Development of A Digital Marketing Model to Enhance The Competitiveness of MSME's Owned by People with Disabilities in Denpasar City

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Abstract. In the era of globalization, economic development necessitates adaptation to technological advancements and the enhancement of quality and capabilities, particularly towards digitalization. Furthermore, the COVID-19 pandemic has accelerated the demand for digital transformation and technology adoption, especially in the realm of marketing, which has shifted towards digital platforms. This transition has impacted Micro, Small, and Medium Enterprises (MSMEs), urging them to market their products digitally and leverage the benefits of on going developments. The progression of digitalization presents an opportunity for MSMEs to engage in marketing processes without limitations. However, amidst the rapid digital evolution for MSMEs to adapt to the digital world, there is a risk of certain groups being left behind, including people with disabilities. They struggle with limited access to technology and possess significantly different knowledge in business management compared to the general population, especially concerning product marketing. Consequently, they must compete to market their products effectively and attract customers. The presence of digital marketing models for MSMEs owned by people with disabilities is expected to enhance their competitiveness in the digital era. Currently, there is limited information availability regarding products from MSMEs run by people with disabilities in Denpasar, making them relatively unknown to the public. Ultimately, Politeknik Negeri Bali, as a vocational institution, can effectively engage in digital business-related endeavors to address local issues. Therefore, this research aims to develop a marketing model to enhance the competitiveness of MSMEs owned by people with disabilities in Denpasar.

Keywords: Business, Denpasar, Digital Marketing, Disabilities, MSMEs

1 Introduction

The development of times and the rapid pace of Industry 5.0 in the digital era have significantly expanded, indirectly affecting various sectors of life and bringing benefits to society, especially in the economic field (Kotler, 2013). The advancement of technology in today's digital era is changing culture, lifestyles, and people's perspectives on carrying out daily activities. In the present time, technology has

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permeated various aspects of life, both in social life and economic activities, including the business sector.

One of the economic sectors affected by technological advancements is Micro, Small, and Medium Enterprises (MSMEs). The influence of technology on MSMEs is changing the way of life for business actors, both in conducting business activities and socializing. The development of technology in this digital era also provides convenience for MSME actors to creatively develop their products to meet consumer needs (Gartner, 2020). MSME actors require a business development process through new strategies in marketing their products to be more attractive by utilizing technology, one of which is by developing digital marketing strategies that align with the times. A change in the current marketing model is needed to attract consumer attention, making them interested in viewing the products produced by business actors. One way to enhance the appeal of marketing in the digital era is by developing a digital marketing model. A digital marketing model is a system for product or service marketing strategies in a digital form that allows businesses to update, manage, and share product information with customers and business partners. With this model, businesses can save on production costs, increase customer satisfaction, and improve efficiency (A. Saadi et al., 2021). The digital marketing model helps MSMEs improve their efficiency and profitability, and enables them to compete with larger business entities (Zhang, 2021). The adoption of digital technology in this model also aids business actors in enhancing their marketing performance (Liu, 2020). To improve marketing strategies and the competitiveness of MSMEs in the digital era, it is important to empower the group of MSMEs at risk of being left behind, including those with disabilities.

According to data from the Office of Village Empowerment, Population, and Civil Registry in Bali Province, the number of people with disabilities in Bali reaches 12,086 (Yasa et al., 2023). In Denpasar City, the latest data from the Denpasar City Social Office in 2022 (Harthamia et al., 2024) shows that there are 1,770 people with disabilities, an increase from 1,301 in the previous data (Adiningrat, 2015). Some of these individuals with disabilities manage their own MSMEs. Denpasar City has also been recognized as a Disability-Friendly City by UNESCO as an inclusive city, with a partnership agreement to raise awareness among the public about people with special needs, and has issued Denpasar City Regional Regulation No. 11 of 2022 concerning the protection and fulfillment of the rights of people with disabilities. However, in this digital era, MSMEs led by people with disabilities still lack ideas for promoting their products digitally and continue to use conventional marketing methods. Meanwhile, the ability to adapt to digital technology is becoming increasingly important for them to build a competitive advantage in their businesses.

2 Methodology

The research follows the ADDIE development model, which consists of several stages: Analysis, Design, Development, Implementation, and Evaluation (Mulyatiningsih, 2013). The ADDIE model is used for system design, and its chart is illustrated in Figure 1.

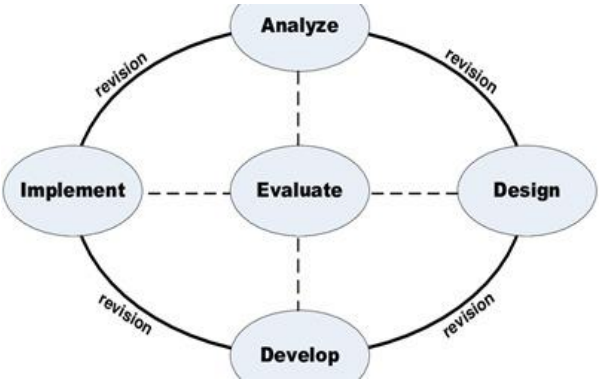

Figure 1. ADDIE development model

During the Analysis stage, the researcher examined the activities of SMEs with disabilities in Denpasar City. Observations were made using incidental sampling techniques due to the lack of specific data on SMEs. Interviews were also conducted with disability activists and observers. At this stage, the analysis involved 1) needs analysis, 2) material analysis, and 3) analysis of SME characteristics. The Design stage follows the analysis and involves creating tools to assess the feasibility of the developed digital marketing model. This stage includes designing several elements, such as 1) QR code, 2) Information, 3) access to product/sales information, and 4) E-Catalogue. In the Development stage, the researcher undertook various steps to develop the E-Catalogue, structured as 1) Design, 2) Cover, 3) List of SMEs with Disabilities, and 4) E-Catalogue of SME Products. The next stage, Implementation, occurs after the digital marketing model has been evaluated by both material and media experts. This stage also involves making improvements based on their feedback. The E-Catalogue was then tested on 20 individuals with disabilities involved in the SME sector in Denpasar City for further material testing in digital marketing activities. The results of this testing provide a basis for refining the E-Catalogue. Assessments are based on aspects such as 1) content feasibility, 2) language, 3) usefulness, and 4) graphics.

The Evaluation stage is carried out after the previous stages. Evaluation of the E-Catalogue includes gathering expert feedback and responses from SMEs with disabilities to make necessary improvements. Responses from online questionnaires aimed at media experts, material experts, and SMEs with disabilities are processed directly through the Google Form response tab in a tabular format. The resulting spreadsheet is downloaded and further analyzed by researchers to calculate averages. Quantitative data is then computed using the appropriate formula.

3 Result and Discussion

3.1 Result

At this stage of analysis, researchers used the observation method in MSME activities, particularly for Persons with Disabilities in Denpasar City. The researchers conducted

observations both individually and in groups through an interview process. Interviews were conducted with MSME activists and disability observers to understand how materials are used, digital marketing activities, and creative ideas employed by these MSMEs to enhance their market competitiveness. The analysis conducted in this study included needs analysis, material analysis, and analysis of the characteristics of MSMEs with Disabilities. So far, MSMEs led by persons with disabilities still rely on references related to marketing through direct visualization obtained from various activities they engage in, especially in sales activities. Additionally, some of them require assistance in developing product or service promotions to reach a wider market. Although there are some references used in developing the marketing process, most are still trying to adapt to existing sources. Regarding government efforts to support MSMEs with Disabilities in increasing their competitiveness through an integrated MSME development center, there are several places designed to empower persons with disabilities to be creative and innovate new products. This support includes facility assistance in the form of Corporate Social Responsibility (CSR) to aid the competency development process. However, in its implementation, some MSMEs have not yet utilized digital marketing, resulting in limited competitiveness.

During the design process stage, following the analysis phase, the next steps involve creating a digital marketing model with using a QR Code-based E-Catalogue aimed at enhancing the competitiveness of MSMEs with Disabilities in Denpasar City. At this point, the researcher designed an instrument to assess the feasibility of the E-Catalogue. The design process included drafting an outline of the E-Catalogue's content, focusing from Product/Sales Information Access into E-Catalogue. In the development process, it was generally divided into two main sections. The first section involves the QR Codes, which are subdivided into profiles of MSMEs in Denpasar City and MSME products specific to each MSME. The second section provides information on MSMEs with disabilities, presented in the form of a Linktree. The first part of this section focuses on accessing product/sales information in digital form. The section on Disabled MSME products includes details such as product names, menus, prices, and visual representations of the products. The next stage involved organizing the content of the E-Catalogue. The digital marketing content was arranged within a Linktree, where consumers visiting the MSMEs with Disabilities can scan a QR code to access it. While the process is straightforward, assistance may be needed to access the QR code so that it can be read by the QR Code reader system. Following this, researchers categorized MSMEs with disabilities based on their sales areas, dividing them into four zones: North Denpasar, South Denpasar, West Denpasar, and East Denpasar. Each sub-district was then listed with the names of MSMEs, complete with picture profiles, product names, and addresses in each MSME profile. These names can be accessed directly, leading users to a more detailed E-Catalogue Menu, which includes the full product menu, prices, descriptions, and order access. The final step involved designing an instrument using a Likert scale 5 questionnaire, with response options ranging from Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), to Strongly Disagree (SD). The responses were then converted into scores ranging from 1 to 5, based on the order of the statements in the answers.

During the initial development of the e-catalogue, Microsoft Office Word was utilized to collect and organize materials, formulate quiz questions, and compile the summary section. For designing the initial version targeted at MSMEs with Disabilities,

the researchers used the Linktree application, which featured various MSMEs with Disabilities located in Denpasar City. The background and cover of the e-catalogue were created using the Canva digital application, while evaluations were conducted using Google Forms, and barcodes were generated with the QR Code Generator application. After preparing the e-catalogue data file, it was transferred into the Canva design, with additional elements like ordering barcodes uploaded as QR Codes. All the components were combined into a single file using the Canva design, and the final e-catalogue was downloaded in PDF format. The digital marketing model interface can be seen in Figure 2.

Figure 2. Digital marketing model interface (in Indonesia language)

The feasibility of the developed digital marketing model was then evaluated by experts. The instruments included in the e-catalogue were discussed with observers, activists, and the research team. Following necessary revisions, the validation process was carried out by a team of material and media experts using an assessment sheet previously created by the researchers. The results of the validation by the material expert validator for the e-catalogue are as follows:

In this instance, the E-Catalogue's evaluation by the material expert validator focused on three key aspects: content, language, and presentation. The assessment yielded an overall average score of 4.29 out of a possible 5.00, placing it in the very good category. Following this, the next stage of validation by media experts examined aspects such as screen design, ease of use, consistency, usability, and graphical elements.

Table 1. Results of digital marketing model validation by material experts

No.	Assesment aspect	Average assesment score for each aspect	Category
1	Contents	4.34	
2	Language	4.00	Very Good
3	Presentation	4.56	
	Average	4.29	

Table 1 shows the assessment of the digital marketing model by the media expert validator resulted in an overall average score of 4.37 out of 5.00, categorizing it as a very good product. Additionally, the media expert's evaluation indicated that the digital marketing model is well-suited for use based on its media components. Overall, the quality of this digital marketing model is considered appropriate for the material process during the implementation stage as shown in Table 2.

Table 2. Results of digital marketing model validation by media experts

No.	Assessment aspect	Average assessment score for each aspect	Category
1	Screen design	4.28	
2	Ease of use	4.14	
3	Consistency	4.67	Very good
4	Usability	4.17	
5	Graphics	4.28	
	Overall Average	4.37	

During the implementation of the digital marketing model, researchers conducted meetings where MSME participants were first given a brief overview of the goals behind developing the model combine with QR Code digital marketing model for MSMEs, particularly for Persons with Disabilities in Denpasar City, along with an introduction to Digital Marketing. In the following week, researchers introduced the participants to digital marketing activities relevant to MSMEs and how these activities connect with their daily operations. In subsequent meetings, a brief explanation was provided on how to market creative products or services in the digital realm. Through these activities, researchers aimed to understand the needs and limitations of MSME participants. The next week, during the introduction stage of the digital marketing model, MSME participants learned how to upload product photos and make them appealing to attract buyers in a digital environment. They were also introduced to using barcodes, which facilitate consumer access to the MSME catalog. The evaluation results of the participants' responses to the digital marketing model are summarized in the following table.

The assessment of the response from MSME actors in Table 3 with disabilities to the development of digital marketing model yielded an overall average score of 4.1 out of 5.00, placing it in the very good product category. The detailed results from the instrument completion and the full calculations are attached. Based on this assessment, the E-Catalogue is considered outstanding and is suitable for use as a material during field implementation. After progressing through the previous stages, the development received feedback from several experts and MSMEs with Disabilities, leading to

improvements. The evaluation included suggestions and follow-up actions, such as making justifications in the model, correcting naming errors in existing quotations, addressing a title entry mistake in one of the models, and adding more colors to the model to avoid a monotonous appearance.

Table 3. Results of the assessment of MSME actor responses to the model

No.	Assessment aspect	Average assessment score for each aspect	Category
1	Feasibility	4.52	
2	Linguistic	4.49	
3	Usability	4.5	Very Good
4	Graphics	4.42	
	Overall Average	4.1	

3.2 Discussion

The feasibility of Digital Marketing for MSMEs with Disabilities in Denpasar City has been evaluated in terms of content and media by one content expert and one media expert. The analysis of the model assessment by the content expert resulted in an overall average score of 4.29, placing it in the very good product category. This score indicates that the digital marketing model developed by the researchers meets the material feasibility requirements and aligns with the competitive standards for MSME entrepreneurs with disabilities. Furthermore, the analysis by the media expert yielded an overall average score of 4.37, also in the very good product category. This score suggests that the digital marketing model developed by the researchers is suitable as a digital marketing model for MSMEs with Disabilities, along with the innovations derived from digital adoption, which can help improve sales activities.

The evaluations from the content and media experts demonstrate excellent results, with product improvements made according to the suggestions and feedback provided by the experts. After the model underwent validation by content and media experts and revisions were made as per the suggestions, the feasibility test results from MSME participants indicated that the marketing model is considered suitable for their sales and business activities (Prasetyo, 2020). The average overall score from this feasibility test was 4.1, categorized as very good. Additionally, the researchers observed that MSME entrepreneurs with disabilities in Denpasar City used this digital marketing model effectively, aligning with expectations. There is a clear desire among these entrepreneurs to be more creative, competitive, and adaptable to modern trends, as evidenced by their increased independence in developing new marketing strategies using digital tools (Saputra, 2020). The presence of digital marketing also helps to bring products or services closer in a more measurable and focused way, allowing them to expand their sales activities, reach a broader digital market, and develop their businesses to maintain customers and increase profits (Assauri, 2015). The average overall score from the MSME participants' responses to the development of this model shows that the product has met their needs, although there are still areas for future improvement (Adiningrat, 2023). This includes enhancing the understanding of relevant messages so that consumers better understand the marketing model being

developed (Fournaise, 2012). Based on the discussion, the research results indicate that the digital marketing model, as evaluated by content and media experts and the responses from MSME entrepreneurs with disabilities, falls into the very good category. Therefore, it can be concluded that this model is a viable digital marketing tool that can be used by MSME entrepreneurs with disabilities to enhance their business operations and competitiveness.

4 Conclusion

The research on developing this digital marketing model to enhance competitiveness for SMEs with disabilities in Denpasar City. This study follows the ADDIE development model, consisting of 1) Analysis, 2) Design, 3) Development, 4) Implementation, and 5) Evaluation stages. The developed digital marketing model features QR code access for an overview of SMEs with disabilities. This data is organized in Linktree, categorized by the SME's location in one of four districts in Denpasar City: North Denpasar, South Denpasar, West Denpasar, and East Denpasar. Each district's selection leads to a list of SMEs, which can be accessed by clicking on their profiles. The SME list directs users to the SME's website containing an online catalogue with product menus and ordering buttons that link directly to the SME's contact number. This digital marketing model offers an interactive experience, especially beneficial for SMEs with disabilities. The findings from this research reveal that the Digital Marketing Model is deemed effective for enhancing competitiveness among SMEs with disabilities in Denpasar City. The overall average scores indicate that material experts rated the model 4.29, which falls into the very good category, while media experts gave it an average score of 4.37, also classified as very good. Similarly, SMEs with disabilities rated the model 4.1, which is categorized as very good. Looking ahead, it is anticipated that this model will be employed by SMEs with disabilities with more detailed content and advanced visualization techniques, such as evolving from images to videos. The current study did not address the effectiveness of the model in daily operations. Thus, future research should explore the effectiveness of this model in practical usage.

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