

# The Effect of Digital Marketing-Upgrading and Product Virality on the Sustainability of MSMEs

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## ABSTRACT

*This study aims to understand the role of consumer behavior in mediating the influence of virality, digital marketing, and product enhancement on the desires of MSMEs in East Java. This study expands our understanding of the impact of digital marketing, product enhancement, and virality on the desires of MSMEs in East Java, focusing on diverse consumer behavior. With a quantitative approach, this study uses a survey method with a questionnaire as the main instrument, involving 160 respondents from various cities in East Java, including Surabaya, Malang, and Mojokerto. The variables explained include digital marketing (X1) consisting of social media indicators, websites, and mobile marketing; product enhancement (X2) such as product quality and innovation; and virality (X3) which includes content creativity and the use of influencers. Consumer behavior (Y) focuses on satisfaction, loyalty, and interest, as well as MSME desires (Z) which are measured through profitability and public acceptance. The results of the analysis show that digital marketing has a positive effect on consumer behavior, which has an impact on increasing customer loyalty and satisfaction. In addition, product enhancement and virality significantly affect the desire of MSMEs, with consumers more interested in modern and popular products.*

**Keywords:** Digital Marketing, Product Upgrading, Consumer Behavior, Sustainability, MSMEs

## ABSTRAK

*Penelitian ini bertujuan untuk memahami peran perilaku konsumen dalam memediasi pengaruh viralitas, pemasaran digital, dan peningkatan produk terhadap keberlanjutan UMKM di Jawa Timur. Penelitian ini memperluas pemahaman kita tentang dampak pemasaran digital, peningkatan produk, dan viralitas terhadap keberlanjutan UMKM di Jawa Timur, dengan fokus pada perilaku konsumen yang beragam. Dengan pendekatan kuantitatif, penelitian ini menggunakan metode survei dengan kuesioner sebagai instrumen utama, melibatkan 160 responden dari berbagai kota di Jawa Timur, termasuk Surabaya, Malang, dan Mojokerto. Variabel yang dianalisis meliputi pemasaran digital (X1) yang terdiri dari indikator media sosial, situs web, dan pemasaran mobile; peningkatan produk (X2) seperti kualitas dan inovasi produk; serta viralitas*

(X3) yang mencakup kreativitas konten dan penggunaan influencer. Perilaku konsumen (Y) difokuskan pada kepuasan, loyalitas, dan ketertarikan, sementara keberlanjutan UMKM (Z) diukur melalui profitabilitas dan penerimaan masyarakat. Hasil analisis menunjukkan bahwa pemasaran digital berpengaruh positif terhadap perilaku konsumen, yang berdampak pada peningkatan loyalitas dan kepuasan pelanggan. Selain itu, peningkatan produk dan viralitas secara signifikan memengaruhi keberlanjutan UMKM, dengan konsumen yang lebih tertarik pada produk yang modern dan populer.

**Kata kunci:** Pemasaran Digital, Peningkatan Produk, Perilaku Konsumen, Keberlanjutan, UMKM

## INTRODUCTION

Changes and updates in the Society 5.0 Era make business people face challenges and also have extraordinary positive impacts. Business people are greatly helped by advances in technology and information systems to run their businesses. Business actors, especially micro, small and medium businesses, must take part in taking advantage of the progress of civilization in order to realize the sustainability of their businesses. Apart from demands to follow advances in technology and digitalization, MSME players are required to follow increasingly modern market or consumer demands (Jones et al., 2014). Market demand is influenced by changes in consumer behavior following the progress of civilization or era. Several points that are requests for consumer behavior are regarding businesses that have implemented digital marketing mechanisms, upgrading the latest products, and virality of branding of a business product. These three things greatly influence how a consumer responds to a product. Of course, this affects how the existence of the business or venture continues.

Mehralian (2022), said that the sustainability of a business in the current era of digitalization requires following the flow of technological progress. Business people should apply technological advances in their business processes and activities. Apart from technological advances that must be followed by implementation, market demands for consumer behavior must also be studied and followed by business people. Because these two things really influence the sales of their products. As it will affect the profitability and sustainability of their business. Yunus et al. (2022), argue that digital marketing and product enhancement greatly influence consumer purchasing decision demand. One of the points in digital marketing is viral marketing which can make consumers interested in buying a product. Consumers are also very interested in product upgrading in terms of packaging and taste innovation as has been researched in research.

Awawdeh et al. (2022), strengthen the research statement above with similar research results. Consumers in today's society are greatly influenced by the virality of product branding. Even in his research, consumers currently really trust products that have high virality on social media. This phenomenon explains that the influence of the virality of a product brand greatly influences consumer purchasing decisions. In other words, product sales will increase drastically. Habib et al. (2022), do not agree with the research above, as stated in their research that in the business world it is not necessary to keep up with the times. The research is supported by evidence from the samples studied, namely MSMEs in North Sumatra using a qualitative approach. The most important business development is how entrepreneurs are able to create creativity and innovation related to their products. So that their products can be accepted by the wider community. Another consideration from their research, Habib and his friends said that in developing countries regarding digital marketing and product upgrading which must be completely modern and up to date there is still no need to do this because the condition and situation of society in developing countries (Indonesia) is still classified as not being attractive and impulsive in terms of technological progress. So, it is still common to say that society still has an unequal standard of living, for example the people of Java and Sumatra.

Pitoyo & Riyanto (2022), developing countries demanding that business actors, especially MSMEs, follow the current developments and meet consumer demand which has begun in a new phase, namely the era of society, will of course make it difficult for business actors and tend to get confused. This is because in developing countries not all communities in each region have the same human resources and also the same economy. Digital marketing and product branding are not that important for business actors, especially MSMEs. Considering the condition of society which is still not fully in the all-digital phase of technology and modernization. The overview of various research gaps outlined above motivates researchers to explore the impact of Digital Marketing, Product Upgrading, and Virality on MSMEs, taking into account the differing consumer behaviors in East Java. This will be achieved using statistical databases to generate new arguments grounded in robust field data. Additionally, researchers will review literature and prior studies related to the topic to enhance the discussion and findings of this research.

## **LITERATURE REVIEW**

Dewi et al. (2022), seeks to investigate and analyze the impact of digital marketing and customer relationship marketing on the development of brand image at a hotel in Bali. Additionally, it aims to explore how brand image influences tourists' decisions regarding this hotel, as well as the effect of digital marketing on those decisions, with brand image serving as a mediator. The findings indicate that digital marketing positively and significantly impacts brand image; however, it does not directly enhance tourists' decisions. In contrast, brand image has a positive and significant effect on tourists' decisions. Furthermore, customer relationship marketing influences brand image and subsequently affects tourists' decisions. Indirectly, digital marketing does not positively affect tourist decisions via brand image, suggesting that brand image fails to mediate the relationship between digital marketing and tourists' decisions.

The purpose study by Susanti et al. (2022), show a ascertain, using customer satisfaction as a mediator, the impact of entrepreneurial and digital marketing on customer loyalty at Rumah Bintang Embroidery and Embroidery. The customer loyalty variable is the only one covered by this study, and the data came from one embroidery MSME in Bukittinggi City. As a result, broad conclusions about the research's findings are not possible. The study centers on the correlation between digital and entrepreneurial marketing strategies and customer loyalty, with a particular emphasis on the mediating function of customer satisfaction characteristics.

Investigates the influence of the Internet of Things (IoT) on marketing performance by considering the potential mediating role of entrepreneurial orientation in this effect. The findings show that IoT has a significant positive effect on marketing performance and also on entrepreneurial orientation. Entrepreneurial orientation was found to have a significant positive influence on marketing performance. This study also investigates the impact of IoT on marketing performance with the mediation of entrepreneurial orientation. The findings of this research provide business management and strategy professionals better insight into the relationship between IoT and marketing performance (Mehralian, 2022; Wasim et al., 2024).

Study of Mehralian & Khazae (2022), examines how the Internet of Things (IoT) affects marketing performance, taking into account the possible mediating function that entrepreneurial attitude may have in this relationship. The results demonstrate that IoT significantly improves both entrepreneurial orientation and marketing performance. Marketing performance was found to be significantly improved by entrepreneurial orientation. This study also analyzes the impact of IoT on marketing performance with the mediation of entrepreneurial orientation. Professionals in corporate management and strategy will gain greater understanding of the connection between IoT and marketing performance according to the research's findings.

By using purchasing interest on Shopee e-commerce as a mediator, this study seeks to examine how promotions and digital marketing affect consumer decisions. The study's findings demonstrate the positive and substantial influence that digital marketing

and promotions have on consumers' propensity to make purchases. Aside from this, the mediating variable of purchasing desire has a positive influence on judgments about purchases, although the digital marketing variable does not. Promotion, on the other hand, positively influences decisions about purchases (Ansari et al., 2017; Liu, 2020).

The study by Yunus et al. (2022), findings demonstrate the strong positive correlation between CRM and Digital Marketing and Online Trust. Additionally, there is a strong correlation between online purchase intent and CRM and digital marketing. Regretfully, online customer purchase intentions are not greatly influenced by online trust. Furthermore, in Banda Aceh, Aceh Province, Indonesia, CRM acts as a mediator in the interaction between digital marketing and online trust regarding e-commerce consumers' intentions to make online purchases. The study's findings indicate that CRM mediates the association between the factors examined and e-commerce customers' inclinations to make online purchases. Furthermore, this study demonstrated the importance of CRM by successfully examining the variables that affect consumers' intents to make online purchases.

Al Hosni et al. (2023), explained in his research about ascertain the relationship between competitive advantage and marketing performance, as well as the relationship between competitive advantage and digital marketing and marketing performance. 50 SMEs made up the study's population. According to the study's findings, digital marketing and competitive advantage have a big impact on marketing effectiveness. Competitive advantage has a considerable impact on marketing performance; but, when it comes to the mediating influence, the combined impact of the three independent factors outweighs the direct impact. The study's findings demonstrate that competitive advantage acts as a mediator between digital marketing's indirect impact and marketing performance.

The notion of sustainability pertains to how businesses conduct their operations while considering the long-term viability of their resource base. Elkington (1997), established the concept of the triple bottom line, which is included in sustainability. Profit, People, and Planet are the three Ps that are the center of this notion. According to this idea, businesses must actively contribute to protecting the environment (planet) in order to ensure the sustainability of resources, in addition to their primary priority, which is profit. They also need to consider the welfare of the local community (people). In order to ensure the long-term viability of the business and generate sustainable earnings, the corporation must maintain a sustainable environment and resources.

Sustainable firm must, in general, be able to run its operations using the three components known as the 3Ps, which are as follows: Every business institution must have profit as its primary objective, or the potential to generate profits and sustainability from the business. People (Society): A business has ties to the local community in addition to pursuing profit. It is crucial to keep in mind that a sustainable business is one that benefits society as a whole in addition to its owners and employees. It is impossible to separate the planet (environment), society, and the environment since they are all crucial to the continuity of commercial operations. Running a business is one of the continuing human activity that is connected to the environment. The behaviors of people, groups, or organizations concerning the acquisition, utilization, and disposal of goods and services are referred to as consumer behavior. This includes how their emotions, attitudes, and preferences can influence purchase behavior. In order to identify their target market and learn how to provide customers and consumers with more appealing product and service offers, firms typically look into consumer behavior research.

Studying consumer behavior is very important for business, because it can help marketing and business teams understand what things can influence consumer purchasing decisions. By understanding how consumers behave when deciding on a product, businesses can fill market gaps and identify what products consumers need. Apart from that, studying consumer behavior can also help marketers decide how to present their products so that they can produce maximum impact on consumers. In short, consumer behavior studies are very important for businesses because they are the secret key to reaching and engaging consumers, and turning them into loyal buyers.

Studies on consumer behavior explore various aspects of how consumers make decisions and interact with products and brands. One area of study focuses on how customers feel and think about different alternatives, such as brands, products, services, and retailers. Another aspect involves how consumers evaluate the pros and cons of different options. Additionally, consumer behavior research examines how individuals shop and conduct research, how they are influenced by their environment (friends, society, media), and how marketing tactics can be improved to better influence customers. These considerations are influenced by three key factors. First, individual factors, which include a person's beliefs, interests, and demographic variables such as age, gender, culture, and occupation. Second, psychological factors, which encompass how people perceive and interpret information, their sense of needs, and their attitudes, leading to different responses to marketing efforts. Lastly, social factors, such as age groups, social media influence, family, friends, education level, income, and social class, also play a role.

There are different types of consumer behavior. One is intricate purchasing patterns, typically seen when consumers buy expensive and infrequently purchased items. In such cases, consumers are deeply involved in the process, conducting thorough research before making a decision, like when buying a house or vehicle. Another type is purchases aimed at reducing cognitive dissonance, where consumers participate actively in the shopping process but find it difficult to distinguish between brands. Dissonance may arise when they fear second-guessing their decision, such as when purchasing a smartphone. The third type is habitual purchase patterns, where consumers exert little effort in choosing product categories or brands, like picking their preferred brand of bread during grocery shopping. Finally, there is variety-seeking behavior, where consumers try different products not out of dissatisfaction but in search of a new experience, such as experimenting with a new scent of body soap.

Elkington (1997) defined TBL as social fairness, environmental quality, and economic prosperity in his book *Cannibals with Forks*. Sustainability is defined as "the entire set of values, issues, and processes that companies must address in order to minimize any harm resulting from their activities and to create economic, social, and environmental value," as seen in a quotation (Ferrarini, 2021). A more specific definition might be: a system for evaluating and disclosing business success in relation to social, environmental, and economic factors.

TBL can be defined as three pillars of performance measurement, namely from an economic or financial, social, and environmental perspective, based on the definitions given above. The TBL concept, as a performance indicator, is frequently split into two main categories: financial and social. Three categories are typically used by businesses to assess their financial performance: profitability in absolute terms, return on equity or return on assets, and a variety of accounting metrics with a score ranging from 0 to 10. Corporate Social Responsibility (CSR) is the term used to describe performance measurement that takes into account social and environmental factors.

Strategy for Digital Marketing the Greek term for strategy, indicates "the art or science of becoming a general." A plan for the deployment and application of military power in specific regions to accomplish particular objectives can also be understood as a form of strategy. Although the term strategy was originally employed in reference to war and the armed forces, it has now expanded to include usage in the corporate and business spheres. Grainger-Brown & Malekpour (2019), asserts that strategy is a tool with long-term objectives for the business. Business strategies include regional expansion, diversification, acquisition, product development, market penetration, divestment, liquidation and joint ventures.

Based on the understanding of these experts, it can be concluded that digital marketing is a marketing activity that utilizes the internet and information technology to reach target consumers, expand markets and increase sales. Through digital marketing, consumers can more easily obtain product information by surfing in cyberspace (Yoga et al., 2019; Sawlani & Se, 2021; Suryanto, 2021). Digital marketing is known to have a

positive impact on sales volume (Dolega et al., 2021). Digital marketing consists of several types or tools, such as: Search Engine Optimization (SEO), Search Engine Marketing (SEM), Social Media Marketing (SMM), Content Marketing, Email Marketing, Online Advertising, Landing Page Marketing, Smartphone Audience Marketing, Mobile Marketing, Affiliate Marketing and Viral Marketing.

Upgrading is an activity to improve quality, knowledge and socio-economic knowledge. As the basic word is, upgrading is upgrading, namely increasing. The aim is to add or update a value so that there is an improvement from before. Usually what this means is changing for the better. As every human does, we must always change to be better. Likewise with other elements such as products. Upgrading products cannot be separated from quality (Aisyah et al., 2022; Medina, 2024). Sunghayok et al. (2024), product quality has several dimensions, namely (1) Performance, the basic characteristics of a product. For example, speed of delivery, product cleanliness. (2) Reliability, the possibility of product failure is small. (3) Conformity, the level of conformity of the product with established standards. For example, on time delivery of products. (4) Durability, the ability of the product when used to be better during normal use, and (5) aesthetics, regarding the appearance of the product which can be assessed. (6) Perceived quality, quality assessed based on the seller's reputation. Business people certainly have to involve themselves in evaluating the products and services they sell to consumers. The goal is to make their products so they can always compete with other products. Of course, as time goes by. There will definitely be new competitors who are more modern and more liked by today's society. This of course requires evaluation and upgrading of a product, whether goods or services.

Virality is a phrase, generally known as “going viral”, that refers to a new video, tool, application, material, product, software program, game, or other online-based item that generates up to hundreds of millions of views from individuals utilizing it. the item or service. Whether intentional or not, a brand's social media virality can raise exposure of the brand. Social media users can communicate with one another and express their thoughts, and depending on each user's point of view, this might result in a positive or negative brand image. As a result, it's critical to consider how this information is packaged to ensure that users of social media can easily understand the message. Apart from that, the maximum virality of a brand can simultaneously apply promotional techniques through soft selling, where social media users will be curious and then find out more about the brand, and ultimately be moved to buy it. So, you can reduce promotional costs which usually cost the most. This can be an opportunity for brands to create a continuation strategy for the virality that occurs and lead to increased sales.

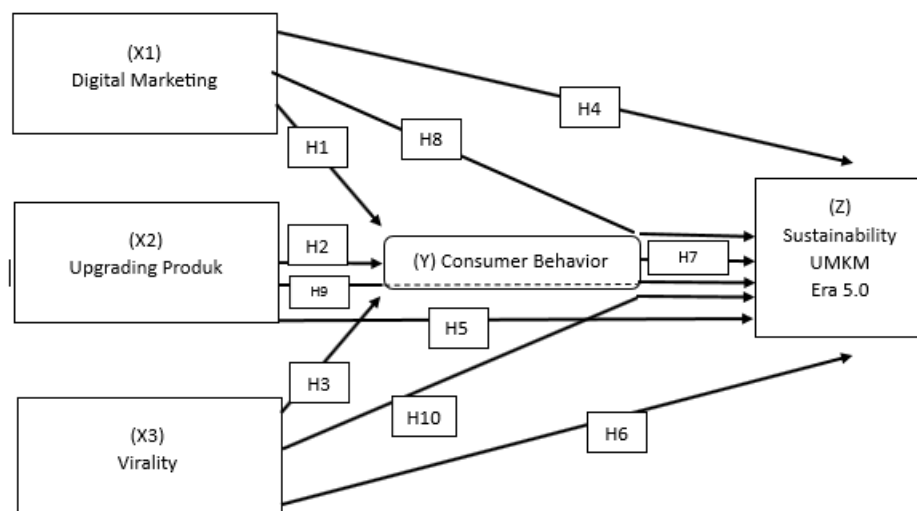


Figure 1. Conceptual Framework

- H1: Consumer behavior is positively and significantly (real) influenced by digital marketing.
- H2: Product enhancement has a beneficial and substantial (real) impact on customer behavior.
- H3: Virality influences consumer behavior in a positive, meaningful, and real way.
- H4: MSME sustainability has a positive and significant (real) impact on digital marketing.
- H5: Product enhancement has a beneficial and significant (real) effect on MSME sustainability.
- H6: MSME sustainability has a positive and significant (real) impact on virality.
- H7: MSME sustainability has a positive and significant (real) impact on consumer behavior.
- H8: Digital marketing influences MSME sustainability through customer behavior as a mediating variable.
- H9: Product enhancement influences MSME sustainability through the mediating variable of consumer behavior
- H10: Virality has a mediating effect on MSME sustainability through consumer behavior.

**METHODS**

This quantitative research tests hypotheses using a survey method, with questionnaires as the main data collection tool. The population is MSMEs in East Java, with a sample size of 160 respondents determined using accidental sampling. Respondents were selected from cities with higher economic activity, such as Surabaya, Sidoarjo, Gresik, Pasuruan, Mojokerto, Malang, and Batu, representing various generations: Baby Boomers (35), Generation X (45), Generation Y (50), and Generation Z (30). The primary data used in this research were collected directly from MSMEs through questionnaires focused on digital marketing, product upgrading, consumer behavior, and MSME sustainability. The variables are divided into several dimensions, such as social media use, product quality, content creativity, consumer satisfaction, and profitability. For example, digital marketing (X1) includes indicators like social media, websites, and mobile marketing. Product upgrading (X2) includes product quality, innovation, and packaging. Virality (X3) measures creativity and the use of influencers, while consumer behavior (Y) focuses on satisfaction, loyalty, and attraction. Lastly, MSME sustainability (Z) covers profitability and community acceptance. Path analysis was used to analyze the relationships between these variables, following traditional assumption tests. Each variable has specific question items addressing key aspects, such as the impact of digital marketing on consumer satisfaction and the role of product upgrading in ensuring MSME sustainability. Overall, this research provides a comprehensive overview of the factors influencing the growth and sustainability of MSMEs in East Java.

**RESULTS**

A traditional assumption test came before the data analysis utilizing path analysis. The residual data was found to be normally distributed Asymp Sig. 2 tailed > 0.05 by the performed normality test. The multicollinearity test results also met the requirements, showing no symptoms based on tolerance values above 0.10 and VIF below 10, and the Glejser test could be considered as non-occurring. heteroscedasticity due to a p-value greater than 0.05.

**Table 1.** Classic Assumption Test Results

Ind	Dep	Normality Sig. 2 Tailed	Multicollinearities		Heteroskedasticities
			Tol	VIF	(Glejser / Sig.)
X1	Z	0.873	0.500	2.000	0.080
X2			0.585	1.709	0.457
X3			0.517	1.932	0.616
Y			0.525	1.875	0.528

Table 2. Direct Influence and Indirect Influence

Hypothesis	Coefficient	t	t-table	Sig.	Decision	Conclusion
X1->Y	0.483	5.318	1.985	0.000	H <sub>1</sub> accepted	Significant
X2->Y	0.288	3.170	1.985	0.002	H <sub>2</sub> accepted	Significant
X3-> Y	0.238	2.688	1.985	0.008	H <sub>3</sub> accepted	Significant
X1->Z	0.189	2.308	1.985	0.023	H <sub>4</sub> accepted	Significant
X2->Z	0.475	5.447	1.985	0.000	H <sub>5</sub> accepted	Significant
X3-> Z	0.229	3.094	1.985	0.001	H <sub>6</sub> accepted	Significant
Y->Z	0.136	2.333	1.985	0.019	H <sub>7</sub> accepted	Significant
X1->Y->Z	0.324	4.115	1.985	0.003	H <sub>8</sub> accepted	Significant
X2->Y->Z	0.288	3.356	1.985	0.009	H <sub>9</sub> accepted	Significant
X3->Y->Z	0.215	3.024	1.985	0.018	H <sub>10</sub> accepted	Significant

Direct Influence Based on Table 2, the results of path analysis on direct influence can be made into the following equation:

$$(1) Y = 0,483X1 + 0,288X2 + 0,238X3 + e1$$

$$(2) Z = 0,189X1 + 0,475X2 + 0,229X3 + 0,136Y + e2$$

With a coefficient value of 0.483, digital marketing influences customer behavior in a favorable way. The digital marketing variable's t-value, as determined by the t test, was 5.318, with a t significance of 0.000. H<sub>1</sub> is approved since t-count > t-table produced a result of 5.318 > 1.985 or because t's significance is less than 5% (0.000 < 0.05). These findings indicate that the MSME consumer behavior variable is directly impacted by the digital marketing variable in a favorable and meaningful (real) way. With a coefficient value of 0.288, product upgrading significantly influences consumer behavior in a positive way. 3.170 was the computed t-value for the product upgrading variable, and t-significance was found to be 0.002 in the t-test. H<sub>2</sub> is approved since t-count > t-table produced a value of 3.170 > 1.985 or because the significance of t is less than 5% (0.002 < 0.05). These findings indicate that the MSME consumer behavior variable is directly positively and significantly (really) impacted by the product upgrading variable.

A coefficient value of 0.238, virality significantly influences customer behavior in a positive way. With a t significance of 0.008, the t test on the virality variable yielded a computed t value of 2.688. H<sub>3</sub> is acceptable since t-count > t-table acquired a value of 2.688 > 1.985 or because t's significance is less than 5% (0.008 < 0.05). These findings indicate that the MSME customer behavior variable is directly positively and significantly (really) impacted by the virality variable. With a coefficient value of 0.189, digital marketing significantly improves the sustainability of MSMEs. The digital marketing variable's t-test findings yielded a computed t-value of 2.308 and a t-significance of 0.023. Because t-count > t-table acquired a value of 2.308 > 1.985 or the significance of t is smaller than 5% (0.023 < 0.05), then H<sub>4</sub> is approved. Based on these findings, the MSME Sustainability variable is directly impacted by the digital marketing variable in a positive and meaningful (actual) way.

Product upgrading, with a coefficient value of 0.475, significantly improves the sustainability of MSMEs. The product upgrading variable's t-value was 5.447 with a t significance of 0.000 according to the t test results. H<sub>5</sub> is approved since t-count > t-table produced a value of 5.447 > 1.985 or because the significance of t is less than 5% (0.000 < 0.05). These findings indicate that the MSME Sustainability variable is directly and significantly (really) positively impacted by the product upgrading variable. With a coefficient value of 0.229, virality significantly improves the sustainability of MSMEs. With a t significance of 0.001, the t-value for the Virality variable's t test results was 3.094. H<sub>5</sub> is approved since t-count > t-table produced a value of 3.094 > 1.985 or because the significance of t is less than 5% (0.001 < 0.05). These findings indicate that the MSME Sustainability variable is directly and significantly (really) positively impacted by the Virality variable.

Consumer behavior has a substantial positive influence on the sustainability of MSMEs with a coefficient value of 0.136. The consumer behavior variable's t-test findings

yielded a computed t-value of 2.333 and a t-significance of 0.019. H5 is acceptable since  $t\text{-count} > t\text{-table}$  acquired a value of  $2.333 > 1.985$  or because t's significance is less than 5% ( $0.019 < 0.05$ ). These findings indicate that the MSME Sustainability variable is directly and significantly (really) positively impacted by the consumer behavior variable. There is an indirect influence of digital marketing on the sustainability of MSMEs, which is mediated by customer behavior with a coefficient value of 0.324 ( $0.003 < 0.000$ ), H7 is accepted. These are the findings of research utilizing the Sobel Test Calculator for the Significance of Mediation. With a coefficient value of 0.288 ( $0.009 < 0.000$ ), the indirect impact of product upgrading on the sustainability of MSMEs is mediated by consumer behavior; H8 is accepted. With a coefficient value of 0.215 ( $0.018 < 0.000$ ), the indirect impact of virality on the sustainability of MSMEs is mediated by customer behavior; H10 is accepted.

## **DISCUSSION**

It is established that digital marketing influences consumer behavior in a favorable and meaningful (real) way based on data analysis results. This implies that consumer behavior, including pleasure and attractiveness in terms of purchase decisions, is accepted to a greater extent when digital marketing is performed well. Conversely, a severe downturn in digital marketing will significantly affect the declining acceptance of consumer behavior. Numerous prior researches have demonstrated the beneficial relationship between digital marketing and consumer behavior (Pujiastuti, 2021; Susanti et al., 2022; Dewi et al., 2022; Keiper et al., 2024; Al-Shaikh et al., 2024). Customers are interested in the methods and sales promotion strategies used by MSMEs through digital platforms like websites, YouTube, social media, and so forth, which has been shown to impact interest in consumer behavior in this day and age. Additionally, customers can more easily obtain information about embroidered goods, leading to an increase in customer satisfaction a measure of consumer or customer behavior (Tolstoy et al., 2022). The study's findings also showed that improving a product had a favorable and noteworthy (actual) impact on MSMEs' customers' interest in what they desire in the era of society 5.0.

This implies that purchase attractiveness and customer happiness increase with better product upgrading. Nonetheless, consumer behavior indicates that consumers are less attracted and satisfied with products that have undergone poorer upgrades. These findings are consistent with earlier research Rumijati & Hakim (2023), demonstrating a strong relationship between product innovation and consumer happiness. By implementing innovative products and effective branding strategies, business actors can enhance consumer happiness and pave the way for future corporate growth (sustainability). The phenomena that consumer behavior has altered to become more modern and contemporary is also evident in the period of society 5.0. Social media, newspapers, and other media platforms can all demonstrate this phenomenon, which demonstrates how customer behavior tends to be more interested in goods or services with viral branding. This indicates that the product branding is already in place, well-known in the general public, and has the potential to expand internationally. Given that digital marketing can rapidly expand over a large geographic area, Rosandy & Fahmi (2022). This assertion is in line with the results of study undertaken by researchers that the virality variable has a substantial effect on customer behavior.

The study's findings also demonstrate that digital marketing significantly and favorably (really) affects MSMEs' capacity to survive. This implies that the sustainability of MSMEs will rise with enhanced digital marketing, and vice versa. The study's conclusions are consistent with previous research (Mehralian, 2022). By balancing their needs, digital marketing can assist focused marketing efforts in raising customer awareness (Tolstoy et al., 2022). Similar to digital marketing, product upgrading contributes significantly and favorably to MSMEs' sustainability. This implies that MSMEs' sustainability will rise or become more stable if they upgrade their products more, and vice versa. These findings demonstrate that product upgrades will raise MSMEs' sustainability levels due to

customer sensitivity to change and the desire to try new things so that continuous and sustainable innovation and creativity are needed.

Likewise, with the virality of a product. As the results have been tested, currently virality has a very significant role or influence on business continuity. As explained in the previous statement, consumers in the current era society are very interested in things that are viral. As explained by Purwanto (2019), people around the world, especially Indonesia, have an interest in things that are very famous, familiar or viral. This virality also applies to a brand or company product. The study also revealed that the sustainability of MSMEs is positively and significantly (really) impacted by consumer behavior. This implies that the sustainability of MSMEs increases with increased customer satisfaction and attractiveness as measured by consumer behavior indicators and the other way around these findings concur with earlier research (Maulany, 2014; Purwanto, 2019; Amalana & Nugroho, 2022). Prior research has demonstrated that consumer behavior has a favorable impact on both customer happiness and customer loyalty. Of course, MSMEs will have a stronger or more consistent degree of sustainability when their customers or consumers are already loyal to a certain product.

This study demonstrates that, through partial mediation by consumer behavior, there is an indirect relationship between digital marketing, product upgrading, and virality and the sustainability of MSMEs. The findings of this study clarify and support the idea that, in the modern day, digital marketing, product innovation, and virality have a significant impact on customer demand as a type of consumer behavior. Naturally, a company's sustainability especially that of MSMEs will be very strong and consistent when customer demand is satisfied. Therefore, it is time for MSME players to study again how consumers behave in this era of society by developing three basic things that are very popular with society (consumers) in this very modern era. These three things include how MSME players make a new breakthrough in applying digital marketing to their products, then how they make the latest innovations and creativity for their products so that they are more contemporary and in line with what is in demand by the wider community, then how they create a scheme in a business strategy by combining digital marketing and upgrading their products so that their product branding goes viral. The importance of synergy from various parties, including the government through related agencies, to provide outreach and training to improve the quality and quantity of MSMEs in East Java. So, it is hoped that MSMEs in East Java will be able to sustain and have a positive impact on the economy of the people of East Java.

## **CONCLUSION**

This study enhances our understanding of how consumer behavior mediates the effects of virality, digital marketing, and product enhancement on the long-term sustainability of micro, small, and medium enterprises (MSMEs). It demonstrates that consumer behavior serves as a mediating factor in the relationship between virality, digital marketing, and product improvements with customer loyalty. These findings have significant implications for business practitioners, particularly in creating more appealing digital marketing content that can become viral. Content that consumers can easily find and recommend helps expand market reach organically. Additionally, MSMEs should focus on updating their products to be more modern and diverse to increase customer satisfaction. Such updates are expected not only to retain existing customer loyalty but also to attract new customers, thereby contributing to the business's long-term sustainability. Among its shortcomings is the fact that the research was limited to one MSME area—East Java—making it unable to apply the findings to a larger population. Only 160 MSMEs were able to respond, which is obviously insufficient to accurately depict the actual situation.

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