

Optimizing Branding and Digital Marketing Through the Implementation of Augmented Reality (AR) Technology at Lukita Ceramic Studio

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Abstract. Lukita Ceramic Studio is a craft business that produces a variety of high-quality ceramic products. Despite its unique and attractive products, the studio faces significant challenges in branding and digital marketing. In the increasingly digital era, it is important for artisans to understand and utilize effective branding and digital marketing strategies to increase the visibility and competitiveness of their products. This activity aims to optimize Lukita Ceramic Studio's branding and digital marketing through the application of Augmented Reality (AR) technology. By using AR, the studio can introduce ceramic products interactively to consumers, providing a more immersive and engaging experience. This technology allows customers to view and interact with products in 3D, thereby increasing consumer appeal and trust in the products offered. This community service activity is designed to achieve three main objectives: (1) increasing the understanding of Lukita Ceramic Studio artisans about the importance of branding and digital marketing; (2) implementing AR technology to introduce products interactively; (3) increasing sales of Lukita Ceramic Studio products in the market. The methodology used in this program includes needs analysis, training on branding and digital marketing, AR application development, and evaluation of implementation results. It is hoped that through this program, Lukita Ceramic Studio can increase brand awareness, strengthen customer relationships, and drive product sales growth. This way, Lukita Ceramic Studio will not only be able to compete locally but also have the potential to expand into a broader market.

Keywords: Lukita Ceramic Studio, Branding, Digital Marketing, Augmented Reality (AR), Sales, Community Service

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INTRODUCTION

The development of digital technology has changed the paradigm of branding and marketing strategies, particularly in the creative industries and MSMEs. Today, businesses no longer rely solely on conventional media or digital promotions based on static images and two-dimensional videos, but are beginning to adopt immersive technology to enhance the consumer interaction experience. One rapidly developing technology that holds significant potential to support branding and digital marketing strategies is Augmented Reality (AR) [1].

Digital transformation has fundamentally changed the marketing landscape, pushing companies to continuously innovate in the way they interact with consumers [2]. Amidst increasingly fierce competition in the digital era, brands are racing to create experiences that not only capture attention but also build deep emotional connections with their audiences. In this context, Augmented Reality (AR) technology has emerged as one of the most revolutionary innovations capable of bridging the physical and digital worlds, creating a new dimension in branding and digital marketing strategies [3].

AR technology enables the integration of three-dimensional virtual objects into the real environment in real time through digital devices such as smartphones and tablets [4]. In a marketing context, AR has been used

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to increase customer engagement, strengthen brand perception, and help consumers understand products more deeply before making a purchase. Several studies and industry practices have shown that the application of AR in the marketing of fashion, furniture, and craft products can increase purchase intention, consumer trust, and brand differentiation amidst increasingly fierce digital market competition [5].

In the crafts and ceramics sector, the use of AR is still relatively limited, especially among MSMEs. Most ceramic studios still rely on product photography, printed catalogs, and conventional social media as promotional tools [6]. This approach is not fully capable of optimally showcasing the artistic value, texture details, scale, and uniqueness of ceramic product designs. As a result, the potential visual narrative and cultural richness inherent in the products often go unfulfilled by digital consumers [7].

Although the creative industry is undergoing massive digitalization, the crafts and ceramics sector still shows relatively limited adoption of Augmented Reality (AR) technology [8]. This gap is particularly pronounced among Micro, Small, and Medium Enterprises (MSMEs), where traditional touchpoints are often considered difficult to synergize with high technology. However, for the ceramics sector, which relies heavily on visual and spatial detail, AR holds great potential to bridge the physical gap between products and potential buyers [9].

Lukita Ceramic Studio is a craft business focused on producing a variety of high-quality ceramic products, from household appliances to interior decorations. While offering unique and high-quality products, the studio faces a number of challenges that hinder its growth and development [10]. One of the main challenges is the lack of brand awareness among consumers. Many potential customers are unfamiliar with Lukita Ceramic Studio and the products it offers. This is due to its conventional and limited marketing strategies, as well as a lack of understanding of the importance of branding in building a strong brand identity. In an increasingly competitive business world, having a clear and easily recognizable brand identity is crucial to attracting consumers. Furthermore, the rapid development of digital technology also poses a challenge [11].

Today digital era, consumers increasingly rely on online platforms to search for information and shop. Therefore, it is important for artisans to understand and utilize effective digital marketing strategies. Many artisans, including Lukita Ceramic Studio, still struggle to implement appropriate digital marketing strategies, such as the use of social media, SEO, and online advertising. In this context, Augmented Reality (AR) technology has emerged as an innovative solution that can help Lukita Ceramic Studio introduce products interactively to consumers [12]. Augmented Reality (AR) allows customers to view and interact with products in 3D, providing a more immersive and engaging experience. By utilizing AR technology, Lukita Ceramic Studio can not only increase brand awareness but also strengthen relationships with customers through a more personalized and interactive experience [13].

The potential of Augmented Reality (AR) technology to transform the way consumers interact with products has been recognized across various industry sectors. In a marketing context, AR has the ability to increase consumer engagement, create a more personalized and immersive shopping experience, and potentially increase purchase intention [14]. With realistic and interactive product visualizations through AR, it is hoped that it can reduce consumer doubts, provide a clearer picture of the product, and ultimately encourage more profitable purchasing decisions. In this proposal, the implementation of AR at Lukita Ceramic Studio is expected to provide similar benefits, increasing interaction with consumers, and driving product sales growth [15].

Therefore, it is crucial to conduct community service aimed at improving artisans' understanding of branding and digital marketing, as well as implementing AR technology into their marketing strategies . This program is expected to provide the necessary training and mentoring to overcome existing challenges, as well as facilitate artisans in adopting new technologies. With this step, it is hoped that Lukita Ceramic Studio can increase product sales and expand its market reach in the increasingly evolving digital era. By strengthening branding and utilizing technology, Lukita Ceramic Studio can compete more effectively in an increasingly competitive market and meet changing consumer expectations.

METHODS

This Community Service activity is implemented using a participatory and collaborative approach, placing partners as active participants in every stage of the activity. This method aims to optimize Lukita Ceramic Studio's branding and digital marketing through the application of applicable and sustainable Augmented Reality (AR) technology. The partner in this activity is Lukita Ceramic Studio, a creative ceramics business with the potential for superior products but still facing limitations in utilizing interactive digital technology as a branding and marketing tool.

Time Activity

This community service activity is planned to be held on Tuesday, August 19, 2025. The implementation time is 08.00 - 14.00 WIB. The implementation location is at Lukita Ceramic Studio, Sekarpetak RT: 02, Gedongan, Bangunjiwo, Kasihan District, Bantul Regency, Special Region of Yogyakarta 55284. The target of this activity is consumers who are customers who buy products at Lukita Ceramic Studio.



Figure 1. Socialization with Partners

Activity Implementation Stages

The implementation method for this community service activity consists of the following stages:

1. **Problem Identification and Needs Analysis**
The initial stage involved discussions and observations with partners to identify problems faced in branding and digital marketing. The analysis focused on limited promotional media, low consumer interaction, and the suboptimal use of innovative digital technology.
2. **Solution Design and Augmented Reality (AR) Content**
Based on the results of the needs analysis, the community service team designed a solution by implementing Augmented Reality (AR) technology as a branding and digital marketing medium. The design included selecting superior ceramic products, creating AR visual models, and designing narrative content aligned with Lukita Ceramic Studio's brand identity.
3. **AR Technology Implementation**
The implementation stage involved integrating AR content into digital media used by partners, such as digital catalogs, social media, and online promotional materials. This implementation enabled consumers to virtually view and interact with ceramic products, enhancing the user experience and branding appeal.
4. **Partner Mentoring and Training**
The community service team provides mentoring and training to partners on the use, management, and development of AR content. This activity aims to empower partners to operate the technology independently and integrate it into their digital marketing strategies sustainably.
5. **Monitoring and Evaluation**
Monitoring and evaluation are conducted to assess the effectiveness of AR technology implementation in improving branding and digital marketing. Evaluation is conducted by observing partner and

consumer responses, levels of digital interaction, and feedback regarding the ease of use and benefits of AR technology.

Data Collection Techniques

Activity data was obtained through observations during the community service implementation, activity documentation, and partner feedback. This data was used to assess the program's success and as a basis for developing recommendations for further development.

Success Indicators

The success of this community service activity was measured based on:

1. Implementation of AR technology as a supporting medium for Lukita Ceramic Studio's branding and digital marketing.
2. Increased understanding and skills of partners in utilizing AR technology.
3. Increased visual appeal and consumer interaction with digitally promoted products.

RESULT AND DISCUSSION

This community service activity resulted in the application of Augmented Reality (AR) technology as a branding and digital marketing tool at Lukita Ceramic Studio. Partners' superior ceramic products were successfully showcased in AR visuals accessible through digital promotional media, such as digital catalogs and social media.



Figure 2. Signing of Cooperation Agreement with Lukita

Implementation results show that AR-based promotional media provides a more engaging and interactive product display than conventional promotional media. Consumers can virtually see the shape, details, and visualization of the product, thereby helping to increase interest in the product being offered.



Figure 3. Workshop Products

Furthermore, the training and mentoring provided to partners demonstrated positive results. Partners understood how to use and leverage AR media as part of their branding and digital marketing strategies. Partners also demonstrated enthusiasm for independently developing AR-based promotional content after the community service activities concluded.

The application of Augmented Reality (AR) technology has proven to be an effective solution for optimizing Lukita Ceramic Studio's branding and digital marketing efforts. AR technology serves not only as a product visualization medium but also as a means to build an innovative brand image and keep pace with digital technology developments.



Figure 4. Development Results AR

From a branding perspective, the use of AR strengthens Lukita Ceramic Studio's brand identity as a creative, technology-adaptive business. Interactive product visualizations provide a new experience for consumers and differentiate Lukita Ceramic Studio from competitors who still use static promotional media.

From a digital marketing perspective, AR-based promotional media has the potential to increase consumer engagement with digital content. This is evident in the increased attention and interest consumers receive when accessing catalogs and promotional content equipped with AR features. This technology also makes it easier for consumers to understand product characteristics before making a purchase.

The results of this activity align with the goal of community service, which is to increase the capacity and independence of partners in utilizing digital technology. Through mentoring, partners not only acquire new promotional media but also knowledge and skills that can be used sustainably and in collaboration.



Figure 5. IA Collaboration with Partners

Overall, this community service activity has had a positive impact on optimizing branding and digital marketing at Lukita Ceramic Studio. The application of Augmented Reality (AR) technology can be used as an alternative digital marketing strategy for creative MSMEs to increase product competitiveness in the digital era.



Figure 6. Photo Session With The Owner Lukita

CONCLUSION

This Community Service activity demonstrated that the application of Augmented Reality (AR) technology can be an effective solution for optimizing branding and digital marketing at Lukita Ceramic Studio. AR-based promotional media can display ceramic products in a more engaging and interactive way, thereby helping to enhance visual appeal and consumer understanding of the products.

In addition to producing AR-based digital promotional media, this activity also successfully improved partners' understanding and skills in utilizing digital technology to support marketing activities. Through training and mentoring, partners became better equipped to develop branding and digital marketing strategies independently and sustainably.

Overall, this community service activity had a positive impact on strengthening Lukita Ceramic Studio's brand image and opening up opportunities to utilize innovative technology as a means of increasing the competitiveness of creative businesses. Suggestions for development from this activity include: Lukita Ceramic Studio can continue developing Augmented Reality (AR)-based promotional content by increasing product variety and expanding digital distribution channels. Furthermore, AR utilization can be combined with other digital marketing strategies, such as social media and marketplaces, to broaden promotional reach.

For future community service activities, a more in-depth evaluation of the impact of AR implementation on increasing product interaction and sales is recommended. The development of AR technology can also be applied to other MSMEs as an effort to support digital transformation in the creative industry sector.

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