally conscious consumers, comply with stringent regulations, foster innovation, and prepare businesses to face future challenges, which ultimately can build positive reputation and create competitive advantages for a business (Peterson et al., 2021). However, this strategy represents merely one component of the solution to the prevailing challenges. Equally essential are the development of sustainable products and production processes, As well as additional factors including customer knowledge and awareness of competitive dynamics within the marketplace (Claudy et al., 2016). Undeniably, sustainable marketing practices can be employed to promote these approaches and align marketing initiatives with consumer values (Peterson et al., 2021). The sustainable marketing concept tries to put forward a focus on providing superior value for all interests including consumers, employees, company owners and others, which ultimately aims to create sustainable profits for the company (Coric et al., 2020).

The sustainable marketing framework integrates three critical dimensions: environmental, social, and economic components (Mitchell et al., 2010). This marketing approach builds good relationships with all involved parties. Sustainable marketing allows companies to make profits while caring about society (Lucic et al., 2020; Crittenden et al., 2011). Lucic et al. (2020) explain that this marketing approach encourages companies to act environmentally friendly out of their own awareness. This model helps companies create their business uniqueness, while still prioritizing customer satisfaction.

### **Competitive Advantage**

Competitive advantage represents a concept describing organizational superiority relative to competitors (Tu & Wu, 2021). A business's competitive advantage emerges from the value or benefits that the organization can generate for its consumers. When a company successfully creates advantages for customers, it positions itself to attain competitive superiority (Farida & Setiawan, 2022). Competitive advantage can be comprehended by examining organizations through the lens of numerous activities undertaken in designing, manufacturing, marketing, distributing, and providing after-sales support (Farhikhteh et al., 2020). Hussain et al. (2023) found how the use of marketing strategies based on can be a competitive advantage for a business. The use of digital marketing is able to improve targeting and segmentation capabilities, enable personalized experiences, drive consumer engagement, increase brand loyalty, and ultimately produce sustainable competitive advantage. This aspect is crucial because competitive advantage represents the fundamental element for strategic management success, as it constitutes a strategy formulated to establish company value in competitive marketplaces (Sigalas, 2015). As competition exists across all business sectors, manufacturing entities must address and maintain consistent product/service quality to secure competitive advantage. Consequently, creativity and innovation represent

essential characteristics within competitive business environments, facilitating product enhancement (Azeem et al., 2021). In gaining a competitive advantage, companies need to innovate uniqueness that distinguishes them from other companies. This advantage can create a different perspective in consumers' minds, ultimately driving the company's success (Hossain et al., 2022). Thus, companies can discover their competitive advantage by identifying the uniqueness of their products or services, understanding unmet market needs, and optimizing internal processes to deliver value that cannot be easily replicated by competitors.

Competitive advantage may emerge from innovative practices characterized by value, rarity, inimitability, and non-substitutability, which involve material resources, superior products, and supporting business systems (de Guimarães et al., 2018; Tu & Wu, 2021). Recent studies have stated that large and small businesses need to pay significant attention to creating a competitive advantage (Arsawan et al., 2020). However, the implementation of competitive advantage will be more profitable for large companies than MSMEs that do not have as many resources as large companies (Tukamuhabwa et al., 2021). Thus, MSME actors are required to find unique and cheap resources to develop their businesses and gain a competitive advantage.

### **Value Co-creation**

Prior studies have contended that knowledge can constitute a primary source of competitive advantage within the dynamically evolving technological landscape (Papa et al., 2018). Certainly, these knowledge repositories manifest as both internal and external sources. Presently, customer expectations regarding products and services have grown increasingly sophisticated. As a result, organizations must acquire knowledge not exclusively from internal sources but also by accessing external knowledge from customers and additional stakeholders to gain insights concerning novel product and service development. (Opata et al., 2019). As a corollary, enterprises have pivoted towards the utilization of social media networks (AbdelAziz et al., 2021; Scuotto et al., 2017). Therefore, most businesses are now starting to focus on various strategies to obtain information, build relationships with customers, and be able to create a product that suits customer desires, in this case how consumers are able to create value together with the business (Chepurna and Criado, 2018).

Prahalad states value co-creation as the creation of joint value by companies and customers, enabling customers to jointly build service experiences to suit their context (Zhang et al., 2020). Co-creation provides consumers with the tools and opportunities to work with business organizations in producing their value offerings (Zhang et al., 2020). The customer participation activities include several activities in value co-creation such as searching for information, sharing information, and responsible behavior so that customers are cooperative and personal interaction (Abdelaziz et al., 2021). Customer engagement can be enhanced through the utilization of the internet and digital technologies that facilitate connections between customers and enterprises, as well as between customers themselves (Chepurna and Criado, 2018). For example, within social media environments, customers can participate in value co-creation through



organizational and peer-customer interactions to discuss product design, manufacturing, and consumption experiences (Zhao et al., 2018).

### **Hypothesis Development**

This study identifies how digital marketing, sustainable marketing, and value co-creation can create a competitive advantage. Hussain et al. (2023) explained that digital marketing provides precise targeting, personalization, and engagement opportunities that enhance customer experiences. This digital approach works seamlessly with the sustainability marketing orientation described by Lucic (2020), which focuses on building strong stakeholder relationships and integrating sustainability values throughout business operations. When combined with value co-creation processes outlined by Solakis et al. (2022), where businesses actively involve customers in knowledge exchange and skill development, these strategies create a comprehensive approach that generates unique customer experiences. This integrated strategy not only builds stronger brand loyalty and improves brand image but also creates distinctive customer value propositions that competitors struggle to replicate, ultimately establishing a sustainable competitive advantage.

### **Digital Marketing Adoption Towards Sustainable Marketing Orientation**

Currently, organizational power has shifted towards consumers who wield an increasingly elevated, active, engaged, and controlling role in communication. Moreover, the amassing of voluminous data and information is paramount within the enterprise's CRM efforts, guiding towards enhanced understanding of customer needs and more precise targeted marketing strategies (Jacova & Horak, 2015; Hommerova & Patrovsky, 2017). Therefore, companies must focus on providing various means of excellent treatment to customers. Besides customers, focusing various activities on stakeholders is necessary to make a business sustainable (Jones et al., 2018). This underlines the need to implement a sustainable marketing orientation. Sustainable marketing orientation (SMO) derives from the concept of market orientation where a company needs to be able to provide superior value to consumers and other stakeholders (Lucic, 2020).

Marketing orientation considers three dimensions. First, customer orientation refers to measuring employee contributions to customer service and customer satisfaction. In this regard, customer satisfaction programs must be continually investigated and refined. Second, competitor orientation is where services must respond to what competitors are doing. Finally, coordination between functions is based on information sharing and efficient use of internal resources to support value creation that can provide benefits to customers (Kuntobutr et al., 2019). To help companies meet the demands of a sustainable marketing orientation, digital technology assistance, especially in the form of digital-based marketing technology, becomes highly essential. By using digital-based marketing, it will be easier for companies to collect information about customers, competitors, and other stakeholders. This includes the use of email marketing, social media marketing, content marketing, and other strategies to gain the information needed by the company

and encourage the creation of a sustainable marketing orientation for the company (De Oliveira et al., 2020). Therefore, the subsequent hypothesis is advanced.

*H<sub>1</sub>: Digital marketing adoption has a positive effect on sustainable marketing orientation.*

### **Sustainable Marketing Orientation Towards Competitive Advantage**

A fundamental determinant of organizational or commercial success lies in establishing competitive advantage. Competitive advantage is characterized as the distinctive value or organizational performance that surpasses competitors and cannot be replicated (Knudsen et al., 2021). To create a competitive advantage that matches consumer perceptions, a marketing orientation concept is needed. Marketing orientation prompts organizations to proactively pursue comprehensive insights into consumer requirements, aspirations, and inclinations. By adopting a customer-centric approach, organizations endeavor to establish enduring relationships. The principal objective involves ensuring consumer satisfaction, potentially fostering elevated customer fidelity and contributing to sustained revenue enhancement (Gruber-Muecke & Hofer, 2015).

Furthermore, the orientation of sustainable marketing is building and managing relationships with various stakeholders, of which consumers are the most important group (Lucic, 2020). A market-oriented concept of sustainability has been developed, this strategy focuses on marketing practices that are socially and environmentally responsible, which will trigger sustainable actions and lead to the creation of unique resources (Leonidou et al., 2015; Crittenden et al., 2011). Motivating organizations to develop distinctive, rare, and complex resources that facilitate differentiation from competitive organizations' strategies can foster competitive advantage creation (Papadas et al., 2019). Therefore, the subsequent hypothesis is advanced.

*H<sub>2</sub>: Sustainable marketing orientation has a positive effect on competitive advantage.*

### **Digital Marketing Adoption Towards Competitive Advantage**

Market globalization and competitive developments create the need for new technology and innovation for business people, not only that, competitive competition can also make it difficult for organizations to survive and progress (Cvjetković et al., 2020). One solution in this unstable environment is to carry out activities that can be used to compete, namely adopting digital-based marketing strategies (Olson et al., 2021). Enterprises must allocate resources toward digital marketing initiatives, as this approach facilitates competitive positioning in expanding businesses and enables utilization of diverse marketing instruments that can establish customer relationships and generate business competitiveness (Weru & Mbugua, 2017).

The integration of digitally-based technologies, particularly within marketing functions, can enhance business transformation by improving the velocity, precision, and

operational efficiency in exchanging substantial information volumes. This profit will increase sales volume and increase business income (Kano et al., 2022). The various advantages of implementing this digital marketing strategy can help most business owners create a competitive advantage (Mogos, 2015). Therefore, Internet-based marketing must be regarded as a strategic asset with the potential to harness business learning within the digital milieu, thereby empowering marketers to leverage digital-centric marketing in the pursuit of competitive advantage (Chauhan et al., 2015). Therefore, the subsequent hypothesis is advanced.

*H<sub>3</sub>: Digital marketing adoption has a positive effect on competitive advantage.*

#### **Relationship between Digital Marketing Adoption and Competitive Advantage Moderated by Value Co-creation**

Recently, researchers (Cheung & To, 2021; Merz et al., 2018) has confirmed that co-creation has evolved into an essential component of organizational activities. The aspiration for distinctiveness, uniqueness, and dissatisfaction with existing options motivates consumers to interact with organizations, thereby participating in collaborative value formation, commonly termed value co-creation (Sahi et al., 2022). Value co-creation represents collaboration between producers and consumers in generating value through product and service definition, production, delivery, and utilization (Sheth & Hellman, 2018). Sharma (2021) states that co-creation strategies can help micro-enterprises increase the perception of their product differentiation to consumers. Products that are co-created are considered more interesting, innovative, different, and suitable to meet consumer needs compared to products that are not co-created or mass-produced. Of course, product creation that stimulates and encourages product and service innovation aims to get the competitive advantage (Sahi et al., 2022). Business professionals can enhance competitiveness by implementing digital marketing approaches, particularly via social media platforms, to expand consumer networks and promote offerings. (Humaidi et al., 2023). Consequently, digital-centric marketing strategy adoption, combined with value co-creation implementation, will further enable organizations to achieve enhanced competitive positioning. Therefore, the subsequent hypothesis is advanced.

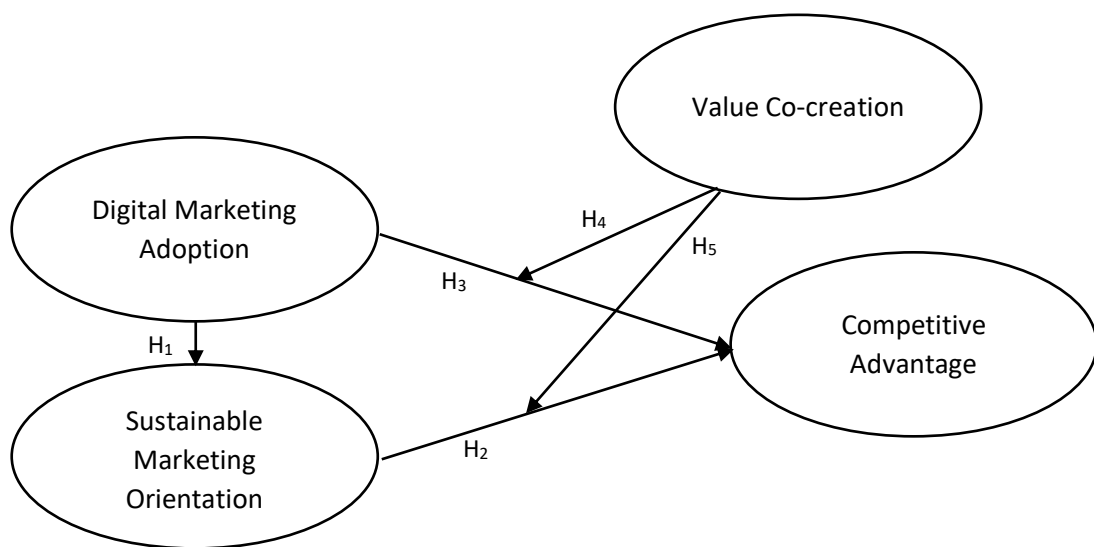
*H<sub>4</sub>: Value co-creation moderates the influence of digital marketing adoption on competitive advantage.*

#### **Relationship between Sustainable Marketing Orientation and Competitive Advantage Moderated by Value Co-creation**

Competitive advantage represents the extent to which organizations can obtain and sustain leading positions compared to competitors through customer value creation. This encompasses capabilities enabling organizational differentiation from competitors (Feng et al., 2010). In recent times, consumers have changed their role from simply purchasing products and services, they are now becoming more active as self-motivated consumers

who can define and generate value for themselves (Anshu et al., 2022). Consumer participation in collaborative value formation enables organizations to monitor evolving customer preferences, ensuring new product offerings accurately reflect consumer preferences at the time of market introduction (Martinez, 2014). Thus, to meet individual demands, companies must develop the most appropriate products or services from a variety of resources that require greater flexibility. Co-creation activities are considered very important for turning customer efforts, skills, and knowledge into new sources of competitive advantage for companies (Mostafa, 2016). A market-oriented concept of sustainability has been developed, this strategy focuses on marketing practices that are socially and environmentally responsible, which will trigger sustainable actions and lead to the creation of unique resources (Leonidou et al., 2015; Crittenden et al., 2011). Encouraging organizations to develop distinctive, rare, and complex resources that facilitate differentiation from competitive organizations' strategies can promote competitive advantage development (Papadas et al., 2019). Thus, implementing sustainable marketing approaches and value co-creation practices within organizational operations will enhance competitive advantage attainment. Therefore, the subsequent hypothesis is advanced.

**H<sub>5</sub>:** *Value co-creation moderates the influence of sustainable marketing orientation on competitive advantage.*



**Figure 1** Research Model

## Research Methods

### Research Methods

While digital marketing implementation has been acknowledged in MSME literature, limited understanding persists regarding how and to what degree it impacts sustainable development of MSMEs within national contexts (Kraft et al., 2022; Zhang et al., 2023). Given this knowledge gap, we examined the hypothesis within MSME research parameters by gathering data from numerous MSMEs operating in Palu City, Indonesia. This investigation constitutes descriptive-causal research, concentrating on small and medium enterprises for data acquisition purposes.

### Sampling and Data Collection

In the selection of research respondents and participants, the investigators employed a probability sampling technique, specifically the simple random sampling approach. Within the simple random sampling methodology, each element in the population possesses a known and equivalent probability of selection. Moreover, every potential sample of a given size holds a known and equivalent likelihood of being the actual sample chosen (Malhotra, 2020). In ensuring that each element of the MSME population in Palu City has an equal opportunity to be selected, the initial step involved collecting and compiling a list of MSMEs operating in Palu City. After the MSME list was collected, it was then filtered to include MSMEs that had been operating for at least one year and were already implementing digital marketing strategies. After filtering, each remaining MSME still had an equal opportunity to be selected. Subsequently, a simple random methodology was implemented, wherein individual MSMEs received unique numerical identifiers, with selection conducted via statistical software that randomly identified numbers to ensure unbiased sample selection. The structured questionnaire comprises two sections: Part A containing respondent demographic information, and Part B presenting statements regarding each research variable. The structured questionnaire contains thirty-five statements answered by selected respondents (MSME business owners).

The aim of obtaining several actual data that is useful both in theory and practice is realized by using SME representatives and owners to answer questionnaires by relying on the comprehensive data they have. The number of MSMEs in Palu City, Indonesia is 1,853 MSMEs (Antara, 2023), encompassing diverse sectors including manufacturing, retail and wholesale, services, automotive trade, communications, fashion, food and beverage, among others. This investigation utilized 120 samples, conforming to the minimum sample size requirement of 100-200 when employing SEM methodology (Hair et al., 2021).

Implementation of Simple Random Sampling to guarantee equitable selection opportunity for all enumerated SME segments. Selected MSMEs necessarily included those having implemented digital marketing approaches. Before initiating primary data collection, a preliminary examination involving 30 respondents was executed to evaluate the measurement instrument's construct validity and reliability metrics. The results found

in the reliability evaluation of all variables have met the established standards and have fulfilled the reliability standards. In the validity evaluation, two indicators were found not to have values above the threshold, namely the indicator “using special methods to encourage consumers to dialogue with the business” in the dialog dimension and value co-creation variable. Additionally, the indicator “all information disseminated can be trusted” in the transparency dimension and value co-creation variable, thus these indicators were not used in this current research. Qualitative feedback was also collected for statements that were difficult to understand, so the language was simplified.

### **Operational Variable**

The investigation at hand leveraged a questionnaire instrument, a standard metric tool administered to the participants. The questionnaire employed a Likert scale, specifically one ranging from 1 to 5, with response options spanning from "strongly disagree" (1) to "strongly agree" (5) (Malhotra, 2020). The research indicators for each variable are as follows: digital marketing adoption has nine items adapted from (Ritz et al., 2019). Sustainable marketing oriented is measured with ten items adapted from (Lucic, 2020). Competitive advantage was measured with six items adapted from (Alghamdi & Agag, 2024; Lee et al., 2016; Jain et al., 2017). Finally, value co-creation was measured with ten items adapted from (Zaborek & Mazur, 2019).

### **Analysis Technique**

This investigation employs Structural Equation Modeling (SEM) with PLS as the analytical technique. The results of data analysis were reported in two stages to evaluate the suitability of the research model. There were two evaluations in this study. The measurement model evaluation incorporated convergent validity, discriminant validity, and composite reliability assessments. Concurrently, the internal model assessment encompassed structural analysis utilizing R Square measurements (Latan & Ghazali, 2017). During preliminary measurement scale development phases, loading coefficients ranging between 0.5 and 0.6 are typically deemed sufficient. However, this investigation implemented a minimum loading coefficient threshold of 0.70.

## **Results and Discussion**

### **Respondent Profile**

The survey in this study was aimed at business owners or managers. Respondents were selected by directly visiting the business premises and talking to related parties. Of the main respondents, 49.16% worked as business owners, 11.67% as business managers, 10.83% as supervisors, and 28.34% as staff or employees. This indicates the representation of different levels of business management in this study. Details on the characteristics of the respondents are presented in Table 1.

**Table 1** Characteristics Respondent

Characteristic	Frequency	Percentage
<b>Respondent's Position</b>		
Business owner	59	49.16%
Business manager	14	11.67%
Supervisor	13	10.83%
Staff/employees	34	28.34%
<b>Type of Business</b>		
Retail/Wholesale	10	8.33%
Manufacture	16	13.34%
Service	28	23.33%
Culinary	51	42.5%
Craft	15	12.5%
<b>Digital Marketing Adoption Levels</b>		
Haven't adopted yet	0	0%
Just starting to adopt	48	40.0%
In process	33	27.5%
Have adopted	39	32.5%
<b>Collaboration with Customers</b>		
Never	3	2.5%
Seldom	66	55.0%
Sometimes	32	26.67%
Often	19	15.83%
<b>Type of Collaboration</b>		
Product development	28	23.33
Service feedback	76	63.33
Co-Design	12	10.0%
Community Building	4	3.33%

Table 1 illustrates the demographic profile of small and medium enterprises operating in Palu City that constitute the research subjects for this digital marketing adoption investigation. The most dominant type of business is services (42.5%), followed by culinary (23.33%), manufacturing (13.34%), crafts (12.5%), and retail/wholesale (8.33%). This reflects the diversity of the industry sector in Palu City, with the main focus being on the service and culinary sectors. Digital marketing adoption levels demonstrate considerable variation among the examined SMEs. Among these businesses, 40% of them have just started adopting digital marketing, 27.5% are in the process of adopting digital marketing, and 32.5% have fully adopted digital marketing. There are no respondents who have not adopted digital marketing at all. In terms of collaboration with customers, most SMEs rarely collaborate (55%), while 26.67% sometimes collaborate and only 15.83% often collaborate. The most common type of collaboration is service feedback (63.33%), followed by product development (23.33%), co-design (10%), and community building (3.33%). This shows that although digital marketing adoption is quite widespread in Palu City, customer interaction and collaborative processes require enhancement to achieve sustainable competitive advantages.

## Measurement Reliability and Validity

### Convergent Validity

Convergent validity indicates the degree to which construct measurement indicators demonstrate strong inter-correlation, suggesting measurement of identical concepts. Loading factor serves as the metric for convergent validity assessment. The limit used in this study refers to (Sarstedt et al., 2021), namely a loading factor score > 0.50. In the context of analysis with tools such as SmartPLS, ensuring convergent validity is an important step to ensure that the model built has a solid foundation and reliable results.

**Table 2** Measurement Scales

Variables	Dimension	Indicators	Loading Factor
Digital Marketing Adoption	Perceived Usefulness	Using the Internet to promote business products or services will enable companies to achieve faster growth.	0.750
		Leveraging online platforms to advertise goods or services enhances the company's capability to boost customer engagement in its operations.	0.761
		Employing digital channels to market products or services accelerates business sales.	0.815
	Perceived Ease of Use	Designing online promotions for products or services effortlessly.	0.856
		Accomplishing online marketing objectives easily.	0.740
		Creating online campaigns for products or services easily.	0.835
	Perceived Economic Benefit	Promotions on products/services are conducted online to save money.	0.860
		By managing online promotions for a business, excess funds can be allocated to other areas.	0.794
		When starting an Internet promotion project, the hope is that businesses can save more.	0.833
Sustainable Marketing Orientation	Strategic Integration	Business success is evaluated using a mix of financial, environmental, and social performance indicators.	0.765
		Dedicated to tracking customer satisfaction.	0.808
		Assessing the environmental impacts of the products/services.	0.801
	Societal Engagement	Evaluating the impacts of products/services on society and communities.	0.865
		Collaborating with diverse stakeholders to comprehend their expectations.	0.915
		Choosing suppliers based on robust environmental, social, and economic criteria.	0.862
	Ethical Capabilities	Facilitating personnel advancement and professional development through structured training programs and career trajectory planning.	0.866
		Operating with integrity and responsibility in pricing products and services.	0.886
		Ensuring customers always have comprehensive information about all product/service offerings.	0.854
Competitive Advantage		All offers are conveyed clearly, accurately, and honestly to consumers.	0.820
		The company has strategic advantages over competitors.	0.906
		Overall, the company is run more successfully than its competitors.	0.877
		The organization can implement cost reduction strategies to achieve price competitiveness within the marketplace.	0.897
		The company has been able to increase productivity in recent years.	0.895
		The company has a good image in the minds of customers.	0.918
Value Co-creation	Dialog	The company can attract workers with the best talent from the market.	0.911
		Systematically conducting dialogue with product/service consumers.	0.878
		Dialogue is carried out to generate ideas for new products/services or product modifications.	0.843
	Access	Consumer dialogue facilitates learning regarding consumer product/service experiences.	0.720
		Consumers maintain selection capability for specific product/service elements affecting usability and/or aesthetic qualities.	0.853
		Consumers consistently retain preferred payment method selection options.	0.894
	Risk Assessment	Consumers invariably maintain preferred communication channel selection capabilities.	0.885
		Customers are prompted to examine comprehensive information regarding product/service utilization.	0.848
		The offering provides complete safety for all users, eliminating risk notification requirements.	0.846
		The information published on the website is the latest and most up-to-date information.	0.827
	Transparency	Promptly responding to all inquiries from customers and potential customers.	0.808



Table 2 illustrates the loading coefficient values for individual indicators, all exceeding 0.70. This demonstrates that each indicator adequately explains its corresponding measured variable, indicating the variable's validity for subsequent analytical procedures.

### Construct Reliability

Reliability evaluation, designated as construct reliability, constitutes an essential procedure for verifying internal consistency within measured constructs. Construct reliability quantifies the degree to which indicators comprising a specific construct exhibit measurement uniformity and stability. The reliability assessments implemented within The Partial Least Squares (PLS) analytical framework encompasses both composite reliability and Cronbach's alpha coefficients, utilized jointly as they incorporate individual indicators' outer loading values. A construct demonstrates reliability when its composite reliability and Cronbach's alpha coefficients surpass the 0.70 threshold (Hair et al., 2016).

**Table 3** Cronbach's Alpha & Composite Reliability Values

Variable	Cronbach's Alpha	Composite Reliability
Digital Marketing Adoption	0.943	0.932
Sustainable Marketing Orientation	0.961	0.955
Value Co-creation	0.960	0.954
Competitive Advantage	0.963	0.953
Competitive Advantage*Digital Marketing	1.000	1.000
Competitive Advantage*Sustainable Marketing	1.000	1.000

As Table 3 demonstrates, each variable exhibits Composite Reliability values exceeding 0.70 and Cronbach's alpha coefficients greater than 0.60. Therefore, all variables or constructs can be considered to demonstrate robust reliability.

### R-Squared

The determination of the R-squared ( $R^2$ ) metric stands as a veritable paragon of importance, measuring the remarkable ability of independent variables to elucidate the variance inherent within the dependent variable. An R-squared value of greater magnitude signifies a model of heightened predictive prowess.

**Table 4** R-Squared Values

Variable	R Squared	Adjusted R Squared
Competitive Advantage	0.937	0.934
Sustainable Marketing Orientation	0.710	0.707

As seen in Table 4, The research outcomes demonstrate digital marketing's influence on sustainable marketing orientation and competitive advantage. Regarding the initial relationship between digital marketing and sustainable marketing orientation, the R-squared value reaches 0.710 (71.0%), suggesting digital marketing exerts substantial influence on sustainable marketing orientation. Concerning the additional relationship between digital marketing and competitive advantage, the R-squared value attains 0.937

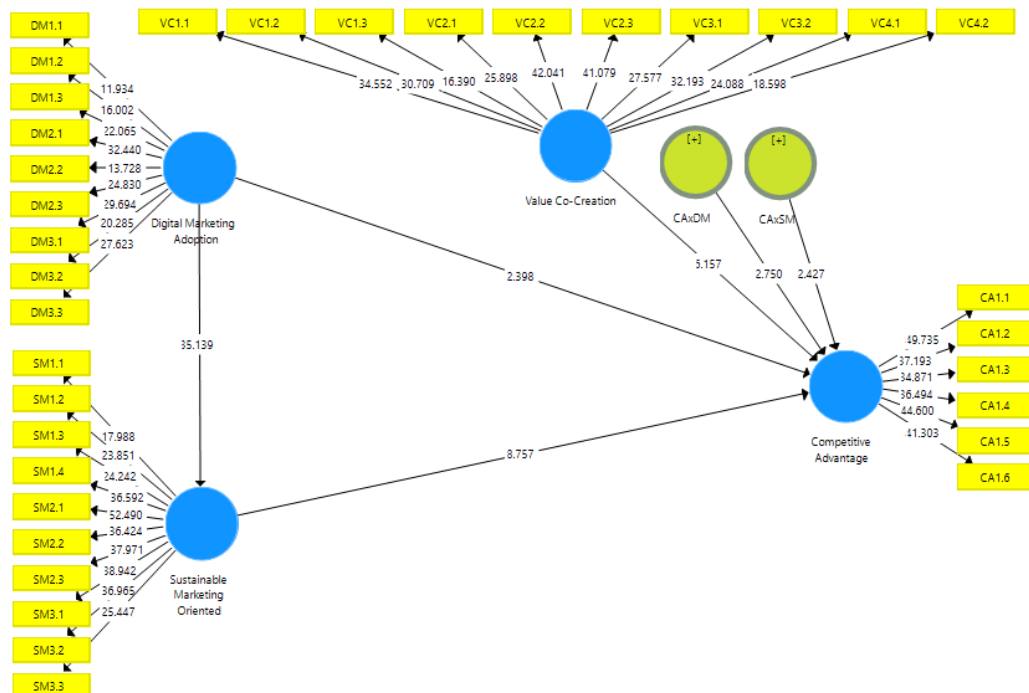
(93.7%), indicating digital marketing exercises remarkably significant influence on competitive advantage.

### Path Coefficient Estimation

Path coefficient estimation constitutes the process of quantifying relationship strength and directionality between latent variables within research frameworks. These coefficients emerge through PLS algorithmic processes that optimize linear relationships between latent variables. In this investigation, influence directionality remains unambiguous. Consequently, the analysis employed exclusively one-tailed testing with 0.05 designated as the significance threshold and a calculated t-value of 1.65. Path coefficient examination results appear in Table 5.

**Table 5** Path Coefficient

Variable	Original Sample (O)	T Statistic	P Value	Conclusion
Digital Marketing Adoption -> Sustainable Marketing Orientation	0.842	35.139	0.000	Supported
Sustainable Marketing Orientation -> Competitive Advantage	0.500	8.757	0.000	Supported
Digital Marketing Adoption -> Competitive Advantage	0.135	2.398	0.017	Supported
Digital Marketing -> Competitive Advantage (Co-Creation as Moderator)	0.155	2.750	0.006	Supported
Sustainable Marketing Orientation -> Competitive Advantage (Co-Creation as Moderator)	0.143	2.427	0.016	Supported



**Figure 2** Path Analysis Results

Figure 2 displays the findings derived from path analysis. The initial assessment of the relationship between digital marketing implementation and sustainable marketing orientation generated a t-value calculation of 35.139, considerably exceeding the critical threshold of 1.65, with a p-value of 0.000, substantially below the established significance level of 0.05. Consequently, the first hypothesis ( $H_1$ ) receives strong validation. Furthermore, examination of the relationship between sustainable marketing orientation and competitive advantage yielded a calculated t-value of 8.757, surpassing the critical threshold of 1.65, with a p-value of 0.000, below the 0.05 significance level. Thus, the second hypothesis ( $H_2$ ) is likewise confirmed. Finally, analysis of the connection between digital marketing implementation and competitive advantage produced a calculated t-value of 2.398, exceeding the critical value of 1.65, with a p-value of 0.017, below the established threshold of 0.05. This substantiates the third hypothesis ( $H_3$ ).

The fourth finding reveals the relationship examination between digital marketing implementation and competitive advantage, with value co-creation serving as the moderating factor. The calculated t-statistic of 2.750 surpasses the 1.65 critical threshold, with a p-value of 0.006, significantly below the 0.05 significance level. This confirms the fourth hypothesis ( $H_4$ ). Additionally, the fifth finding examines the relationship between sustainable marketing orientation and competitive advantage, with value co-creation again functioning as the moderating variable. The calculated t-statistic of 2.427 exceeds the 1.65 critical value, with a p-value of 0.016, below the 0.05 significance threshold. This confirms the fifth hypothesis ( $H_5$ ).

According to the Dynamic Capabilities Theory concept (Teece et al., 1997), companies achieve competitive advantage through their ability to reconfigure resources in response to environmental changes. Digital marketing serves as a dynamic capability that enables rapid adaptation to market trends and real-time data analysis (Hussain et al., 2023). Integration with sustainable marketing builds long-term relationships with stakeholders and anticipates regulatory changes (Lucic, 2020), while value co-creation involves customers in the development of shared value (Solakis et al., 2022) which will create an adaptive marketing ecosystem that is difficult for competitors to imitate, thereby strengthening the company's competitive position.

### **Digital Marketing Adoption Towards Sustainable Marketing Orientation**

This research finds that the use of digital-based marketing strategies can encourage sustainable marketing orientation in a company. In the hallowed halls of sustainable marketing, the stakeholders are deemed the most crucial parties for a company to heed, with the consumer reigning supreme as the central focus (Lucic, 2020). This conceptual paradigm implores the company to uncover the precise methods and means by which to nurture and cultivate fruitful relationships with all involved parties. Therefore, in building and managing relationships with stakeholders, the role of digital marketing becomes very crucial. Technology and digital strategies enable companies to communicate more effectively and efficiently with various interested parties. Through digital marketing, companies can reach stakeholders more widely and on target, convey information quickly, and build more personal and responsive interactions (Troise & Camilleri, 2021).

Beyond its primary functions, digital marketing exhibits significant connections to sustainable marketing principles. Sustainable marketing strategies emphasize achieving equilibrium among economic viability, environmental stewardship, and social welfare considerations. Through digital marketing platforms, organizations can effectively communicate their sustainability initiatives—including eco-friendly material utilization, ethical business operations, and corporate social responsibility programs—to stakeholders with transparency and consistency. Furthermore, digital marketing technologies facilitate the measurement and analytical assessment of stakeholder responses regarding these sustainability endeavors, which can then be used to improve the company's strategy and approach. Diez-Martin et al. (2019) in their research also found the same results as this research, the research stated that to build sustainable marketing using digital marketing, Organizations must consider various critical elements including customer-centric approaches and value propositions, digital consumer behavioral patterns, environmentally responsible digital marketing practices, competitive superiority, sustainable supply chain management, and organizational internal capabilities.

### **Sustainable Marketing Orientation Towards Competitive Advantage**

This study finds that companies' attempts to focus on a diverse range of sustainable marketing practices or activities positively affect their competitive advantage. Sustainable marketing refers to the decision-making processes and business activities undertaken by local communities and consumers, such as production and sales, as well as socially and environmentally friendly practices (Jung et al., 2020). The problem that occurs is that company owners focus more on how to meet consumer needs with the various products and services they offer. This is important to note because, in essence, the focus of consumers is looking for products or services that can solve the problems they face. Meanwhile, the company's responsibility for sustainable marketing is not yet considered very important by consumers (Sheth & Parvatiyar, 2021).

Companies need to pay close attention to sustainable marketing practices because this can significantly influence the acquisition of competitive advantages. Sustainable marketing allows companies to respond to the needs and desires of consumers who are increasingly concerned about environmental and social issues. By demonstrating a commitment to environmentally friendly and ethical practices, companies can build a better reputation, increase customer loyalty, and attract a more sustainability-conscious market segment. In addition, this approach often leads to innovation in products and services, which allows companies to offer unique solutions that differentiate them from competitors, thereby creating significant added value for customers.

### **Digital Marketing Adoption Towards Competitive Advantage**

The findings of this research indicate that strategic implementation of digital marketing methodologies contributes significantly to establishing organizational competitive advantage. This advantage stems from digital marketing's capacity to access broader and more precisely defined audience segments while maintaining superior cost-effectiveness,

provides data analytics that allows companies to obtain real-time information while simultaneously making real-time strategy adjustments, and strengthens customer relationships through more personal and sustainable interactions. Additionally, a strong online presence helps build a positive brand image and global reputation, while the ability to experiment with various strategies and integrate advanced technologies such as artificial intelligence enhances operational efficiency and delivers better customer experiences. These factors create significant competitive advantages for companies in an increasingly digital marketplace. Furthermore, data analytics enables sustainable marketing by providing real-time insights into consumer behavior and resource usage patterns, allowing companies to optimize campaigns and reduce environmental impact. Artificial intelligence enhances these capabilities by automating personalized communications that build meaningful customer relationships while efficiently allocating resources to minimize waste and ensure long-term marketing sustainability (Lopez, 2023).

In their study, Hussain et al. (2023) revealed the importance of adopting digital marketing technology for a company. Digital marketing can help a business to further develop and create a competitive advantage by offering new capabilities such as targeting more on point, minimizing costs, being more interactive with customers, and having the performance of a given campaign easier to calculate by the system. Denga et al. (2022) also indicates that digital marketing strategy development enhances organizational competitive advantage. Digital marketing enables organizations to minimize operational efforts while maximizing outcomes. Furthermore, digital marketing adoption addressing technological advancement challenges facilitates organizational adaptation. In contemporary environments, organizations pursuing competitive advantage consider digital marketing transformation a strategic necessity.

#### **Relationship between Digital Marketing Adoption and Competitive Advantage Moderated by Value Co-creation**

The empirical evidence from this research establishes that value co-creation significantly enhances the correlation between digital marketing implementation and competitive advantage attainment. Digital marketing encompasses modern internet-enabled communication tool utilization for product or service promotion within target markets across organizational contexts (Suh & Chow, 2021). Various business entities extensively employ these communication tools for information exchange, target market engagement for promotional purposes, and business equity development (Nuseir et al., 2022). Numerous organizations implement digital marketing to strengthen competitive positioning (Momaya, 2020; Sonar et al., 2020). Digital marketing facilitates enhanced brand awareness among consumers alongside improved brand loyalty (Jain et al., 2020). Digital marketing capabilities include marketing cost reduction, increased consumer traffic on brand platforms, and search engine ranking improvement (Kaushik, 2016). Digital marketing's organizational impact has generated exceptionally favorable consumer relationships, with platforms offering efficient and powerful product and service promotional channels (Singh et al., 2022).

Implementing digital marketing strategies additionally assists organizations in accessing target markets more effectively. Djakasaputra et al. (2021) explain that relationships between business organizations and target markets depend on systematic organizational approaches providing clear, differentiated messaging to target markets through digital marketing, delivering unique experiences for both consumers and business organizations. Value co-creation represents a strategic approach to generating value through consumer collaboration. The implementation of value co-creation mechanisms further promotes competitive advantage development for organizations by establishing effective systems and processes that enable seamless information exchange, collaborative practices, and knowledge transfer in managing human capital, infrastructural resources, and organizational intangible assets. Such implementation may encompass advanced technological integration, data-informed decision frameworks, and collaborative operational environments. By leveraging information interaction capabilities, SMEs can enhance their organizational agility, market responsiveness, and innovative potential, thereby yielding improved operational performance and sustainable competitive positioning (Sen et al., 2023). Evidently, digital marketing instrumentation facilitates and enhances organizational capabilities for consumer communication in developing products aligned with consumer preferences and requirements.

#### **Relationship between Sustainable Marketing Orientation and Competitive Advantage Moderated by Value Co-creation**

This research demonstrates that value co-creation strengthens the relationship between sustainable marketing orientation and competitive advantage. Sustainability market-oriented concepts have developed as strategies focusing on socially and environmentally responsible marketing practices. This strategy is designed to trigger sustainable actions that lead to the creation of unique resources, that have high strategic value for the company (Leonidou et al., 2015; Crittenden et al., 2011). Organizations adopting this approach demonstrate sustainability commitment, satisfying customer and stakeholder expectations while enhancing brand reputation and customer loyalty. This sustainable marketing approach establishes stronger relationships with environmentally and socially conscious consumers while strengthening market positioning. Encouraging companies to create unique, rare, and complex resources is key to this strategy. These resources may include product innovation, more efficient production processes, or ethical and environmentally friendly business practices, all of which can be used to differentiate from competitors. This strategy allows companies to develop sustainable competitive advantages, by offering value that cannot be easily imitated by competitors (Papadas et al., 2019).

Existing research has found the importance of using value co-creation strategies in creating competitive advantage (Sahi et al., 2022; Sun et al., 2022; Sen et al., 2023). Value co-creation practices consist of co-production, co-design, and co-innovation (Saha et al., 2022). As an example of co-design, companies can enable consumers to personalize their products with a variety of feature options, transforming passive consumers into active participants in the product creation process. Various efforts have been made to study the impact of value creation together in building and maintaining the company's competitive

advantage (Mostafa, 2016). Involving customers in developing innovations allows companies to get various kinds of ideas that have not been thought of by related companies or competitors so that in the end these ideas can become a source of competitive advantage for the company (Mostafa, 2016). Through sustainable marketing orientation adoption, organizations simultaneously address environmental and societal concerns relevant to consumers while enabling their active participation in value creation processes. This engagement establishes profound emotional connections between organizations and consumers, as customers experience meaningful involvement in initiatives generating broader societal benefits. Such collaborative engagement reinforces consumer trust and loyalty through value alignment identification. Consequently, value co-creation within sustainable marketing frameworks enhances not only customer satisfaction metrics but also strengthens organizational reputation as responsible and innovative industry leaders, ultimately generating sustainable competitive advantage within market environments.

## **Conclusion**

This investigation demonstrates that digital marketing implementation significantly affects sustainable marketing orientation and competitive advantage. Analytical outcomes indicate that enhanced digital marketing adoption corresponds with strengthened sustainable marketing orientation. This directly contributes to organizational competitive advantage enhancement. Sustainable marketing orientation independently demonstrates direct positive influence on competitive advantage. Consequently, sustainable marketing orientation functions as a crucial mediating factor connecting digital marketing implementation with competitive advantage.

Additionally, this research establishes value co-creation's significant moderating function in the relationship between digital marketing implementation, sustainable marketing orientation, and competitive advantage. Value co-creation moderation strengthens this relationship, indicating that organizations capable of customer collaboration in shared value creation enhance digital marketing implementation and sustainable marketing orientation's positive impact on competitive advantage. These findings emphasize customer involvement importance in marketing strategies for sustainable competitive advantage achievement.

## **Theoretical and Managerial Implications**

This investigation provides significant theoretical contributions by expanding understanding regarding relationships between digital marketing implementation, sustainable marketing orientation, and competitive advantage. These findings support theories that technology adoption and sustainable approaches enhance organizational competitiveness. Furthermore, this research introduces value co-creation as a moderating factor, previously underdiscussed in existing literature. Consequently, this investigation addresses literature gaps by demonstrating how organizational-customer

collaboration in value creation strengthens digital marketing implementation and sustainable marketing orientation's positive effects on competitive advantage.

From practical perspectives, this research offers valuable insights for small and medium enterprise (SME) managers and owners regarding digital marketing strategy adoption importance and sustainable marketing orientation integration. SME implementation steps for digital marketing integration with sustainability initiatives include aligning digital content with sustainability values and employing data analytics to measure sustainability initiative impacts on consumer perceptions. SMEs can optimize low-cost digital platforms to communicate sustainable practices and establish online communities supporting sustainability values. Through customer involvement in value co-creation processes, organizations can enhance market competitive advantage. This research suggests that organizations seeking enhanced competitiveness should focus on digital marketing technology adoption, sustainable marketing strategy development, and active customer collaboration promotion for shared value creation. This approach enhances customer satisfaction and loyalty while strengthening organizational positioning as innovative and responsible industry leaders.

### Limitation and Recommendations

This study has several limitations that need to be noted. This research focuses on SMEs in a specific region, so the generalization of the results of this research may be limited to certain geographic contexts and types of businesses. Additionally, this investigation considers specific variables without incorporating other external factors potentially influencing relationships between digital marketing implementation, sustainable marketing orientation, and competitive advantage.

To enhance result generalizability, subsequent research should incorporate broader and geographically diverse participant samples. Future investigations might integrate qualitative methodological approaches to acquire deeper insights into value co-creation processes and factors influencing digital marketing adoption. Additionally, forthcoming studies could examine external factor effects, including governmental regulatory frameworks, economic conditions, and industry developments, on the examined relationships. This would provide more comprehensive understanding regarding digital marketing dynamics and sustainable marketing orientation in competitive advantage attainment.

### References

- AbdelAziz, K., Md Saad, N. H., & Thurasamy, R. (2023). Analysing the factors influencing customer engagement and value co-creation during COVID-19 pandemic: the case of online modest fashion SMEs in Egypt. *Journal of Islamic Marketing*, 14(1), 146-173. <https://doi.org/10.1108/JIMA-09-2020-0294>
- Aggarwal, K., Malik, S., Mishra, D. K., & Paul, D. (2021). Moving from cash to cashless economy: Toward digital India. *The Journal of Asian Finance, Economics and Business*, 8(4), 43-54.



- Alghamdi, O., & Agag, G. (2024). Competitive advantage: A longitudinal analysis of the roles of data-driven innovation capabilities, marketing agility, and market turbulence. *Journal of Retailing and Consumer Services*, 76, 103547. <https://doi.org/10.1016/j.jretconser.2023.103547>
- Amin, M., Thurasamy, R., Aldakhil, A. M., & Kaswuri, A. H. B. (2016). The effect of market orientation as a mediating variable in the relationship between entrepreneurial orientation and SMEs performance. *Nankai Business Review International*, 7(1), 39-59. <https://doi.org/10.1108/NBRI-08-2015-0019>
- Anshu, K., Gaur, L., & Singh, G. (2022). Impact of customer experience on attitude and repurchase intention in online grocery retailing: A moderation mechanism of value Co-creation. *Journal of Retailing and Consumer Services*, 64, 102798. <https://doi.org/10.1016/j.jretconser.2021.102798>
- Antara. (2023). Pemkot Palu Beri Bantuan Dana Usaha Kepada 1.853 Pelaku UMKM. Available at: <https://www.antaranews.com/berita/3765582/pemkot-palu-beri-bantuan-dana-usaha-kepada-1853-pelaku-umkm>. (Accesed on February 01, 2024)
- Arsawan, I. W. E., Koval, V., Rajiani, I., Rustiarni, N. W., Supartha, W. G., & Suryantini, N. P. S. (2020). Leveraging knowledge sharing and innovation culture into SMEs sustainable competitive advantage. *International journal of productivity and performance management*, 71(2), 405-428. <https://doi.org/10.1108/IJPPM-04-2020-0192>
- Bachri, S., Putra, S. M., Farid, E. S., Darman, D., & Mayapada, A. G. (2023). The Digital Marketing To Influence Customer Satisfaction Mediated By Purchase Decision. *Jurnal Aplikasi Manajemen*, 21(3), 578-592. <https://doi.org/10.21776/ub.jam.2023.021.03.03>
- Barrales-Molina V., Bustinza O. F., Gutiérrez-Gutiérrez L. J. (2013). Explaining the causes and effects of dynamic capabilities generation: A multiple-indicator multiple-cause modelling approach. *British Journal of Management*, 24, 571–591. <https://doi.org/10.1111/j.1467-8551.2012.00829.x>
- Bellner, B. W. (2014). *Dynamic managerial capabilities and competitive advantage: an empirical analysis of managers from the finance and insurance and real estate sectors* (Doctoral dissertation, Heriot-Watt University). <https://doi.org/10.15640/smq.v3n3a1>
- Bhat, S. A., & Darzi, M. A. (2016). Customer relationship management: An approach to competitive advantage in the banking sector by exploring the mediational role of loyalty. *International Journal of Bank Marketing*, 34(3), 388-410. <https://doi.org/10.1108/IJBM-11-2014-0160>
- Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. WW Norton & Company.
- Chan, K. W., Yim, C. K., & Lam, S. S. (2010). Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures. *Journal of marketing*, 74(3), 48-64. <https://doi.org/10.1509/jmkg.74.3.048>
- Changalima, I. A., Israel, B., Amani, D., Panga, F. P., Mwaiseje, S. S., Mchopa, A. D., ... & Ismail, I. J. (2023). Do internet marketing capabilities interact with the effect of procedural capabilities for public procurement participation on SMEs' sales performance?. *Journal of Public Procurement*, 23(3/4), 416-433. <https://doi.org/10.1108/JOPP-01-2023-0001>
- Chauhan, P., Agrawal, M., & Chauhan, G. K. (2015). Understanding the Critical Aspect of Digital Marketing for Meaningful Strategic Marketing Perspective. *Journal of Marketing & Communication*, 11(3).
- Chepurna, M., & Rialp Criado, J. (2018). Identification of barriers to co-create on-line: the perspectives of customers and companies. *Journal of Research in Interactive Marketing*, 12(4), 452-471. <https://doi.org/10.1108/JRIM-01-2018-0018>

- Cheung, M. F., & To, W. M. (2021). Effect of customer involvement on co-creation of services: A moderated mediation model. *Journal of Retailing and Consumer Services*, 63, 102660. <https://doi.org/10.1016/j.jretconser.2021.102660>
- Claudy, M. C., Peterson, M., & Pagell, M. (2016). The roles of sustainability orientation and market knowledge competence in new product development success. *Journal of Product Innovation Management*, 33, 72-85. <https://doi.org/10.1111/jpim.12343>
- Cooper, P. (2023), "General Social Advertising Statistics", available at: <https://blog.hootsuite.com/social-media-advertising-stats> (accessed 21 January 2024).
- Coric, D. S., Lučić, A., Brečić, R., Šević, A., & Šević, Ž. (2020). An exploration of start-ups' sustainable marketing orientation (SMO). *Industrial Marketing Management*, 91, 176-186. <https://doi.org/10.1016/j.indmarman.2020.09.002>
- Crittenden, V. L., Crittenden, W. F., Ferrell, L. K., Ferrell, O. C., & Pinney, C. C. (2011). Market-oriented sustainability: a conceptual framework and propositions. *Journal of the Academy of Marketing Science*, 39, 71-85. <https://doi.org/10.1007/s11747-010-0217-2>
- de Guimarães, J. C. F., Severo, E. A., & de Vasconcelos, C. R. M. (2018). The influence of entrepreneurial, market, knowledge management orientations on cleaner production and the sustainable competitive advantage. *Journal of cleaner production*, 174, 1653-1663. <https://doi.org/10.1016/j.jclepro.2017.11.074>
- De Oliveira, R. T., Indulska, M., Steen, J., & Verreynne, M. L. (2020). Towards a framework for innovation in retailing through social media. *Journal of Retailing and Consumer Services*, 54, 101772. <https://doi.org/10.1016/j.jretconser.2019.01.017>
- Deb, S. K., Nafi, S. M., & Valeri, M. (2024). Promoting tourism business through digital marketing in the new normal era: a sustainable approach. *European Journal of Innovation Management*, 27(3), 775-799. <https://doi.org/10.1108/EJIM-04-2022-0218>
- Denga, E. M., Vajjhala, N. R., & Rakshit, S. (2022). The Role of Digital Marketing in Achieving Sustainable Competitive Advantage. *Digital Transformation and Internationalization Strategies in Organizations*, 44-60. <https://doi.org/10.4018/978-1-7998-8169-8.ch003>
- Diez-Martin, F., Blanco-Gonzalez, A., & Prado-Roman, C. (2019). Research challenges in digital marketing: sustainability. *Sustainability*, 11(10), 2839. <https://doi.org/10.3390/su11102839>
- Digdowniseiso, K., & Sugiyanto, E. (2021). How effective is institutional quality for the creation of small & medium enterprises (Smes) in Indonesia? *Economics and Sociology*, 14(1). <https://doi.org/10.14254/2071-789X.2021/14-1/17>
- Djakasaputra, A., Wijaya, O., Utama, A., Yohana, C., Romadhoni, B., & Fahlevi, M. (2021). Empirical study of Indonesian SMEs sales performance in digital era: The role of quality service and digital marketing. *International Journal of Data and Network Science*, 5(3), 303-310. <https://doi.org/10.5267/j.ijdns.2021.6.003>
- Eggers, F. (2020). Masters of disasters? Challenges and opportunities for SMEs in times of crisis. *Journal of business Research*, 116, 199-208. <https://doi.org/10.1016/j.jbusres.2020.05.025>
- Fanelli, R. M. (2021). Barriers to adopting new technologies within rural small and medium enterprises (SMEs). *Social sciences*, 10(11), 430. <https://doi.org/10.3390/socsci10110430>
- Farhikhteh, S., Kazemi, A., Shahin, A., & Mohammad Shafiee, M. (2020). How competitiveness factors propel SMEs to achieve competitive advantage?. Competitiveness Review: *An International Business Journal*, 30(3), 315-338. <https://doi.org/10.1108/CR-12-2018-0090>
- Farida, I., & Setiawan, D. (2022). Business strategies and competitive advantage: the role of performance and innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 163. <https://doi.org/10.3390/joitmc8030163>

- Feng, T., Sun, L., & Zhang, Y. (2010). The effects of customer and supplier involvement on competitive advantage: An empirical study in China. *Industrial marketing management*, 39(8), 1384-1394. <https://doi.org/10.1016/j.indmarman.2010.04.006>
- Gamage, S. K. N., Ekanayake, E. M. S., Abeyrathne, G. A. K. N. J., Prasanna, R. P. I. R., Jayasundara, J. M. S. B., & Rajapakshe, P. S. K. (2020). A review of global challenges and survival strategies of small and medium enterprises (SMEs). *Economies*, 8(4), 79. <https://doi.org/10.3390/economies8040079>
- Gao, J., Siddik, A. B., Khawar Abbas, S., Hamayun, M., Masukujjaman, M., & Alam, S. S. (2023). Impact of E-commerce and digital marketing adoption on the financial and sustainability performance of MSMEs during the COVID-19 pandemic: An empirical study. *Sustainability*, 15(2), 1594. <https://doi.org/10.3390/su15021594>
- Gruber-Muecke, T., & Hofer, K. M. (2015). Market orientation, entrepreneurial orientation and performance in emerging markets. *International Journal of Emerging Markets*, 10(3), 560-571. <https://doi.org/10.1108/IJoEM-05-2013-0076>
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., Ray, S., ... & Ray, S. (2021). An introduction to structural equation modeling. *Partial least squares structural equation modeling (PLS-SEM) using R: a workbook*, 1-29. [https://doi.org/10.1007/978-3-030-80519-7\\_1](https://doi.org/10.1007/978-3-030-80519-7_1)
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Hommerová, D., & Patrovský, S. (2017). Assessing the level of CRM in the Hennlich company using the crack method. u: Opportunities and Threats to Current Business Management in Cross-border Comparison. *Chemnitz: Verlag der GUC*, 48-58.
- Hossain, M. S., Hussain, K., Kannan, S., & Kunju Raman Nair, S. K. (2022). Determinants of sustainable competitive advantage from resource-based view: implications for hotel industry. *Journal of Hospitality and Tourism Insights*, 5(1), 79-98. <https://doi.org/10.1108/JHTI-08-2020-0152>
- Humaidi, H., Rasyidi, R., Sugiharto, S., Ehsan, A., Amalia, F., Fitria, M., & Rahmawati, R. (2023). Implementation of Incremental Innovation and Radical Innovation Through Digital Marketing in Increasing the Competitive Advantage of UMKM Lampit in Wetland Areas of Hulu Sungai Utara Regency. *Asian Journal of Management, Entrepreneurship and Social Science*, 3(04), 491-508.
- Hunt, S. D. (2017). Strategic marketing, sustainability, the triple bottom line, and resource-advantage (RA) theory: Securing the foundations of strategic marketing theory and research. *AMS Review*, 7, 52-66. <https://doi.org/10.1007/s13162-017-0090-y>
- Hussain, H. N., Alabdullah, T. T. Y., Ries, E., & Jamal, K. A. M. (2023). Implementing Technology for Competitive Advantage in Digital Marketing. *International Journal of Scientific and Management Research*, 6(6), 95-114. <https://doi.org/10.37502/IJSMR.2023.6607>
- Iglesias, O., Mingione, M., Ind, N., & Markovic, S. (2023). How to build a conscientious corporate brand together with business partners: A case study of Unilever. *Industrial Marketing Management*, 109, 1-13. <https://doi.org/10.1016/j.indmarman.2022.12.008>
- Indriyani, R., Dewi, A. R., & Kempa, S. (2024). Penggunaan Media Sosial dalam Mendukung Kinerja Pemasaran: Evaluasi Dampak Value Co-Creation dan Produktivitas Kerja. Co-Value. *Jurnal Ekonomi Koperasi dan kewirausahaan*, 15(6). <https://doi.org/10.59188/covalue.v15i6.4860>
- Jacova, H., & Horak, J. (2015). Enterprise resource planning systems as a support tool of increasing of performance of the company. In *Information and Software Technologies: 21st International Conference, ICIST 2015, Druskininkai, Lithuania, October 15-16, 2015, Proceedings*

- 21 (pp. 257-267). Springer International Publishing. [https://doi.org/10.1007/978-3-319-24770-0\\_23](https://doi.org/10.1007/978-3-319-24770-0_23)
- Jain, P., Vyas, V., & Roy, A. (2017). Exploring the mediating role of intellectual capital and competitive advantage on the relation between CSR and financial performance in SMEs. *Social Responsibility Journal*, 13(1), 1-23. <https://doi.org/10.1007/s42943-020-00017-1>
- Jain, V. K., Gupta, A., & Verma, H. (2020). Millennials green consumption behavior and its linkage to firms marketing competitiveness: Findings from select study in Uttarakhand. *International Journal of Global Business and Competitiveness*, 15(2), 94-105. <https://doi.org/10.1007/s42943-020-00017-1>
- Järvinen, J., Tollinen, A., Karjaluo, H., & Jayawardhena, C. (2012). Digital and social media marketing usage in B2B industrial section. *Marketing Management Journal*, 22(2).
- Jones, T. M., Harrison, J. S., & Felps, W. (2018). How applying instrumental stakeholder theory can provide sustainable competitive advantage. *Academy of Management Review*, 43(3), 371-391. <https://doi.org/10.5465/amr.2016.0111>
- Jung, J., Kim, S. J., & Kim, K. H. (2020). Sustainable marketing activities of traditional fashion market and brand loyalty. *Journal of Business Research*, 120, 294-301. <https://doi.org/10.1016/j.jbusres.2020.04.019>
- Kano, K., Choi, L. K., Subhan Riza, B., & Octavyra, R. D. (2022). Implications of digital marketing strategy the competitive advantages of small businesses in Indonesia. *Startuppreneur Business Digital (SABDA Journal)*, 1(1), 44-62. <https://doi.org/10.33050/sabda.v1i1.72>
- Kaushik, R. (2016). Digital marketing in Indian context. *International Journal of Computational Engineering and Management*, 19(2), 12-17.
- Knudsen, E. S., Lien, L. B., Timmermans, B., Belik, I., & Pandey, S. (2021). Stability in turbulent times? The effect of digitalization on the sustainability of competitive advantage. *Journal of Business Research*, 128, 360-369. <https://doi.org/10.1016/j.jbusres.2021.02.008>
- Koman, G., Soviar, J., & Ďad'ová, I. (2020). Possibilities of Building Company's Reputation with the Support of Digital Marketing Tools—A Case Study. In *Emerging Technologies in Computing: Third EAI International Conference, iCETiC 2020, London, UK, August 19–20, 2020, Proceedings 3* (pp. 304-317). Springer International Publishing. [https://doi.org/10.1007/978-3-030-60036-5\\_23](https://doi.org/10.1007/978-3-030-60036-5_23)
- Kraft, C., Lindeque, J. P., & Peter, M. K. (2022). The digital transformation of Swiss small and medium-sized enterprises: insights from digital tool adoption. *Journal of Strategy and Management*, 15(3), 468-494. <https://doi.org/10.1108/JSMA-02-2021-0063>
- Kuntonbutra, S., Combsb, H., & Konosuc, T. (2019). The Effects of Digital Marketing and Market Orientation on Innovation and Firms' Performance. *Development*, 8(8).
- Latan, H. & Ghozali, I. (2017). Partial Least Square: Konsep, Metode, dan Aplikasi menggunakan program WarpPLS 5.0, Edisi ke-3, Semarang: Badan Penerbit Universitas Diponogoro
- Lee, V. H., Foo, A. T. L., Leong, L. Y., & Ooi, K. B. (2016). Can competitive advantage be achieved through knowledge management? A case study on SMEs. *Expert Systems with Applications*, 65, 136-151. <https://doi.org/10.1016/j.eswa.2016.08.042>
- Leonidou, L. C., Fotiadis, T. A., Christodoulides, P., Spyropoulou, S., & Katsikeas, C. S. (2015). Environmentally friendly export business strategy: Its determinants and effects on competitive advantage and performance. *International Business Review*, 24(5), 798-811. <https://doi.org/10.1016/j.ibusrev.2015.02.001>
- Lopez, S. (2023). Optimizing marketing ROI with predictive analytics: Harnessing big data and AI for data-driven decision making. *Journal of Artificial Intelligence Research*, 3(2), 9-36.



- Lučić, A. (2020). Measuring sustainable marketing orientation—Scale development process. *Sustainability*, 12(5), 1734. <https://doi.org/10.3390/su12051734>
- Mahto, R. V., & McDowell, W. C. (2018). Entrepreneurial motivation: a non-entrepreneur's journey to become an entrepreneur. *International Entrepreneurship and Management Journal*, 14, 513-526. <https://doi.org/10.1007/s11365-018-0513-8>
- Makkonen H., Pohjola M., Olkkonen R., Koponen A. (2014). Dynamic capabilities and firm performance in a financial crisis. *Journal of Business Research*, 67(1), 2707–2719. <https://doi.org/10.1016/j.jbusres.2013.03.020>
- Maksum, I. R., Rahayu, A. Y. S., & Kusumawardhani, D. (2020). A social enterprise approach to empowering micro, small and medium enterprises (SMEs) in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3), 50. <https://doi.org/10.3390/joitmc6030050>
- Malhotra, N. K. (2020). *Marketing Research* 7<sup>th</sup> Edition. Pearson UK.
- Martinez, M. G. (2014). Co-creation of value by open innovation: Unlocking new sources of competitive advantage. *Agribusiness*, 30(2), 132-147. <https://doi.org/10.1002/agr.21347>
- Merz, M. A., Zarantonello, L., & Grappi, S. (2018). How valuable are your customers in the brand value co-creation process? The development of a Customer Co-Creation Value (CCCV) scale. *Journal of Business Research*, 82, 79-89. <https://doi.org/10.1016/j.jbusres.2017.08.018>
- Mitchell, R. W., Wooliscroft, B., & Higham, J. (2010). Sustainable market orientation: A new approach to managing marketing strategy. *Journal of Macromarketing*, 30(2), 160-170. <https://doi.org/10.1177/0276146710361928>
- Mkwizu, K. H. (2019). Digital marketing and tourism: opportunities for Africa. *International Hospitality Review*, 34(1), 5-12. <https://doi.org/10.1108/IHR-09-2019-0015>
- Mogoş, R. I. (2015). Digital Marketing for Identifying Customers' Preferences--A Solution for SMEs in Obtaining Competitive Advantages. *International Journal of Economic Practices & Theories*, 5(3).
- Momaya, K. S. (2020). Return from COVID-19: Thinking differently about export competitiveness and sustainability. *International Journal of Global Business and Competitiveness*, 15(1), 1-9. <https://doi.org/10.1007/s42943-020-00012-6>
- Mostafa, R. B. (2016). Value co-creation in industrial cities: A strategic source of competitive advantages. *Journal of Strategic Marketing*, 24(2), 144-167. <https://doi.org/10.1080/0965254X.2015.1076885>
- Nguyen, T. H., Newby, M., & Macaulay, M. J. (2015). Information technology adoption in small business: Confirmation of a proposed framework. *Journal of Small Business Management*, 53(1), 207-227. <https://doi.org/10.1111/jsbm.12058>
- Nuseir, M., Aljumah, A., & El-Refae, G. (2022). Digital marketing and public relations: A way to promote public relations value. *International Journal of Data and Network Science*, 6(4), 1331-1340. <https://doi.org/10.5267/j.ijdns.2022.6.002>
- OECD (2018), *OECD Ministerial Conference on Promoting Innovation in Established SMEs*, Mexico City.
- Opata, C. N., Xiao, W., Nusenu, A. A., Tetteh, S., & Opata, E. S. (2019). Customer willingness to participate in value co-creation: The moderating effect of social ties (empirical study of automobile customers in Ghana). *Cogent Business & Management*. <https://doi.org/10.1080/23311975.2019.1573868>
- Papa, A., Santoro, G., Tirabeni, L., & Monge, F. (2018). Social media as tool for facilitating knowledge creation and innovation in small and medium enterprises. *Baltic Journal of Management*, 13(3), 329-344. <https://doi.org/10.1108/BJM-04-2017-0125>

- Papadas, K. K., Avlonitis, G. J., Carrigan, M., & Piha, L. (2019). The interplay of strategic and internal green marketing orientation on competitive advantage. *Journal of Business Research*, 104, 632-643. <https://doi.org/10.1016/j.jbusres.2018.07.009>
- Peterson, M., Minton, E. A., Liu, R. L., & Bartholomew, D. E. (2021). Sustainable marketing and consumer support for sustainable business. *Sustainable Production and Consumption*, 27, 157-168. <https://doi.org/10.1016/j.spc.2020.10.018>
- Piligrimienė, Ž., Dovalienė, A., & Virvilaitė, R. (2015). Consumer engagement in value Co-Creation: what kind of value it creates for company?. *Inžinerinė ekonomika*, 452-460. <https://doi.org/10.5755/j01.ee.26.4.12502>
- Pollák, F., & Markovič, P. (2021). Size of business unit as a factor influencing adoption of digital marketing: Empirical analysis of SMEs operating in the central European market. *Administrative Sciences*, 11(3), 71. <https://doi.org/10.3390/admsci11030071>
- Pradhan, P., Nigam, D., & Ck, T. (2018). Digital marketing and SMES: An identification of research gap via archives of past research. *Journal of Internet Banking and Commerce*, 23(1), 1-14.
- Puvzhirasi, M., Illakiya., Pachiyappan, K. M., Divya, R., Raman, S., & Sharmila, M. (2024). A Review Article On The Impact And Evolution Of Sustainable Brands. *International Journal For Multidisciplinary Research*, 3.
- Rahman, M. S., AbdelFattah, F. A., Bag, S., & Gani, M. O. (2022). Survival strategies of SMEs amidst the COVID-19 pandemic: application of SEM and fsQCA. *Journal of Business & Industrial Marketing*, 37(10), 1990-2009. <https://doi.org/10.1108/JBIM-12-2020-0564>
- Ritz, W., Wolf, M., & McQuitty, S. (2019). Digital marketing adoption and success for small businesses: The application of the do-it-yourself and technology acceptance models. *Journal of Research in interactive Marketing*, 13(2), 179-203. <https://doi.org/10.1108/JRIM-04-2018-0062>
- Saha, V., Goyal, P., & Jebarajakirthy, C. (2022). Value co-creation: a review of literature and future research agenda. *Journal of Business & Industrial Marketing*, 37(3), 612-628. <https://doi.org/10.1108/JBIM-01-2020-0017>
- Sahi, G. K., Devi, R., Gupta, M. C., & Cheng, T. C. E. (2022). Assessing co-creation based competitive advantage through consumers' need for differentiation. *Journal of Retailing and Consumer Services*, 66, 102911. <https://doi.org/10.1016/j.jretconser.2022.102911>
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In *Handbook of market research* (pp. 587-632). Cham: Springer International Publishing. [https://doi.org/10.1007/978-3-319-57413-4\\_15](https://doi.org/10.1007/978-3-319-57413-4_15)
- Saura, J. R., Palacios-Marqués, D., & Ribeiro-Soriano, D. (2023). Digital marketing in SMEs via data-driven strategies: Reviewing the current state of research. *Journal of Small Business Management*, 61(3), 1278-1313. <https://doi.org/10.1080/00472778.2021.1955127>
- Saura, J. R., Palos-Sanchez, P., & Rodríguez Herráez, B. (2020). Digital marketing for sustainable growth: Business models and online campaigns using sustainable strategies. *Sustainability*, 12(3), 1003. <https://doi.org/10.3390/su12031003>
- Scuotto, V., Del Giudice, M., Della Peruta, M. R., & Tarba, S. (2017). The performance implications of leveraging internal innovation through social media networks: An empirical verification of the smart fashion industry. *Technological Forecasting and Social Change*, 120, 184-194. <https://doi.org/10.1016/j.techfore.2017.03.021>
- Scuotto, V., Santoro, G., Bresciani, S., & Del Giudice, M. (2017). Shifting intra-and inter-organizational innovation processes towards digital business: an empirical analysis of SMEs. *Creativity and Innovation Management*, 26(3), 247-255. <https://doi.org/10.1016/j.techfore.2017.03.021>

- Sen, S., Budiman, A., Na, M., & Mohammadi, A. (2023). Role of Value Co-Creation between Information Interaction Capabilities and Competitive Advantage in SMEs, Henan Province, China. *Journal of International Business and Management*, 6(6), 01-22.
- Sharabati, A. A. A., Ali, A. A. A., Allahham, M. I., Hussein, A. A., Alheet, A. F., & Mohammad, A. S. (2024). The Impact of Digital Marketing on the Performance of SMEs: An Analytical Study in Light of Modern Digital Transformations. *Sustainability*, 16(19), 8667. <https://doi.org/10.3390/su16198667>
- Sharma, P. (2021). Customer co-creation, COVID-19 and sustainable service outcomes. *Benchmarking: An International Journal*, 28(7), 2232-2258. <https://doi.org/10.1108/BIJ-10-2020-0541>
- Sheth, J. N., & Hellman, K. (2018). Unleashing the co-creation of value. *The Marketing Journal*.
- Sheth, J. N., & Parvatiyar, A. (2021). Sustainable marketing: Market-driving, not market-driven. *Journal of macromarketing*, 41(1), 150-165. <https://doi.org/10.1177/0276146720961836>
- Sigalas, C. (2015). Competitive advantage: the known unknown concept. *Management Decision*, 53(9), 2004-2016. <https://doi.org/10.1108/MD-05-2015-0185>
- Singh, S., Singh, G., & Dhir, S. (2022). Impact of digital marketing on the competitiveness of the restaurant industry. *Journal of Foodservice Business Research*, 1-29. <https://doi.org/10.1080/15378020.2022.2077088>
- Solakis, K., Peña-Vinces, J., & Lopez-Bonilla, J. M. (2022). Value co-creation and perceived value: A customer perspective in the hospitality context. *European research on management and business economics*, 28(1), 100175. <https://doi.org/10.1016/j.iedeen.2021.100175>
- Sonar, H. C., Khanzode, V., & Akarte, M. (2020). A conceptual framework on implementing additive manufacturing technology towards firm competitiveness. *International Journal of Global Business and Competitiveness*, 15(2), 121-135. <https://doi.org/10.1007/s42943-020-00015-3>
- Suh, T., & Chow, T. E. (2021). Developing a digital marketing tool for ethnic ventures' mixed business model and market-shaping: A design scientific approach of web demographics. *Industrial Marketing Management*, 93, 10-21. <https://doi.org/10.1016/j.indmarman.2020.12.014>
- Sun, Y., Xu, X., Yu, H., & Wang, H. (2022). Impact of value co-creation in the artificial intelligence innovation ecosystem on competitive advantage and innovation intelligibility. *Systems Research and Behavioral Science*, 39(3), 474-488. <https://doi.org/10.1002/sres.2860>
- Syah, T. Y. R., & Olivia, D. (2022). Enhancing patronage intention on online fashion industry in Indonesia: The role of value co-creation, brand image, and e-service quality. *Cogent Business & Management*, 9(1), 2065790. <https://doi.org/10.1080/23311975.2022.2065790>
- Tajvidi, M., Richard, M. O., Wang, Y., & Hajli, N. (2020). Brand co-creation through social commerce information sharing: The role of social media. *Journal of Business Research*, 121, 476-486. <https://doi.org/10.1016/j.jbusres.2018.06.008>
- Teece D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51, 40-49. <https://doi.org/10.1016/j.lrp.2017.06.007>
- Teece D. J., Pisano G., Shuen A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7%3C509::AID-SMJ882%3E3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7%3C509::AID-SMJ882%3E3.0.CO;2-Z)
- Thaha, A. R., Maulina, E., Muftiadi, R. A., & Alexandri, M. B. (2021). Digital marketing and SMEs: a systematic mapping study. *Library Philosophy and Practice*, 2021, 1-19.
- Troise, C., & Camilleri, M. A. (2021). The use of digital media for marketing, CSR communication and stakeholder engagement. In *Strategic corporate communication in the digital age* (pp. 161-174). <https://doi.org/10.1108/978-1-80071-264-520211010>

- Tu, Y., & Wu, W. (2021). How does green innovation improve enterprises' competitive advantage? The role of organizational learning. *Sustainable Production and Consumption*, 26, 504-516. <https://doi.org/10.1016/j.spc.2020.12.031>
- Tukamuhabwa, B., Mutebi, H., & Kyomuhendo, R. (2021). Competitive advantage in SMEs: Effect of supply chain management practices, logistics capabilities and logistics integration in a developing country. *Journal of Business and Socio-Economic Development*. <https://doi.org/10.1108/JBSED-04-2021-0051>
- Wairimu, W. W. (2015). Micro, small and medium-size enterprises (MSMEs) as suppliers to the extractive industry. *United Nations Development Programme Report*.
- Weru, M., & Mbugua, D. (2017). Effect of information and communication technologies on competitiveness of manufacturing small and medium scale enterprises. *International journal of social sciences and Information Technology*, 3(3)
- Zaborek, P., & Mazur, J. (2019). Enabling value co-creation with consumers as a driver of business performance: A dual perspective of Polish manufacturing and service SMEs. *Journal of Business Research*, 104, 541-551. <https://doi.org/10.1016/j.jbusres.2018.12.067>
- Zhang, J., van Gorp, D., & Kievit, H. (2023). Digital technology and national entrepreneurship: An ecosystem perspective. *The Journal of Technology Transfer*, 48(3), 1077-1105. <https://doi.org/10.1007/s10961-022-09934-0>
- Zhang, L., Yang, W., Yang, L., & Gao, L. (2022). How does the value co-creation of e-commerce platform and manufacturers affect channel performance? The moderating role of innovation capability and market turbulence. *Electronic Commerce Research and Applications*, 52, 101120. <https://doi.org/10.1016/j.elerap.2022.101120>
- Zhang, T., Lu, C., Torres, E., & Cobanoglu, C. (2020). Value co-creation and technological progression: a critical review. *European Business Review*, 32(4), 687-707. <https://doi.org/10.1108/EBR-08-2019-0149>
- Zhao, Y., Chen, Y., Zhou, R., & Ci, Y. (2019). Factors influencing customers' willingness to participate in virtual brand community's value co-creation: The moderating effect of customer involvement. *Online Information Review*, 43(3), 440-461. <https://doi.org/10.1108/OIR-08-2017-0232>