

## Optimizing MSME Marketing through Digital E-Catalog: A Case Study of Dinoy Vape in Samarinda

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### ABSTRACT

English Dinoy Vape MSMEs face challenges in meeting the needs of consumers who increasingly prioritize ease of access and transparency of product information. This change in trend forces MSMEs to adopt a digital approach. They are implementing e-catalog-based digital media as a creative marketing solution for Dinoy Vape MSMEs in Samarinda, East Kalimantan. The e-catalogue is designed to strengthen the competitiveness of MSMEs amid digitalization challenges and business competition. This service activity involves training and assistance in creating e-catalogs using the Canva and Bit.ly platforms and publication through QR codes for easy customer access. The evaluation shows that e-catalogs help improve marketing efficiency and become an eco-friendly solution. This program is expected to be an example for other MSMEs who want to adopt digital technology to support competitive advantage

## **INTRODUCTION**

The MSME Vape Dinoy faces challenges in meeting consumer needs that increasingly prioritize ease of access and product information transparency. This changing trend forces MSMEs to adopt a digital approach, such as using e-catalogue, which can reduce dependence on printed materials and provide a more practical way for customers to explore the products offered (Aksenta et al., 2023). The use of this e-catalogue not only provides convenience for customers but also helps business actors in creating competitive added value. In addition to operational benefits, adopting e-catalogues supports the concept of green technology, which is a significant concern amidst public awareness of environmental issues. Digital e-catalogues are expected to reduce the carbon footprint by reducing the use of paper, which impacts deforestation (Venkadeshwaran, 2021). This initiative also aligns with the global trend towards digitalizing businesses to achieve environmental sustainability goals and enhance the reputation of MSMEs as environmentally conscious businesses (Ramadhani et al., 2023).

This service aims to improve UMKM Vape Dinoy's marketing competence by teaching them to use e-catalogues as a digital promotional tool. This implementation is expected to reach broader consumers, significantly increasing technology users in Indonesia. This step reflects the commitment of UMKM to innovate and adapt to changing customer needs, which tend to prefer an efficient online shopping experience. Furthermore, this activity also educates UMKM actors about the importance of green technology in business. Using e-catalogues, UMKM can save printing costs and reduce negative impacts on the environment, support environmentally friendly movements, and, at the same time, improve the business's image in the public's eyes. This service program can inspire other UMKMs to implement similar digital solutions to create more innovative and sustainable businesses.

## LITERATURE REVIEW

The development of digital technology has had a significant impact on the marketing strategy of small and medium enterprises (MSMEs). Digitizing MSMEs through online platforms such as e-catalogues has been proven to be able to increase marketing efficiency, expand market reach, and reduce operational costs (Saputri et al., 2025) (Irianto et al., 2023). E-catalogue as a form of digital transformation provide convenience in presenting product information interactively and can be accessed at any time by consumers (Putri et al., 2024).

According to Rahman et al., (2023) Digital-based service quality plays an important role in shaping customer satisfaction. In the context of MSMEs, the application of digital media such as e-catalogues is not only a means of promotion, but also creates competitive added value through improving customer experience. Digital marketing is also believed to increase customer engagement and brand loyalty (Dewi, 2023).

In addition to the marketing aspect, e-catalogues also support the principle of green technology. The use of e-catalogues replaces conventional printed materials which have an impact on reducing the use of paper and print waste, making them more environmentally friendly (Putri et al., 2024). This is in line with global trends that encourage the implementation of sustainable businesses that pay attention to environmental aspects.

However, the challenges in the implementation of digital technology among MSMEs are not few. One of them is the low level of digital literacy of business actors and consumers, which is the main obstacle in the adoption of technology such as e-catalogue (Handayani, 2023). Therefore, educational interventions and mentoring are needed so that digitalization is not only a technical solution, but also builds the capacity of MSME human resources in a sustainable manner.

Another study confirms that the successful implementation of digital strategies is also influenced by the readiness of MSMEs in managing changes in business models and competitive advantages (Sari, 2025). Thus, e-catalogues can be positioned not only as a promotional tool, but also as part of the MSME digital transformation strategy towards sustainable competitiveness in the era of industry 4.0 and society 5.0 (Hadiwijaya et al., 2023).

## METHODOLOGY

The type of research used in this study is qualitative research with a Participatory Action Research (PAR) approach. This activity research consists of several stages, starting with Initial Observation, where the community service team conducted a survey to understand the marketing needs of the Dinoy Vape MSME. This observation process identified that marketing through print media was not effective enough to reach a wider audience, especially in this digital era (Hartatik et al., 2023). The team began the project by conducting observations at the service location, initiating the process with the offer of a service work program. To gain permission, the team drafted a cover letter as proof of the agency's approval for the program. Following this, interviews were conducted with partners to identify existing problems. Based on the findings, the team proposed solutions by offering direct services to the local partner.

In the data collection phase, the team captured product photos and videos documenting the service activities at the partner location. These images and videos were used to create an e-catalog, which also served as evidence of the service activities for reporting purposes.

During the implementation phase, the team designed the e-catalog using Canva. The design was then published as a web link, which was shortened using the Bit.ly tool and converted into a QR code for easy access.

Evaluation took place after the implementation, with the team surveying partners and the community, particularly Vape Dinoy customers, to gather feedback on the e-catalog. This feedback allowed the team to make any necessary revisions to the e-catalog until it met the desired standards.

Finally, in the socialization phase, the team revisited the partners to publish the finalized e-catalog. During this stage, they provided counseling on how to use the e-catalog and offered tips on implementing the project effectively. The team also gathered testimonials and suggestions from partners to improve future community service programs.

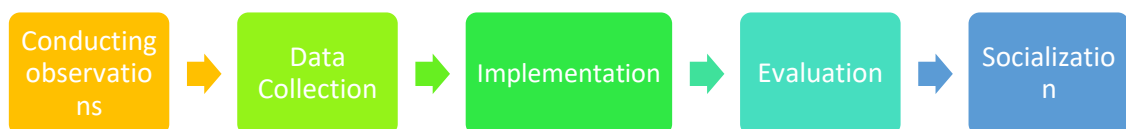


Figure 1. Stages of Implementation of Community Service

## RESEARCH RESULT

The implementation of e-catalogues at MSME Vape Dinoy showed positive results, especially in terms of time efficiency and cost savings. With e-catalogues, customers can access product information anytime and anywhere, which increases flexibility and convenience in shopping (Irianto et al., 2023). These results align with research findings showing that marketing digitalization increases customer satisfaction and their involvement in purchasing (Demirel, 2022). It also found that digitalization through e-commerce can improve customer experience because consumers feel more satisfied with the convenience provided by digital platforms. This supports these findings in the context of e-catalog usage.

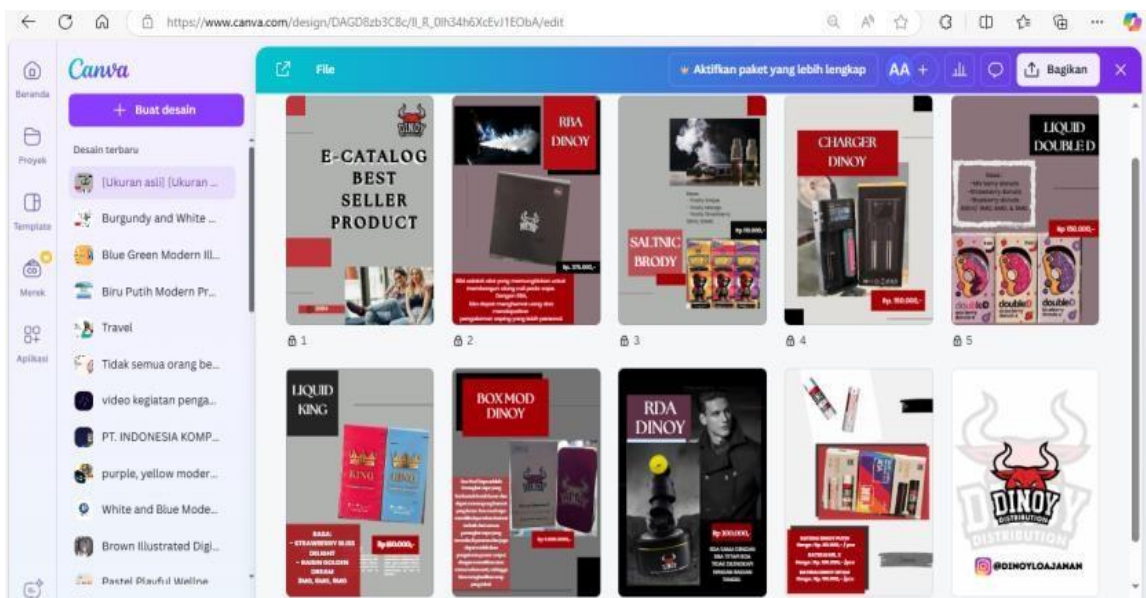


Figure 2. Design The E-Catalog Using Canva Tools

In addition to customer benefits, e-catalogues help businesses reduce operational costs previously allocated for printed materials and highlight that implementing technology such as QR codes in e-catalogues facilitates product access and significantly reduces marketing costs usually incurred for printed materials and physical distribution. This is in line with the findings of (Adiningrat et al., 2023) which show that using QR codes as a medium for accessing e-catalogues can increase cost efficiency while supporting business sustainability.

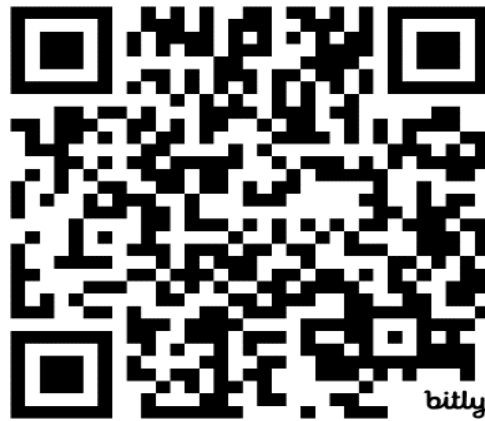


Figure 3. QR Code E-Catalog Vape Dinoy

## DISCUSSION

Using QR codes to access e-catalogues also supports the principles of green technology, which are increasingly important in the era of global climate change. (Zhang et al., 2023) discuss how digital technologies such as e-catalogues contribute to green marketing by reducing the use of paper and other printed materials. By switching to e-catalogues, MSME Vape Dinoy can reduce its environmental impact, aligning with the global trend towards more environmentally friendly and sustainable businesses.

The evaluation conducted at the end of the program showed that both customers and MSME partners responded positively to this implementation. (Wardhana et al., 2023) also, e-catalogues can deepen the interaction between customers and products and increase customer engagement by providing more complete and easily accessible information. This leads to increased customer loyalty to MSMEs and the products offered. However, challenges still need to be addressed, such as low digital literacy among some customers who are still accustomed to conventional methods, which is the focus of further education in the future. (Rivaldi et al., 2024) emphasized that one of the biggest challenges for MSMEs in adopting e-catalogues is the low digital literacy among most customers, who prefer traditional shopping methods. Therefore, education on using digital technology for customers must be strengthened to maximize e-catalog adoption and improve the overall customer experience. By implementing e-catalog as a marketing strategy, it can be a practical first step toward digital transformation (Agustian et al., 2023).

## **CONCLUSIONS AND RECOMMENDATIONS**

This activity has succeeded in improving the digital marketing skills of UMKM Vape Dinoy and introducing the concept of green technology relevant to current conditions. The QR code-based e-catalog not only makes it easier for customers to access product information but also functions as an effort to reduce paper use and support environmentally friendly initiatives. The implementation of this e-catalog also creates a modern business image that is responsive to digital market trends.

To increase effectiveness in the future, it is recommended that UMKM Vape Dinoy expand the use of other social media in distributing e-catalogues and strengthen customer education on the use of QR code technology. Further development can include collaboration with e-commerce platforms to reach a broader market. For other UMKMs, implementing a marketing strategy with an e-catalog can be a practical first step toward digital transformation and sustainable competitive advantage.

## **ADVANCED RESEARCH**

This research has limitations in the solutions provided. With the development of science and technology, advanced research can be carried out with different approaches or different solutions

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