UNDERSTANDING CONSUMER PERCEPTIONS AND ATTITUDES TOWARDS THE IMPLEMENTATION OF AUGMENTED REALITY MARKETING FOR HIGH INVOLVEMENT PRODUCTS

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ABSTRACT

Augmented Reality (AR) enhances an individual's perception of reality by adding digital elements to the physical world. Augmented Reality Marketing (ARM) occurs when AR is used to support branding or sales. This research aims to bridge the gap in the literature regarding ARM, particularly in the context of High Involvement Products (HIP). Through interviews and observations, this study highlights consumer views on ARM in the context of HIP. The results show that consumers see ARM as a valuable tool that provides informative and emotional benefits, increasing their interest in purchasing HIP. However, ARM is not seen as a replacement for other sources of information but rather as a complement. Despite being perceived as time-consuming and difficult to use, ARM has great potential as a standard practice in the future. Consumers find ARM especially useful when product design is a primary focus in the purchase decision. Therefore, the application of ARM may not be essential for all companies, as its main advantage lies in its ability to visualize products in real-life situations before purchase.

KEYWORDS	*Augmented Reality Marketing, High Involvement, Consumer Attitudes, Consumer Perceptions*

INTRODUCTION

The development of information technology has introduced new innovations in marketing that can serve as solutions to replace conventional marketing methods. Today, many prefer digital marketing media due to its perceived efficiency compared to traditional media. Digital marketing initially started with SEO (Search Engine Optimization), which emerged through search engines, and then social media

began to be widely used as a platform to market products. Recently, marketing activities have prioritized building relationships with users and customers over hard selling on social media. Digital marketing is a combination of online and offline interactions between companies and customers, blending style and substance to build brands and strengthen customer engagement (Aiwan et al., 2017). Additionally, content marketed through social media has evolved with the advent of artificial intelligence (AI) technology.

One form of AI technology currently being developed in marketing activities is Augmented Reality (AR). AR is a technology that adds three-dimensional virtual elements from a computer into physical objects or spaces. Unlike Virtual Reality (VR), which replaces the real world, AR focuses on enriching the real-world environment with digital three-dimensional elements. AR is becoming increasingly popular in society because it is connected to mobile devices and also supports the advent of Industry 4.0 due to its disruptive nature in replacing human labor, thereby resulting in better efficiency and effectiveness (Sugiono, 2021).

AR technology will change the way marketing is done with increasingly sophisticated and realistic tools and has been widely applied in various business and industry sectors (Wijayanti, 2019). AR technology is experiencing rapid development in the advertising world today, with applications such as Augmented Reality Automotive, Augmented Reality Furniture, Augmented Reality Education, Augmented Reality Print Materials, and many more. AR technology can be an effective tool for showcasing products to potential consumers. As AR marketing advances, it enables consumers to have a more authentic shopping experience, allowing them to make more informed purchasing decisions and avoid non-refundable costs associated with poor purchases. However, from several studies, there is still a lack of understanding of the contexts in which AR marketing should be used to be optimally effective.

Despite the increasing interest from both companies and researchers in AR marketing and its benefits, knowledge about when and how AR marketing should be used is still inadequate. Firstly, little is known about consumer attitudes towards the use and adaptation of AR marketing. It is said that AR marketing has various positive effects on consumers and business performance, but these findings largely come from studies that do not reflect the "real-life" perspectives of consumers (Dwivedi et al., 2021).

Consumers play a crucial role in the successful implementation of AR marketing because their perceptions, understanding, and use of the technology affect the outcomes. Therefore, the potential benefits of AR marketing identified in research will not materialize if consumers are not interested in using AR marketing platforms in real-life settings, making this area important to study (Ramdani et al., 2022). This is also emphasized by Chylinski, Heller, Hilken, Isobel, et al., (2020), who explain that managers are skeptical about investing in AR because they lack knowledge about how and whether consumers will utilize this technology. Sridhar & Fang (2019) highlight this by explaining that although AR is a prevalent technology, companies do not know whether, when, or how to use it. It is clear that AR can lead to increased sales and competitive advantages, but only if it is valued by consumers. Otherwise, it can result in negative overall outcomes. Therefore, exploring

consumer preferences and attitudes towards AR in marketing is essential to understanding its full potential and the critical factors for its success (Paul & Kosiba, 2018).

To enhance knowledge about when and how AR marketing is useful, researchers should study AR marketing in various contexts. Considering the potential of AR marketing, such as its ability to enhance brand trust, customer satisfaction, reduce risks, and facilitate the decision-making process, it can be suggested that one area where the potential value of AR marketing could be noteworthy is in "high involvement products" (HIP). HIPs are products perceived by consumers to have a high sacrifice risk in their purchase. This is due to the relatively high price of the product or its long usage period (Aditua et al., 2018).

It is important for companies selling HIPs to provide their consumers with as much information as possible to facilitate the customer journey and reduce perceived risks. Since AR marketing tends to have certain opportunities that overlap with common challenges associated with purchasing HIPs, it would be more beneficial for theory and practice to explore how consumers perceive this form of marketing in the context of HIPs. Therefore, in-depth research is needed to gain knowledge about how consumers perceive AR marketing and why, so companies know whether to invest in AR marketing (Chylinski, Heller, Hilken, Keeling, et al., 2020). Additionally, considering the time and effort invested by consumers in purchasing HIPs, the possibility of implementing this new technology to enhance and facilitate the purchasing experience of HIPs is very appealing to managers (Hasibuan, 2023). If companies can learn when to invest in AR marketing based on consumer perceptions of interacting with it, they can better facilitate the customer journey to ultimately enhance brand relationships, trust, and sales.

This research aims to fill the gap in the literature on Augmented Reality Marketing (ARM) by focusing on consumer perceptions and responses to the application of ARM on High Involvement Products (HIP). The purpose of this study is to delve into consumer experiences with ARM, determine the factors that influence consumer attitudes towards the use of ARM, and identify the potential benefits of ARM in the context of purchasing HIPs. The significant contribution of this research is a deeper understanding of consumer perceptions, the identification of new trends in the application of ARM, and suggestions for developing more engaging and relevant ARM applications for consumers. For business practitioners and management, this study provides insights into how ARM can enhance consumer experiences, create competitive advantages, and improve marketing strategies. However, the limitations of the study relate to the subjectivity in the qualitative approach used.

Based on previous research, AR has been used in the tourism and hospitality industry to enhance service quality and create new value for consumers (Shabani et al., 2018). The potential of AR in sports marketing also creates opportunities for practitioners and researchers (Goebert, 2020). Moreover, AR marketing affects consumer perceptions of purchasing decisions (Chylinski et al., 2020). However, despite the optimism towards the potential of AR in consumer marketing, the literature on AR marketing is still scarce and lacks a robust framework (Wedel et al., 2020). This study highlights the importance of further research in understanding

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consumer acceptance of AR technology, with significant practical and theoretical implications.

RESEARCH METHOD

This research employs an exploratory qualitative approach with a phenomenological design to understand the meanings expressed by consumers regarding augmented reality (AR) technology in the marketing of high involvement products. Data was collected through semi-structured interviews and passive participatory observation as the primary instruments. Informants were selected using purposive sampling techniques, with diverse criteria to obtain a comprehensive understanding. The data was analyzed using a descriptive approach and the Miles and Huberman method, with data validity tested through triangulation and member checks. This ensures the validity and credibility of the data obtained from the subjects' perspectives, providing deep insights into consumer perceptions and attitudes towards the application of AR in marketing high involvement products (Creswell, 2014; Sutopo, 2008; Miles & Huberman, 1992; Ahyar et al., 2020).

RESULT AND DISCUSSION

Result Findings: Further Study of Benefits and Values Discovered
Function

Informants consider Augmented Reality Marketing (ARM) as a tool with the potential to aid in purchasing decisions for High Involvement Products (HIP). They view it as supplementary information and an adjunct in the purchasing process, rather than a sole determining factor. AR helps confirm purchasing decisions, both positively and negatively, by allowing consumers to better and more realistically assess products before buying. For example, AR can increase purchase intent if a product appears appealing, but it can also help filter out unsuitable alternatives by eliminating products that do not match consumer preferences. This indicates that ARM can support the decision-making process by providing confirmation for consumers' purchase intuitions.

Advantages

ARM is considered to provide value to consumers in the purchase of HIPs through various practical benefits. It was found that its ability to realistically visualize products helps consumers determine the suitability of products with their preferences and needs. Additionally, AR facilitates consumers in trying out products from home, reducing the stress and transportation costs associated with visiting physical stores. Furthermore, AR helps reduce purchase risks by providing confirmation of purchasing decisions. Informants also enjoyed using AR, finding it entertaining, non-intrusive, and more interactive compared to conventional marketing forms. This indicates that ARM not only offers informational value but also entertainment, making it more appealing and less invasive in product marketing.

Opportunities

Informants agree that ARM has significant potential and is predicted to grow rapidly in the future. They believe that this technology will become a necessity provided by companies in the coming years, reaching all layers of society as technology advances swiftly. Additionally, informants believe that over time, consumer and company experiences with this technology will improve, facilitating integration and increasing its potential use across various product categories. However, they also emphasize the need for technological enhancements for ARM to achieve standard practice status in the future. Although the technology is still in its early stages, informants show strong interest in it, especially in the context of purchasing HIPs, and see great potential value if this technology continues to improve.

Challenges

Informants acknowledge that ARM offers many benefits, but it is also seen as challenging and somewhat cumbersome. One of the main obstacles is the time required for its use, along with practical constraints such as a stable internet connection and adequate lighting. Other concerns include technical complexity that could hinder usage and doubts about the reliability of the technology. Additionally, there are privacy concerns related to camera access and disappointment if products appear unrealistic on the AR platform. Consumers also want features that allow product comparisons and clearer guidelines on how to use the technology. Although ARM is promising, many challenges need to be addressed to meet consumer expectations and improve the user experience.

Discussion

Function

The study reveals that consumers view Augmented Reality Marketing (ARM) as a tool that can facilitate, assist, and complement their purchase of High Involvement Products (HIP). Consumers see ARM as a means to simplify the evaluation and decision-making process, as well as the overall purchasing process. However, instead of being the sole tool for shopping or an exclusive source of information, consumers tend to view ARM as a supplement to other available information sources. It allows them to see products in a new way but does not replace the value derived from videos or images, which provide more product details and inspiration for use. This perspective, not explicitly detailed in previous literature but hinted at in Du et al., (2022), suggests integrating AR technology into existing marketing approaches to enhance efficiency rather than replacing them. The findings support this, as consumers regard ARM as a complement in the purchasing process, not a substitute for other marketing strategies. ARM adds an extra dimension to the information provided by images and videos. The findings also indicate that ARM serves as a source of confirmation for consumers' thoughts, making them more confident than just using the Internet or viewing images.

Advantages

The findings indicate that consumers perceive Augmented Reality Marketing (ARM) as providing value in the context of High Involvement Products (HIP) due

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to several beneficial aspects for the overall purchasing and decision-making process. ARM gives consumers the ability to visualize products, making it easier to evaluate whether the products are satisfactory. When products appear more realistic to consumers, it generally indicates that ARM creates greater value, aligning with Xu et al., (2020), who state that the more positive consumers' attitudes toward ARM, the more real the products feel. When consumers find the purchasing process easier with the ability to see products in their desired context, such as at home or on their body, the perceived value of ARM increases.

Although ARM allows consumers to view products in the intended environment, it also enables them to try products from any location, such as from home. This can help consumers avoid stressful environments and situations that sometimes occur in physical stores. Individuals who feel uncomfortable trying products under the watchful eyes of sales staff, for example, can try products calmly and privately. Hence, the findings suggest that this is an important benefit brought by ARM. ARM facilitates the purchasing process in several ways by allowing consumers to experience products in new ways before buying, supporting Romano et al., (2021). ARM has the potential to help people learn more about products from their homes, feeling more comfortable and at ease during their purchase decision-making process. This is because they can take all the time they need to think, view, and try different products without feeling pressured to satisfy others, such as sales staff or accompanying family members in the store, ultimately reducing stress and anxiety related to these situations. As a result, the consumer's purchasing experience can be enhanced because they can make decisions at their own pace. This can also lead to greater satisfaction with their purchases as they have ample time to make decisions. By providing an opportunity for consumers uncomfortable with the store environment to try products in a better way while avoiding such situations, companies can attract these consumers and improve their brand image by making the purchasing process more comfortable.

ARM in the context of HIPs is found to be interesting and entertaining for consumers, making them see interactions with ARM as "playing" rather than merely seeking information. The findings also show that consumers become more engaged with AR technology because they find it enjoyable to use, which in turn indicates that ARM enhances consumer engagement in the information-seeking process (Jessen et al., 2020). Another reason for increased engagement comes from the fact that consumers must take action to use the technology. As a result, ARM in the context of HIPs tends to be perceived as less intrusive compared to other forms of advertising. Consumers do not regard ARM as an advertisement because they enjoy interacting with it and can choose whether to use it or not. This benefits companies by potentially increasing engagement with their products without having to introduce the products to consumers overtly, making the purchasing process feel more authentic while giving companies room to subtly influence consumer purchase intentions on the ARM platform.

Opportunities

The findings show that consumers are very enthusiastic about considering Augmented Reality Marketing (ARM). They believe ARM has great potential for

the future due to its abundant opportunities and its ability to facilitate the purchasing process for High Involvement Products (HIP) if it operates as expected. Therefore, it is emphasized that this technology needs to be enhanced to make HIPs appear more realistic and the platform more user-friendly, allowing ARM to reach its maximum potential. Currently, the findings indicate that consumers lose interest and leave the ARM platform before achieving the expected results due to its complexity. Nevertheless, consumers remain optimistic that ARM will be improved in the future and will provide significant benefits. This optimism is driven by the rapid pace of technological innovation and the belief that ARM will be sought after by consumers across various product categories. This indicates that practitioners and software engineers would benefit from investing in ARM and focusing on its development. Hence, the findings support the view that ARM can shape consumer behavior to support sales strategies and customer service, as suggested by Kazmi et al., (2021), with the additional emphasis that ARM technology needs to be improved to achieve this.

Calvo-Porral et al., (2018) argue that advertisements for HIPs should focus on providing informative value rather than emotional value, as these ads facilitate the evaluation process. The findings of this study show that informative value is indeed important and highly sought after by participants when interacting with ARM platforms. For example, information about the size, proportion, color, and model of different products often becomes key factors in decision-making related to HIPs. These attributes are highly significant because HIPs are often purchased with specific usage contexts in mind, along with considerations of appropriate size and function. Simultaneously, how a product feels when used is equally important to consumers in determining their purchasing decisions for HIPs. Thus, the ability to see products in their physical context often becomes a crucial determinant of whether consumers will be satisfied with the product. It can be concluded that in many cases of HIPs, a combination of informative value and direct experience of viewing the product in its physical context will be the final determining factor in consumer purchasing decisions.

Another element found important to consumers in the purchase of HIPs is human interaction. Receiving assistance and explanations from store employees or friends about how a product works and which product best fits one's needs is considered a significant factor by informants, especially since the purchase of HIPs often involves complexity and few people have in-depth knowledge about these products. This is a level of interaction that ARM platforms cannot provide. Therefore, an identified risk is that ARM may only offer a temporary sensation in some cases of HIP purchases. Although the initial experience may be intense and engaging due to its entertainment value, this may not be sustainable in the long run when consumers realize that ARM does not significantly aid in their actual purchasing decision-making process. This is due to ARM's limitations in providing an experience that encompasses all the essential elements for purchasing HIPs.

Other research findings also indicate that consumers see ARM as having great potential, with significant interest in using this technology again for future HIP purchases. ARM is viewed as something the informants would like to try if given the opportunity. This is because ARM offers added value not found in other marketing

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activities—the ability to confirm thoughts and test ideas by getting an indication of how a product will feel in its intended environment. Therefore, it is important to ensure that ARM platforms are easily accessible, as the findings show that consumers will not actively seek out this technology on their own due to its time-consuming nature and the perceived uncertainty in finding appealing products. Hence, the authors suggest that ARM should not only be a marketing tool used to boost sales but should focus on facilitating consumers in finding the products they desire in a more natural way. However, it should be noted that ARM is still a relatively new technology and not widely known by consumers. Therefore, efforts are needed to educate and promote ARM platforms so that consumers can see and try them more frequently.

Challenges

Despite generally positive feedback from informants regarding Augmented Reality Marketing (ARM), some negative perceptions were also noted. One such perception is that ARM is time-consuming, which arises before, during, and after testing the ARM platform. Informants expressed concern that they might not be technically skilled enough to use the platform effectively, requiring significant time and effort to master it.

Anderson & Perrin (2017) noted that consumers who are less experienced with technology face greater barriers when interacting with ARM platforms compared to those who are tech-savvy, which aligns with our findings. However, the research adds that regardless of participants' technical expertise, they share similar expectations of the technology, especially in terms of the virtual product display. ARM platforms must be easy to understand, use, and access. If ARM does not meet these expectations, it can negatively impact consumer perceptions of High Involvement Products (HIP) and the company. Due to high technological standards in society, consumers expect ARM platforms to provide realistic product representations. If these expectations are not met, it could negatively affect the company's sales. This presents a challenge in implementing ARM: the goal is to give consumers an experience similar to the real world with the product, despite not interacting directly with the physical product. Achieving this is difficult because ARM cannot satisfy all human senses (Daassi & Debbabi, 2021).

Regarding high expectations, an interesting paradox can be identified. The findings indicate that companies face significant challenges in meeting consumers' high expectations of the technology. It seems that consumers who have never been exposed to ARM before and have no direct experience with its functionality feel disappointed and frustrated when the technology does not operate perfectly or does not meet their expectations. There is an assumption that ARM brings new opportunities and added value to consumers, even though it may not be fully functional yet. However, this creates new problems that did not exist before, namely high consumer expectations of the current technology's capabilities. Consumers have become accustomed to high standards and expect something better, even though they are just receiving a new tool with new possibilities that they did not have before.

The study also reveals potential challenges related to the trustworthiness and accuracy of ARM. A virtual image might deceive the eye in ways that seeing a

product in person cannot. ARM is not about trying the physical product but about viewing the product virtually in a highly realistic way. This is something consumers need to accept if ARM is to become a successful tool for purchasing HIPs. However, software developers must improve their technology to make product proportions, sizes, and colors more believable. Currently, consumers do not feel that the products look "real" when viewed through ARM and are not convinced that ARM provides accurate measurements, even though it might. The study does not indicate that ARM fails to provide reliable measurements, but consumers do not trust ARM platforms to deliver reliable measurements. The perception that ARM is not fully reliable can significantly impact its potential use, as the ability to visualize product size in its intended place is one of ARM's core values. Therefore, this is an important finding for practitioners to consider when adopting this technology in the future.

The findings also indicate that ARM is perceived as somewhat vulnerable in terms of privacy and security (Dick, 2021). When interacting with any ARM platform, companies must request access to consumers' cameras. If consumers deny access, they cannot use the platform. Participants who granted camera access did so either without hesitation or with some reservations. They felt uneasy about who would receive their data and what would be done with it, especially as they share personal information in the form of videos and images. Consumers tend to be accustomed to accepting terms and conditions, so they are likely to do the same for ARM platforms. This was observed and noted. Therefore, the fact that ARM is considered intrusive does not necessarily deter consumers from using it, as they understand that camera access is necessary for ARM to function.

CONCLUSION

The emergence of Augmented Reality (AR) technology in the global market has brought significant changes to product marketing. AR allows consumers to interactively experience products, aiding in more accurate decision-making and avoiding poor purchases. Although valued for its ability to provide rich information and practical experiences, AR also faces negative perceptions. Some consumers find it difficult to use and unreliable, leading to distrust in the product representations provided. Despite this, the potential of AR in assisting with the purchase of high involvement products is still recognized, particularly in realistically visualizing products before purchase.

This research contributes to a deeper understanding of consumer views on AR, especially in the context of high involvement products. The implications include practical guidelines for marketing and sales professionals to optimize the use of AR, as well as potential developments in public policy to protect consumer interests and encourage technological innovation. Thus, despite the challenges in AR adoption and perception, its use is expected to increase, especially with ongoing technological advancements and improved consumer understanding.

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REFERENCES

Aditua, S., Silalahi, F., Penelitian, P., Keahlian, B., Ri, D. P. R., Nusantara, I., & Ri, D. P. R. (2018). *(LOW AND HIGH INVOLVEMENT PRODUCT MARKETING STRATEGIES ON SMALL AND MEDIUM ENTERPRISES) Usaha Kecil dan Menengah (UKM) merupakan internasional . Mayoritas usaha di Indonesia masih negara dengan peran sebagai pemasok bahan baku maupun komponen . 1 Namu. 16*(4), 199–210.

Ahyar, H., Maret, U. S., Andriani, H., Sukmana, D. J., Mada, U. G., Hardani, S.Pd., M. S., Nur Hikmatul Auliya, G. C. B., Helmina Andriani, M. S., Fardani, R. A., Ustiawaty, J., Utami, E. F., Sukmana, D. J., & Istiqomah, R. R. (2020). *Buku Metode Penelitian Kualitatif & Kuantitatif* (Issue March).

Aiwan, N. B., G, E. J. P. S., Jokom, R., Perhotelan, P. M., Manajemen, P. S., Petra, U. K., & Siwalankerto, J. (2017). Analisa Efektifitas Komunikasi Pemasaran Interaktif Melalui Instagram Menggunakan Costumer Responden Index (Studi Pada Kafe De Mandailing Di Surabaya). *Analisa Efektifitas Komunikasi Pemasaran Interaktif Melalui Instagram Menggunakan Costumer Responden Index (Studi Pada Kafe De Mandailing Di Surabaya)*, *5*(2013), 356–367.

Anderson, M., & Perrin, A. (2017). Tech Adoption Climbs Among Older Adults. *Pew Research Center*, *May*, 1–22.

Calvo-Porral, C., Ruiz-Vega, A., & Lévy-Mangin, J. P. (2018). Does product involvement influence how emotions drive satisfaction?: An approach through the Theory of Hedonic Asymmetry. *European Research on Management and Business Economics*, *24*(3), 130–136. https://doi.org/10.1016/j.iedeen.2018.06.001

Chylinski, M., Heller, J., Hilken, T., Isobel, D., & Mahr, D. (2020). Augmented reality marketing : A technology-enabled approach to situated customer experience. *Australasian Marketing Journal (AMJ)*, *xxxx*. https://doi.org/10.1016/j.ausmj.2020.04.004

Chylinski, M., Heller, J., Hilken, T., Keeling, D. I., Mahr, D., & de Ruyter, K. (2020). Augmented reality marketing: A technology-enabled approach to situated customer experience. *Australasian Marketing Journal*, *28*(4), 374–384. https://doi.org/10.1016/j.ausmj.2020.04.004

Daassi, M., & Debbabi, S. (2021). Information & Management Intention to reuse AR-based apps : The combined role of the sense of immersion , product presence and perceived realism Mohamed Daassi *, Sana Debbabi. *Information & Management*, *58*(4), 103453. https://doi.org/10.1016/j.im.2021.103453

Dick, E. (2021). Balancing User Privacy and Innovation in Augmented and Virtual Reality. *Information Technology Innovation Foundation*, *March*.

Du, Z., Liu, J., & Wang, T. (2022). Augmented Reality Marketing: A Systematic Literature Review and an Agenda for Future Inquiry. *Frontiers in Psychology*, *13*(June), 1–18. https://doi.org/10.3389/fpsyg.2022.925963

Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2021). Setting the future of digital and social media marketing research:

Perspectives and research propositions. *International Journal of Information Management*, *59*(June 2020), 102168. https://doi.org/10.1016/j.ijinfomgt.2020.102168

Hasibuan, C. A. (2023). Analisis Pengaruh Manajemen Strategi Teknologi Digital terhadap Perkembangan Pelaku Bisnis E-Commerce dan Loyalitas Pelanggan dalam Perspektif Islam. *Jurnal Ilmu Komputer, Ekonomi Dan Manajemen (JIKEM)*, *3*(2), 3237–3250.

Jessen, A., Hilken, T., Chylinski, M., Mahr, D., Heller, J., Keeling, D. I., & de Ruyter, K. (2020). The playground effect: How augmented reality drives creative customer engagement. *Journal of Business Research*, *116*(May), 85–98. https://doi.org/10.1016/j.jbusres.2020.05.002

Kazmi, S. H. A., Ahmed, R. R., Soomro, K. A., Hashem E, A. R., Akhtar, H., & Parmar, V. (2021). Role of augmented reality in changing consumer behavior and decision making: Case of Pakistan. *Sustainability (Switzerland)*, *13*(24). https://doi.org/10.3390/su132414064

Paul, J., & Kosiba, B. (2018). *na ti o na l J ou of Re ta il & Di str ib ut ion e m*. *48*(July), 205–230.

Ramdani, M. A., Belgiawan, P. F., Aprilianty, F., & Purwanegara, M. S. (2022). Consumer Perception and the Evaluation to Adopt Augmented Reality in Furniture Retail Mobile Application. *Binus Business Review*, *13*(1), 41–56. https://doi.org/10.21512/bbr.v13i1.7801

Romano, B., Sands, S., & Pallant, J. I. (2021). Augmented reality and the customer journey: An exploratory study. *Australasian Marketing Journal*, *29*(4), 354–363. https://doi.org/10.1016/j.ausmj.2020.06.010

Sridhar, S., & Fang, E. (2019). *New vistas for marketing strategy : digital , data-rich , and developing market (D 3) environments*. 977–985.

Sugiono, S. (2021). Tantangan dan Peluang Pemanfaatan Augmented Reality di Perangkat Mobile dalam Komunikasi Pemasaran. *Jurnal Komunika: Jurnal Komunikasi, Media Dan Informatika*, *10*(1), 1. https://doi.org/10.31504/komunika.v10i1.3715

Wijayanti, R. R. (2019). Implementasi Augmented Reality Sebagai Media Promosi Interaktif Untuk Katalog Food and Beverage Pada Hokcafe. *JIKA (Jurnal Informatika)*, *2*(2), 73–83. https://doi.org/10.31000/.v2i2.1519

Xu, L., Zhang, L., Cui, N., & Yang, Z. (2020). How and when AR technology affects product attitude. *Asia Pacific Journal of Marketing and Logistics*, *32*(6), 1226–1241. https://doi.org/10.1108/APJML-03-2019-0221

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