Optimizing SMEs Through Digital Design for Sustainable Industrial Development

Ferric Limano

Design Department, BINUS Graduate Program - Master of Design,
Bina Nusantara University,
Jakarta 11480, Indonesia
ferric.limano@binus.ac.id

Correspondence: ferric.limano@binus.ac.id

ABSTRACT

SMEs (Small and Medium Enterprises) are the pillars of Indonesia's economy, as evidenced by their significant contribution to the country's gross domestic product. The digital disruption era, particularly during the pandemic, has necessitated changes in product development and marketing strategies for SMEs, pushing them towards digital approaches. This research aims to study the application of digital design in branding and digital marketing strategies by SMEs, providing recommendations based on the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). The qualitative research method utilized data from two product samples: Maicih (Food) and Compass (Fashion). In the case of Maicih, engagement was built through a viral snack brand known for its unique spicy flavors, enjoyed socially. The brand's social media, featuring the tagline "cerita emak" (mother's stories), helped foster interaction and drive traffic to online marketplaces. For Compass, the focus was on building a sneaker community, facilitating buying and selling within the community, and fostering emotional connections through collaborations. This study encompasses market analysis, brand design, and the digital development and implementation process. SMEs that can adapt and sustain themselves can address the sustainability goal: "Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation."

Keywords: Design;Digital; Enterprises; Sustainability; SME

INTRODUCTION

SMEs are Micro, Small, and Medium Enterprises. SMEs play a vital role in a country's economy by increasing income and employment opportunities. SMEs are categorized based on the number of employees: micro (1-5 people), small (5-19 people), and medium (20-99 people). The maximum annual revenue for SMEs is IDR 600,000,000.00 (Lamazi et al., 2020). SMEs play a crucial role in increasing a country's Gross Domestic Product (GDP) through the products they generate. The significance of Micro, Small, and Medium Enterprises (SMEs) in Indonesia's economic growth is evident, with SMEs comprising 99% of all business units. In 2023, there were approximately 66 million SME entrepreneurs. SMEs contributed 61% to Indonesia's GDP, equivalent to IDR 9,580 trillion. Additionally, SMEs are a significant source of employment, absorbing around 117 million workers, which represents 97% of the total workforce (KADIN INDONESIA, 2023).

Gross Domestic Product (GDP) is certainly influenced by the products generated by SMEs, which can be marketed both nationally and internationally. This development is driven by technological advancements, particularly the Internet, as well as government-backed loans provided through fintech platforms by the Indonesian

Joint Funding Fintech Association (AFPI) (Pramaisshella & Fisabilillah, 2023). Business units must be able to implement digital operations, a necessity highlighted during the COVID-19 pandemic. With restrictions on direct operations, every business unit is required to conduct transactions digitally. This was evident in many SMEs in Denpasar, where they needed to survive amidst external challenges by adopting digital transformation (Widnyani et al., 2021). The following is data on the growth of MSMEs in Indonesia, which is currently recovering significantly (Table 1):

Table 1. Data SMEs 2018-2023
(KADIN INDONESIA, 2023)

Year	2018	2019	2020	2021	2023
Number of SMEs (Millions)	64.19	65.47	64	65.46	66
Growth %		1.98%	-2.24%	2.28%	1.52%

The disruption caused by the pandemic has compelled SMEs to adapt to the advancements in digital technology. This has become a global issue and should be a concern for every sector of business units (Zaoui & Souissi, 2020). Through this research, the author aims to provide recommendations for digital product design to assist SMEs in addressing the challenges of digital transformation. Additionally, this study is expected to serve as an option in responding to the sustainability goal challenges: "Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation"(Faremo, 2015). Within the SDGs, the goal is to optimize inclusive and sustainable industrialization through industrial development processes that provide equitable economic benefits to all members of society, while also leveraging cutting-edge materials and technology (United Nations, 2023). Based on this background, the research question to find the results is as follows: How do small and medium-sized enterprises (SMEs) utilize digital design to enhance their branding and digital marketing strategies?

METHODS

This research employs a qualitative method, with data collected based on case studies of SMEs from literature documents and internet media sources (Creswell & Creswell, 2018). The data is utilized to analyze and address the research question regarding how digital design recommendations can assist SMEs in achieving economic optimization and sustainability. This data is drawn from samples of successful SMEs in Indonesia to serve as case studies for future SME studies. The study process follows the ADDIE model. The ADDIE model is a framework for developing educational and training programs with five phases: Analysis, Design, Development, Implementation, and Evaluation. Analysis identifies learning needs and goals. Design creates a detailed plan and selects strategies. Development produces the materials. Implementation delivers the training to the audience. Evaluation assesses effectiveness and suggests improvements (Spatioti et al., 2022). The following is a schematic of this research method (Figure 1):
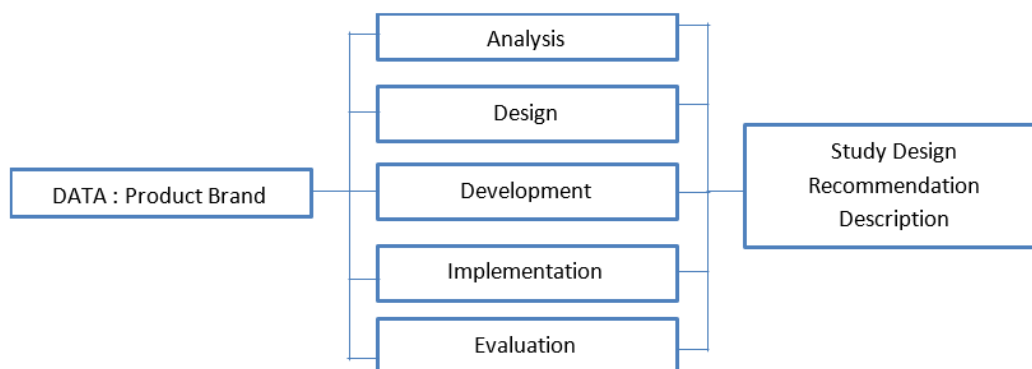

Figure 1. Research Method

RESULT AND DISCUSSION

SMEs require digital branding and promotion strategies, conducted through websites and social media platforms, to effectively market their products on a mass scale (Ainun et al., 2023). Branding begins with designing a brand, which is then propagated through product packaging, websites, and other platforms. This aims to influence buyers' decisions regarding the offered products. The success of SMEs' digitalization is influenced by several factors, such as proficiency in IT, human resource management skills, the ability to conduct online transactions, the availability of quality technology, and other relevant factors within specific contexts (Agustin et al., 2023).

The digitalization scheme for SMEs includes utilizing marketplaces as intermediaries and leveraging social media for marketing strategies. Through marketplaces, SMEs can reach a broader market more easily, while social media allows them to interact directly with customers and build loyal communities. Additionally, digital SME players must collaborate with netizens to market their products and services effectively. This collaboration could take the form of joint campaigns, product reviews by influencers, or participation in relevant online discussions. By integrating various digital platforms, SMEs can expand their marketing reach and enhance customer engagement effectively (Arianto, 2021). Based on the discussion above, the author selects two sample business unit brands that have successfully integrated digital design into their business model optimization process. These brands are Maicih (Food & Beverage) and Compass (Fashion Design Products). The selection of this sample aims to limit this research based on the case studies being examined, specifically focusing on brands from two categories: Food & Beverage and Fashion Design Products. Maicih is a spicy chips brand originating from Bandung, which has evolved to include products such as batagor (fried fish dumplings) and fried meatballs (Maicih, 2024). The Maicih chips product sparked a viral sensation by offering spicy levels to consumers, leading many young people to experiment with the chips. The brand's position became well-known, and with the addition of its logo and virality on digital media, it further increased engagement with the public. Below are case studies on brand development for the Maicih product (Figure 2) and digital strategies (Figure 3):

Figure 2. Maicih Brand Logo & Product Package
(Maicih, 2024)

Figure 3. Strategy Digital Maicih
(Maicih, 2024)

Maicih's digital strategy involves promoting products with content tailored to consumer segmentation, directing audiences towards the product's value, especially with the primary goal of generating revenue streams in online marketplaces (Johnson, 2012). The effectiveness of Maicih products through social media has been measured using the EPICrate method from data secondary journal. This method includes four dimensions: empathy, which scored 3.98; persuasion, which scored 3.99; impact, which scored 3.93; and communication, which scored 3.90. The overall EPICrate value is 3.95. These results indicate that the digital promotion conducted via social media is highly effective (Riyantoro & Harmoni, 2013).

The next brand to be discussed is Compass, a footwear brand specializing in sneakers (COMPASS, 2024). The uniqueness of this brand lies in its sneaker community and collaborations with artists, enhancing consumer engagement on digital platforms. This community aims to buy and sell Compass shoes through social media, ensuring the sustainability of the products used by the community (Figure 4).
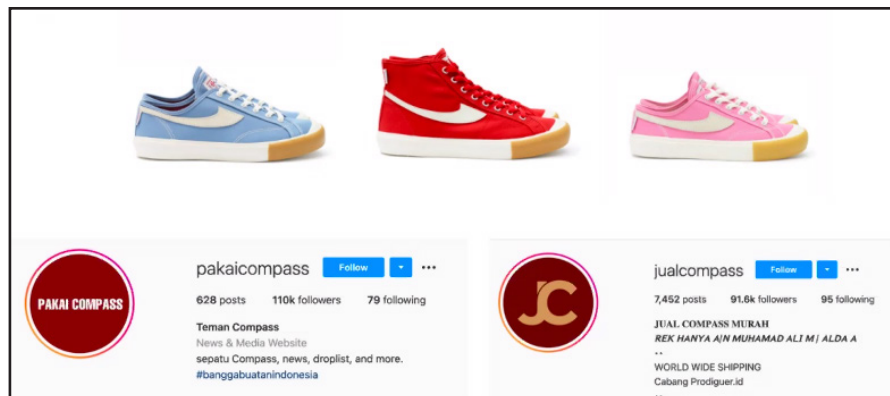

Figure 4. Sneaker Movement – Compass
(COMPASS, 2024)

Compass shoe's digital strategy includes a brand logo, website, and social media presence. Brand image significantly influences purchase intention. Both influencers and consumer reviews have a significant impact on brand image, with influencers' influence being six times stronger than consumer reviews. Additionally, brand image mediates the relationship between influencers and purchase intention, thereby reinforcing the indirect influence of influencers on purchase intention. This mediation strengthens the significant relationship between these two variables. However, brand image does not mediate the influence of consumer reviews on purchase intention (Alghiffari & Listyorini, 2022). The following is an illustration of the digital design engagement model carried out by compass Figure 5:

Instagram Story: IWAN TIRTA'S SIGNATURE "KUPU

Website Article: IWAN TIRTA'S SIGNATURE "KUPU SIMBAR"
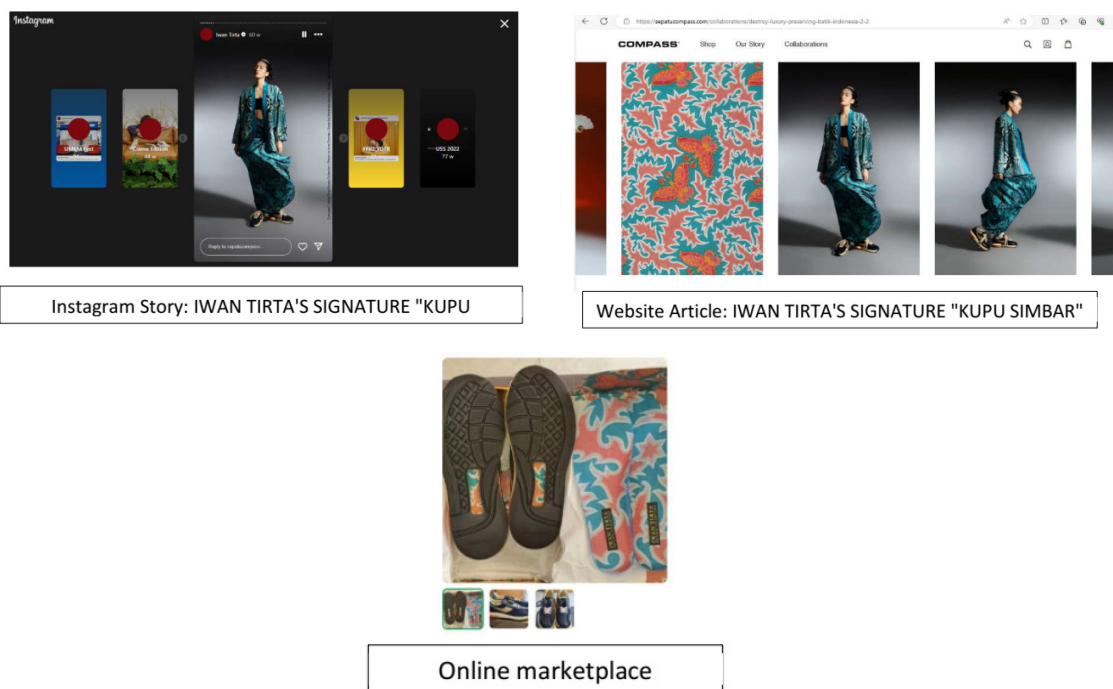
Online marketplace

Figure 5. Brand Development from Compass
(COMPASS, 2024)

Even during the pandemic, Compass shoes managed to increase buyer interest using digital content. This is demonstrated by secondary data from a journal, which includes variable (X), indicating that the influence of communication strategies (using social media content strategies) on Compass shoes during the COVID-19 pandemic resulted in a 0.563 increase in public purchase interest (Y). The influence of Compass shoes' communication strategies on purchase interest has a positive effect (Raphael & Rusdi, 2022). Based on the two case studies of Maicih and Compass, the interpretation of the ADDIE model used in digital design is as follows:

Analysis
- Maicih: Segmentation of young people, especially those who try spicy flavors
- Compass: Selling stories about local sneaker brand pride, segmenting young people who like local products.

Design
- Maicih: The brand design and products offered provide a narrative of snacks with unique recipes and can be eaten in any situation.
- Compass: The modern designs offered are stories from local sneakers

Development
- Maicih: Development is aimed at going viral and challenging on social media to try the spiciness of the snack taste.
- Compass: Development by building a community both onsite and online who like local pride sneakers.

Implementation
- Implementation: Mak / Mother brand logo which is the best spice maker in food, digital brand on the web, social media and also online shop platforms. The content of social media content is adjusted to the individual's empathy for the brand, such as familiarity, unique taste and so on.
- Compass: Gazelle brand logo symbol that represents endurance and drive. This campaign with local artists, influencers and other brands aims to increase engagement with consumers. Apart from that, there is an onsite and online community of local sneaker brand lovers. Digital web platforms, social media and online shop platforms to reach consumers widely at home and abroad.

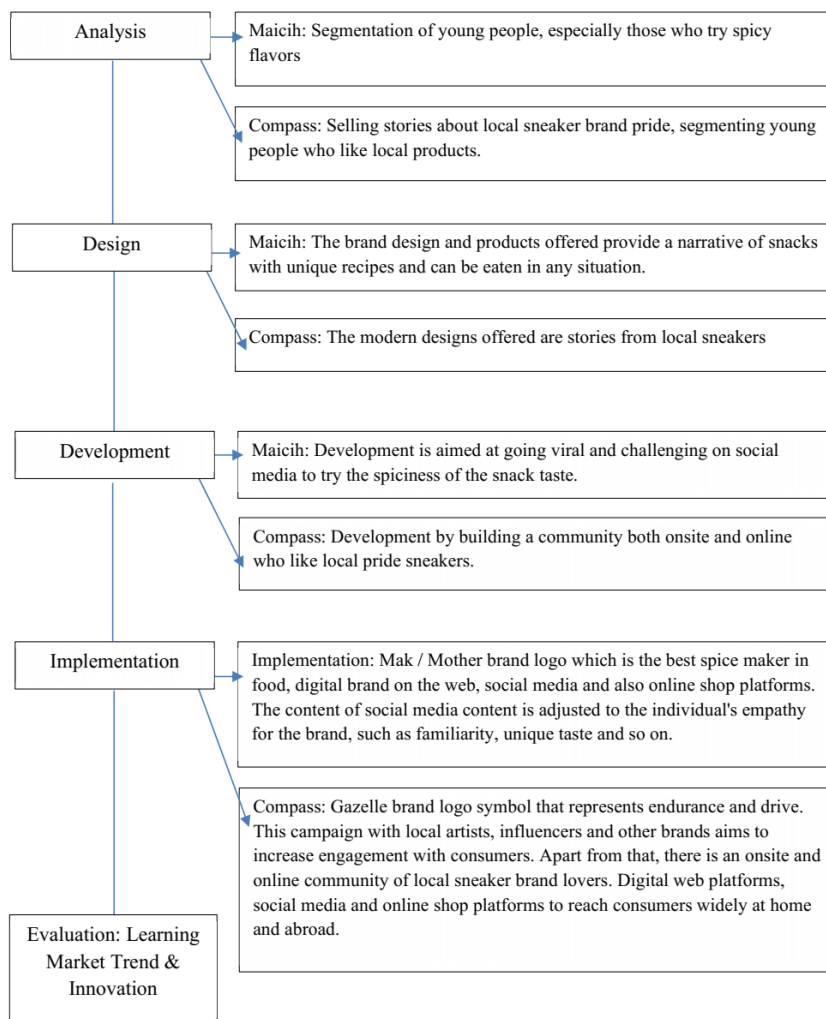**Evaluation: Learning Market Trend & Innovation**

Figure 6. ADDIE – Brand Maicih and Compass

The adoption of digital technology can enhance SME performance by expanding access to customers and increasing sales. To address limitations in internet access, it's essential to increase internet accessibility. Production constraints can be overcome with Supply Chain Management (SCM) solutions, online recruitment applications, and inventory management systems. To expand the market, SMEs are encouraged to use digital technology through managed e-commerce services and effective promotion on social media (Idah & Pinilih, 2020). Based on the case studies of the two brands above for food and products, they can be described in Table 2 below.

Table 2. Recommendation ADDIE for SMEs

Analysis	Design	Development	Implementation	Evaluation
It's important to study the market segmentation to understand which target market to pursue. When considering the best digital technology, segmentation typically targets the generation that is tech-savvy and uses smartphones for online transactions.	After identifying the customer segment, it's essential to determine the most suitable products and the value offered to individuals or communities.	At this stage, it involves the process of product development, marketing, and positioning the brand in the community.	Final product development involves mass digital marketing, campaigns, and collaborations.	At this stage, there needs to be consideration for innovation in both product and marketing strategies to ensure the sustainability of SME products.

Based on this study, it can be understood that SMEs are a pillar of national development (Sarfiah et al., 2019). SMEs are capable of addressing global challenges and disruptions, while also providing employment opportunities and contributing to the country's economy. The development of SMEs through the ADDIE process (Analysis, Design, Development, Implementation, Evaluation) will strengthen the industry to achieve SDGs targets: "Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation." This research results in SME industries that can withstand external conditions (international/national phenomena) and sustain internal innovation (business units).

CONCLUSION

The conclusion of this research is that in developing and implementing marketing strategies for SMEs, it is important to understand the target market segment, particularly the generation actively using digital technology such as smartphones for online transactions. After identifying the market segmentation, it is necessary to determine the appropriate products and the value offered to customers. The product development and marketing processes should be continuous, focusing on innovation and strategies that ensure the sustainability of SME products. Continuous evaluation is required to ensure that the implemented strategies are effective in achieving sales goals and expanding market share. With this approach, SMEs can improve their performance and make a greater contribution to the economy. The limitation of this research is only on the samples of food and fashion products. In the future, it may be beneficial to focus on a wider range of products for further research.

REFERENCES

Agustin, A., Putra, G. P. E., Pramesti, D. T., & Madiistriyatno, H. (2023). Strategi UMKM Dalam Menghadapi Digitalisasi. *Oikos-Nomos: JURNAL KAJIAN EKONOMI DAN BISNIS*, *16*.

Ainun, N., Maming, R., & Wahida, A. (2023). PENTINGNYA PERAN LOGO DALAM MEMBANGUN BRANDING PADA UMKM. *Jesya*, *6*(1). https://doi.org/10.36778/jesya.v6i1.967

Alghiffari, I. M., & Listyorini, S. (2022). THE EFFECT OF INFLUENCER AND CONSUMER REVIEW ON PURCHASE INTENTION WITH BRAND IMAGE AS INTERVENING VARIABLE. *Jurnal Pemikiran Dan Penelitian Administrasi Bisnis Dan Kewirausahaan* , *7*(3).

Arianto, B. (2021). Pengembangan UMKM Digital di Masa Pandemi Covid-19. *ATRABIS: Jurnal Administrasi Bisnis (e-Journal)*, *6*(2), 233–247. https://doi.org/10.38204/atrabis.v6i2.512

COMPASS. (2024). *COMPASS - Footwear Sneaker*. https://sepatucompass.com/

Creswell, J. W., & Creswell, J. D. (2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches - John W. Creswell, J. David Creswell - Google Books. In *SAGE Publications, Inc.*

Faremo, G. (2015). Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. *UN Chronicle*, *51*(4). https://doi.org/10.18356/9e86470d-en

Idah, Y. M., & Pinilih, M. (2020). Strategi Pengembangan Digitalisasi UMKM. *Prosiding Seminar Nasional Dan Call for Papers "Pengembangan Sumber Daya Pedesaan Dan Kearifan Lokal Berkelanjutan IX,"* *9*(1), 195–204.

Johnson, E. A. J. (2012). Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers - By Alexander Osterwalder and Yves Pigneur. *Journal of Product Innovation Management*, *29*(6).

KADIN INDONESIA. (2023). *UMKM Indonesia*. https://kadin.id/data-dan-statistik/umkm-indonesia

Lamazi, L., Simangunsong, R., Aulia, R., Paramita Hapsari, P., Hakim, A., Soeaidy, S., & Halim, A. (2020). Pengaruh Pertumbuhan Usaha Kecil Menengah (UKM) terhadap Pertumbuhan Ekonomi Daerah (Studi di Pemerintah Kota Batu). *Jurnal Ilmiah Ekonomi Pembangunan*, *1*(2). https://doi.org/10.33395/juripol.v3i1.10491

Maicih. (2024). *Maicih Kripik Pedas Bandung*. https://www.maicih.com/

Pramaisshella, C. A., & Fisabilillah, L. W. P. (2023). Pengaruh Fintech Peer to Peer Lending terhadap Produk Domestik Bruto Indonesia. *Independent: Journal of Economics*, *2*(2). https://doi.org/10.26740/independent.v2i2.50969

Raphael, A. J., & Rusdi, F. (2022). Pengaruh Strategi Komunikasi Sepatu Compass di Masa Pandemi Covid-19 terhadap Minat Beli Masyarakat. *Kiwari*, *1*(3). https://doi.org/10.24912/ki.v1i3.15792

Riyantoro, B., & Harmoni, A. (2013). Efektivitas Iklan Melalui Jejaring Sosial Sebagai Salah Satu Strategi Pemasaran Keripik Pedas Maicih. *Proceeding PESAT (Psikologi, Ekonomi, Sastra, Arsitektur & Teknik Sipil)*, *5*(10).

Sarfiah, S. N., Atmaja, H. E., & Verawati, D. M. (2019). UMKM Sebagai Pilar Membangun Ekonomi Bangsa. *Jurnal REP (Riset Ekonomi Pembangunan)*, *4*(2).

Spatioti, A. G., Kazanidis, I., & Pange, J. (2022). A Comparative Study of the ADDIE Instructional Design Model in Distance Education. In *Information (Switzerland)* (Vol. 13, Issue 9). MDPI. https://doi.org/10.3390/info13090402

United Nations. (2023). The Sustainable Development Goals Report 2023 Special Edition. In *The Sustainable Development Goals Report*.

Widnyani, N. M., Astitiani, N. L. P. S., & Putri, B. C. L. (2021). PENERAPAN TRANSFORMASI DIGITAL PADA UKM SELAMA PANDEMI COVID-19 DI KOTA DENPASAR. *Jurnal Ilmiah Manajemen Dan Bisnis*, *6*(1). https://doi.org/10.38043/jimb.v6i1.3093

Zaoui, F., & Souissi, N. (2020). Roadmap for digital transformation: A literature review. *Procedia Computer Science*, *175*. https://doi.org/10.1016/j.procs.2020.07.090