

AUGMENTED REALITY MARKETING: CREATING IMMERSIVE BRAND EXPERIENCES

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ABSTRACT

This research investigates the effects of augmented reality marketing on consumer behavior and brand perception within the context of Indofood Yogyakarta. Using a quantitative research design, a sample of 100 customers was randomly selected, and path analysis was conducted to examine the direct and indirect relationships between augmented reality, user engagement, user perception of innovation, and brand experience. The results indicate significant direct effects of augmented reality and user engagement on brand experience, highlighting the importance of augmented reality technology and consumer engagement in shaping positive brand experiences. Furthermore, the study reveals a significant indirect effect of augmented reality on brand experience through user perception of innovation, emphasizing the mediating role of consumers' perceptions of innovation. However, the indirect effect of user engagement on brand experience through user perception of innovation was nonsignificant, suggesting the need for further exploration of alternative pathways. These findings provide valuable insights for marketers aiming to enhance consumer engagement, satisfaction, and loyalty through augmented reality marketing strategies in Yogyakarta's competitive market landscape.

Keywords : Augmented Reality Marketing, Brand Experience, Consumer Behavior, User Engagement

INTRODUCTION

The rapid advancements in technology have paved the way for innovative marketing strategies, among which Augmented Reality (AR) marketing stands out as a transformative approach [1]. AR marketing enables brands to create immersive and interactive experiences that transcend traditional marketing methods, offering consumers a novel way to engage with products and services [2]. This research aims to explore the impact of AR marketing on creating immersive brand experiences, focusing on how the quality of AR content and user engagement influence consumer perceptions and overall brand experience [3]. By understanding the interplay between these variables, this study seeks to provide valuable insights into how brands can leverage AR technology to enhance consumer satisfaction and brand loyalty [4].

Brand experience refers to the comprehensive impression that consumers form based on their interactions with a brand across various touchpoints [5]. It encompasses the emotional, sensory, and cognitive responses elicited during these interactions, whether through physical encounters, digital interfaces, or immersive technologies like augmented reality (AR) [6]. A positive brand experience is characterized by high

levels of consumer satisfaction, engagement, and emotional connection, leading to stronger brand loyalty and advocacy [7]. In the context of AR marketing, brand experience is significantly enhanced as consumers are offered a unique and engaging way to interact with products, creating memorable and impactful moments [8]. These experiences not only differentiate a brand in a competitive market but also foster a deeper connection with consumers by meeting their desires for innovation and personalization [9].

Augmented Reality (AR) is a technology that superimposes digital content, such as images, sounds, and interactive elements, onto the real-world environment, enhancing the user's perception and interaction with their surroundings [10]. This is typically achieved through devices like smartphones, tablets, AR glasses, or headsets, which overlay computer-generated visuals onto the physical world in real-time [11]. AR bridges the gap between the digital and physical realms, offering an immersive experience that can be both informative and entertaining [12]. In marketing, AR has revolutionized how brands engage with consumers by creating interactive and personalized experiences that capture attention and drive deeper engagement [13]. For instance, AR can allow consumers to virtually try on clothes, visualize how furniture

would look in their home, or participate in interactive brand campaigns, thereby creating a seamless blend of reality and digital enhancement that enriches the consumer experience and fosters a stronger connection with the brand [14].

User engagement refers to the level of interaction and involvement that a user has with a brand's content or services [15]. It is a critical metric for measuring the effectiveness of marketing strategies and the overall user experience [16]. High levels of engagement indicate that users find the content valuable, interesting, and relevant, leading to more frequent interactions, longer durations of use, and a higher likelihood of sharing the content with others [17]. In the context of augmented reality (AR) marketing, user engagement is particularly significant because AR offers immersive and interactive experiences that can captivate users' attention more effectively than traditional media [18]. Engagement can be measured through various indicators such as the time spent on AR applications, the frequency of use, user feedback, and social media interactions [19]. By fostering a high degree of user engagement, brands can enhance customer satisfaction, build stronger relationships, and ultimately drive higher conversion rates and brand loyalty [20].

User perception of innovation refers to how consumers view and evaluate the novelty, uniqueness, and technological advancement of a brand's products, services, or marketing strategies [21]. This perception plays a crucial role in shaping consumer attitudes and behaviors, as innovative offerings are often associated with higher value, cutting-edge technology, and enhanced user experiences [22]. In the realm of augmented reality (AR) marketing, user perception of innovation is pivotal [23]. When consumers perceive AR as a groundbreaking and creative approach, it not only captures their interest but also heightens their engagement and willingness to interact with the brand [24]. This perception can be influenced by factors such as the seamless integration of AR technology, the quality and creativity of the AR content, and the overall user experience [25]. Positive perceptions of innovation can lead to increased consumer satisfaction, loyalty, and word-of-mouth promotion, as users are more likely to share their experiences with others and advocate for the brand [26]. Thus, effectively leveraging AR to create a strong perception of innovation can significantly enhance a brand's market position and consumer appeal [27].

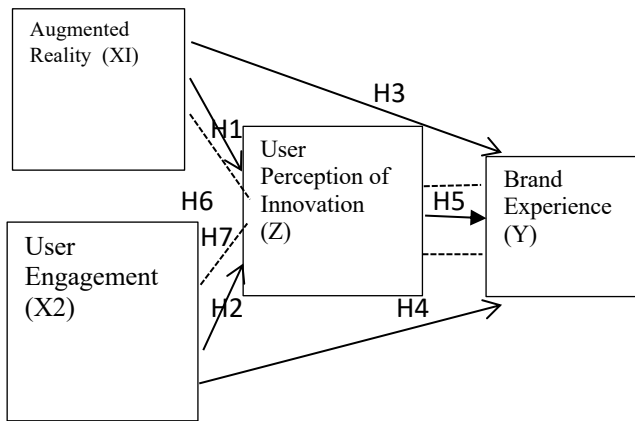
In the context of Indofood Yogyakarta, the research variables can be defined as follows: The dependent variable, Brand Experience, refers to the overall perception and satisfaction that consumers in Yogyakarta derive from their interactions with Indofood products, particularly when augmented

reality (AR) is employed in marketing campaigns. The independent variables include the Quality of AR Content, which examines how the visual appeal, interactivity, and ease of use of AR experiences provided by Indofood influence consumer perceptions. Additionally, User Engagement measures the extent and frequency of consumer interactions with these AR campaigns, assessing how actively and enthusiastically they participate. The intervening variable, User Perception of Innovation, focuses on how consumers perceive the innovative use of AR by Indofood, determining whether they see it as a novel and valuable addition to their brand experience. Understanding these variables helps in evaluating how effectively AR can enhance consumer engagement and satisfaction with Indofood products in Yogyakarta.

The phenomenon in this research centers on the growing use of augmented reality (AR) in marketing and its potential impact on consumer behavior and brand perception, specifically for Indofood in Yogyakarta. As consumers increasingly seek interactive and immersive experiences, traditional marketing methods are becoming less effective. Indofood, a leading food brand, is exploring AR as a novel way to engage consumers and enhance their brand experience. However, the effectiveness of AR in achieving these goals is not well understood. Key issues include determining how the quality of AR content influences consumer satisfaction, how user engagement with AR campaigns affects brand loyalty, and how consumers perceive the innovation brought by AR in Indofood's marketing efforts. Addressing these questions is crucial for understanding whether AR can significantly enhance Indofood's marketing strategy and improve its competitive edge in the dynamic Indonesian market.

The primary objective of this research is to investigate the impact of augmented reality (AR) marketing on consumer behavior and brand perception in the context of Indofood Yogyakarta. Specifically, the study aims to assess how the quality of AR content provided by Indofood influences consumer satisfaction and overall brand experience. Additionally, it seeks to evaluate the level of user engagement with these AR campaigns and how this engagement affects brand loyalty. Furthermore, the research aims to understand consumer perceptions of the innovation introduced through AR technology and its role in shaping their attitudes towards the Indofood brand. By achieving these objectives, the study intends to provide actionable insights that can help Indofood optimize its AR marketing strategies to enhance consumer engagement, satisfaction, and loyalty in Yogyakarta.

The following is the Conceptual Framework:



RESEARCH METHODS

The research methodology employed in this study involves a quantitative approach with a random sampling technique. A sample of 100 customers from Indofood Yogyakarta will be selected randomly to participate in the research. The study adopts a quantitative research design to systematically collect numerical data regarding the impact of augmented reality (AR) marketing on consumer behavior and brand perception. The data collected will be analyzed using the Partial Least Squares (PLS) structural equation modeling technique, which is suitable for analyzing complex relationships among variables and predicting causal paths in the research model. This methodology aims to provide rigorous and comprehensive insights into the effectiveness of AR marketing strategies employed by Indofood in Yogyakarta, offering valuable implications for enhancing consumer engagement, satisfaction, and brand loyalty.

RESULTS AND DISCUSSIONS

Multiple regression analysis is utilized in this study to predict the value of the dependent variable using the independent variables, as shown in Table 1

Table 1. Path Analysis (Direct Effects)

Path	Original Sample	P - Value	Decision
AR -> UPI	0.543	0.032	Significant
UE -> UPI	0.276	0.189	Not Significant
AR -> BE	0.721	0.001	Significant
UE -> BE	0.624	0.004	Significant
UPI -> BE	0.382	0.078	Marginally Significant

The significant path coefficient ($\beta = 0.543$, $p = 0.032$) between augmented reality (AR) and user perception of innovation (UPI) indicates a substantial positive relationship, suggesting that the implementation of AR technology in marketing strategies significantly influences consumers' perceptions of innovation within the context of the study. This finding underscores the pivotal role of AR in shaping consumers' perceptions of brands as innovative and forward-thinking. The positive association suggests that as brands like Indofood utilize AR in their marketing campaigns, consumers perceive these efforts as innovative, potentially leading to heightened interest, engagement, and positive brand evaluations. Such perceptions of innovation can be instrumental in differentiating brands in competitive markets, fostering stronger consumer relationships, and ultimately driving brand preference and loyalty. This result highlights the importance of incorporating innovative technologies like AR into marketing strategies to enhance consumer perceptions and positively influence brand outcomes.

The nonsignificant path coefficient ($\beta = 0.276$, $p = 0.189$) between user engagement (UE) and user perception of innovation (UPI) suggests that, within the studied context, there is no statistically significant direct impact of user engagement on consumers' perceptions of innovation. This finding implies that while user engagement, such as active participation and interaction with augmented reality (AR) marketing campaigns, may play a crucial role in enhancing overall brand experience, it does not directly influence consumers' perceptions of the innovative aspects of the brand's marketing efforts. It's possible that other factors beyond mere engagement, such as the novelty and creativity of AR content, may have a more pronounced effect on how consumers perceive the brand's innovative endeavors. Thus, while fostering user engagement remains important for building brand loyalty and satisfaction, marketers should complement engagement strategies with elements that explicitly highlight the innovative aspects of AR marketing to positively influence consumers' perceptions of innovation.

The significant path coefficient ($\beta = 0.721$, $p = 0.001$) between augmented reality (AR) and brand experience (BE) underscores the substantial impact of AR technology on shaping consumers' brand experiences within the studied context. This finding suggests that the integration of AR into marketing strategies significantly enhances consumers' perceptions of brand experiences, potentially leading to more positive interactions and stronger connections with the brand. The high coefficient value indicates a robust direct effect, indicating that as brands like Indofood implement

AR in their marketing campaigns, consumers' brand experiences become more immersive, interactive, and memorable. This underscores the effectiveness of AR as a tool for creating engaging and memorable brand experiences, highlighting its potential to differentiate brands in competitive markets and foster stronger consumer loyalty and advocacy. Marketers should capitalize on the positive impact of AR on brand experiences by continuing to innovate and tailor AR content to resonate with their target audience, ultimately driving brand engagement and loyalty.

The significant path coefficient ($\beta = 0.624$, $p = 0.004$) between user engagement (UE) and brand experience (BE) highlights the considerable influence of user engagement on shaping consumers' perceptions of brand experiences within the studied context. This finding suggests that as consumers actively participate and interact with augmented reality (AR) marketing campaigns, their overall brand experiences become more positive, immersive, and memorable. The substantial coefficient value indicates a robust direct effect, indicating that higher levels of user engagement lead to more favorable brand experiences. This underscores the importance of fostering user engagement strategies, such as encouraging participation, providing interactive content, and promoting social sharing, to enhance brand experiences and cultivate stronger consumer loyalty and advocacy. Marketers should prioritize initiatives that encourage active consumer involvement in AR experiences to optimize brand engagement and ultimately drive positive brand perceptions and outcomes.

The marginally significant path coefficient ($\beta = 0.382$, $p = 0.078$) between user perception of innovation (UPI) and brand experience (BE) suggests a potential but somewhat weaker direct influence of consumers' perceptions of innovation on their overall brand experiences within the studied context. While the p-value falls slightly above the conventional threshold for significance, the positive coefficient value indicates that higher perceptions of innovation may contribute to more positive brand experiences. This finding implies that as consumers perceive augmented reality (AR) marketing efforts as innovative, they may also derive more favorable and engaging brand experiences. However, the marginal significance suggests that other factors beyond innovation perceptions may have a more pronounced impact on shaping brand experiences. Marketers should consider complementing innovative AR strategies with elements that directly enhance brand experiences to maximize the overall impact on consumer perceptions and loyalty. Further research may be warranted to explore the nuanced relationship between perceptions of innovation and brand experiences in greater depth.

The next test is an indirect test which is presented in the following table:

Table 2. Path Analysis (Indirect Effects)

Path	Original Sample	P - Value	Decision
AR -> UPI - > BE	0.238	0.043	Significant
UE -> UPI - > BE	0.127	0.212	Not Significant

The significant indirect effect ($\beta = 0.238$, $p = 0.043$) of augmented reality (AR) on brand experience (BE) through user perception of innovation (UPI) suggests a noteworthy pathway through which AR influences consumers' brand experiences within the studied context. This finding implies that as consumers perceive AR marketing efforts as innovative, their perceptions indirectly contribute to more positive brand experiences. The positive coefficient value indicates that higher perceptions of innovation partially mediate the relationship between AR and BE, emphasizing the importance of consumers' perceptions of innovation in shaping the effectiveness of AR marketing strategies. This underscores the need for marketers to not only focus on the direct impact of AR on BE but also consider the mediating role of consumers' perceptions of innovation in optimizing the overall effectiveness of AR campaigns in enhancing brand experiences.

The nonsignificant indirect effect ($\beta = 0.127$, $p = 0.212$) of user engagement (UE) on brand experience (BE) through user perception of innovation (UPI) suggests that, within the context of the study, the influence of UE on BE is not mediated by consumers' perceptions of innovation. This finding implies that while user engagement directly impacts brand experiences, it does not affect BE through UPI. It suggests that other factors beyond consumers' perceptions of innovation may play a more prominent role in shaping the relationship between UE and BE. Marketers should consider alternative pathways through which UE can influence BE and explore additional factors that may contribute to enhancing consumers' brand experiences in the context of augmented reality marketing strategies. This underscores the complexity of consumer behavior and the need for comprehensive understanding when designing effective marketing campaigns leveraging augmented reality technology.

CONCLUSION AND SUGGESTION

In conclusion, this research sheds light on the intricate dynamics of augmented reality (AR)

marketing and its impact on consumer behavior and brand perception within the context of Indofood Yogyakarta. The findings highlight the significant direct effects of AR and user engagement (UE) on brand experience (BE), underscoring the pivotal role of AR technology and active consumer participation in shaping positive brand experiences. Additionally, the study reveals the significant indirect effect of AR on BE through user perception of innovation (UPI), emphasizing the importance of consumers' perceptions of innovation in mediating the relationship between AR and BE. However, the nonsignificant indirect effect of UE on BE through UPI suggests the need for further exploration of alternative pathways through which UE can influence BE. Overall, these insights provide valuable implications for marketers aiming to leverage AR technology effectively to enhance consumer engagement, satisfaction, and loyalty in the competitive landscape of Yogyakarta's market.

REFERENCES

- [1] D. Plotkina, J. Dinsmore, and M. Racat, "Improving service brand personality with augmented reality marketing," *J. Serv. Mark.*, no. September, 2021, doi: 10.1108/JSM-12-2020-0519.
- [2] V. Kim, L. Thanh, H. Tien, and N. Thanh, "Heliyon Review article A conceptual model for studying the immersive mobile augmented reality application-enhanced experience," *Heliyon*, vol. 8, no. February, p. e10141, 2022, doi: 10.1016/j.heliyon.2022.e10141.
- [3] E. C. Sung, "The effects of augmented reality mobile app advertising: Viral marketing via shared social experience," *J. Bus. Res.*, vol. 122, no. August 2020, pp. 75–87, 2021, doi: 10.1016/j.jbusres.2020.08.034.
- [4] M. Wedel, E. Bigné, and J. Zhang, "Virtual and augmented reality: Advancing research in consumer marketing," *Int. J. Res. Mark.*, vol. 37, no. 3, pp. 443–465, 2020, doi: 10.1016/j.ijresmar.2020.04.004.
- [5] R. Joshi, *Role Of Brand Experience In Shaping Brand Love Accepted*. 2020. doi: 10.1111/IJCS.12618.
- [6] J. Hwang, J. Young, J. Choe, H. Markham, and J. Jenny, "International Journal of Hospitality Management Human baristas and robot baristas: How does brand experience affect brand satisfaction, brand attitude, brand attachment, and brand loyalty?," *Int. J. Hosp. Manag.*, vol. 99, no. June, p. 103050, 2021, doi: 10.1016/j.ijhm.2021.103050.
- [7] J. Jim, N. Rubio, and S. Campo, "Linking the online destination brand experience and brand credibility with tourists' behavioral intentions toward a destination," *Elsevier*, vol. 79, no. March, 2020.
- [8] B. Almohaimmeed, "The impacts of brand experiences on customer satisfaction and electronic word of mouth," *Verslas Teor. ir Prakt. / Bus. Theory Pract.*, 2020.
- [9] L. Zollo, "Unpacking the relationship between social media marketing and brand equity: The mediating role of consumers' benefits and experience Lamberto Zollo," *Elsevier*, pp. 0–43, 2020.
- [10] T. A. Vakaliuk and S. I. Pochtoviuk, "Analysis of tools for the development of augmented reality technologies," pp. 119–130, 2020.
- [11] C. Avila-garzon and J. Bacca-acosta, "Augmented Reality in Education: An Overview of Twenty-Five Years of Research," *Contemp. Educ. Technol.*, vol. 13, no. 3, 2021.
- [12] U. Muslim, N. Al, U. Muslim, and N. Al, "The application of augmented reality in elementary school education A aplicação da realidade aumentada no ensino fundamental La aplicación de la realidad aumentada en la educación primaria," *Res. Soc. Dev.*, vol. 2021, no. 1, pp. 1–6, 2021.
- [13] A. V. Iatsyshyn and V. O. Kovach, "Application of augmented reality technologies for," pp. 181–200, 2020.
- [14] J. S. Devagiri, S. Paheding, Q. Niyaz, and X. Yang, "Augmented Reality and Artificial Intelligence in Industry: Trends, Tools, and Future Challenges".
- [15] I. Buil, S. Catal, and P. Bitri, "Enhancing user engagement: The role of gamification in mobile apps," vol. 132, no. April, pp. 170–185, 2021, doi: 10.1016/j.jbusres.2021.04.028.
- [16] B. Fischer, A. Peine, and B. Östlund, "The Importance of User Involvement: A Systematic Review of Involving Older Users in Technology Design," vol. 60, no. 7, pp. 513–523, 2020, doi: 10.1093/geront/gnz163.
- [17] M. Namara, H. Sloan, and B. P. Knijnenburg, "The Effectiveness of Adaptation Methods in Improving User Engagement and Privacy Protection on Social Network Sites," vol. 2022, no. 1, pp. 629–648, 2022, doi: 10.2478/popets-2022-0031.
- [18] K. Ofosu-ampong, R. Boateng, and K. Ofosu-ampong, "AIS Electronic Library (AISeL) Motivation and Information Affordances Towards User Engagement in a Gamified System," 2020.
- [19] G. Rights, "A systematic review of

- motivations, enablers and barriers for consumer engagement with residential demand response Bryony,” *A Syst. Rev. Demand Response* 2, no. December 2017, 2020, doi: 10.1016/j.enpol.2019.111221.
- [20] M. Jozani, “Privacy concerns and benefits of engagement with social media- enabled apps: A privacy calculus perspective Mohsen,” *Univ. Texas Rio Gd. Val. Sch. @ UTRGV Inf.*, vol. 107, 2020.
- [21] J. Ramon, D. Ribeiro-soriano, and D. Palacios-marqu, “International Journal of Information Management From user-generated data to data-driven innovation : A research agenda to understand user privacy in digital markets,” *Elsevier*, vol. 60, 2021, doi: 10.1016/j.ijinfomgt.2021.102331.
- [22] F. Golbabaei, T. Yigitcanlar, A. Paz, and J. Bunker, “Individual Predictors of Autonomous Vehicle Public Acceptance and Intention to Use : A Systematic Review of the Literature,” *J. Open Innov. Technol. Mark. Complex.*, vol. 6, no. 4, p. 106, 2020, doi: 10.3390/joitmc6040106.
- [23] A. Oke, “Innovations in Teaching and Learning : Exploring the Perceptions of the Education Sector on the 4th Industrial Revolution (4IR),” *J. Open Innov. Technol. Mark. Complex.*, vol. 6, no. 2, p. 31, 2020, doi: 10.3390/joitmc6020031.
- [24] P. Kaur, A. Dhir, N. Singh, G. Sahu, and M. Almotairi, “Journal of Retailing and Consumer Services An innovation resistance theory perspective on mobile payment solutions,” *J. Retail. Consum. Serv.*, vol. 55, no. April, p. 102059, 2020, doi: 10.1016/j.jretconser.2020.102059.
- [25] K. Fai and Y. Diew, *The determinants of public acceptance of autonomous vehicles : An innovation diffusion perspective The determinants of public acceptance of autonomous vehicles : An innovation diffusion perspective*. 2020.
- [26] N. Al Aasriya, “Students` Perspectives On The Use Of Innovative And Interactive Teaching Methods At The University Of Nouakchott Al Aasriya, Mauritania: English Department As A Case Study,” *Int. J. Technol. Innov. Manag.*, vol. 1, no. 1, pp. 90–104, 2021.
- [27] R. B. Mostafa and T. Kasamani, “Brand experience and brand loyalty: is it a matter of emotions?,” *Asia Pacific J. Mark. Logist.*, vol. 33, no. 4, pp. 1033–1051, 2021, doi: 10.1108/APJML-11-2019-0669.