

The effect of experience economy on augmented reality-based marketing apps: a study of consumer satisfaction

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ABSTRACT

Purpose — *The objective of this paper is to examine the impact of the experience economy on augmented reality-based marketing apps and their influence on consumer satisfaction.*

Method — *The research strategy employed in this study is a quantitative approach, utilizing survey methods. The primary data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The process of data collection encompassed the distribution of online questionnaires to participants who actively utilize smartphones. These participants were then required to engage with one of the five augmented reality marketing applications selected for this study: Shopee (Beauty Cam), Sephora (Virtual Artist), IKEA Place, Dulux (Visualizer), and Kinder Joy (Applaydu). To enhance the robustness of the findings, a total of 230 respondents were included in this study.*

Result — *The study revealed that aesthetics have a positive influence on entertainment, learning, and escapism. Furthermore, entertainment, learning, and escapism have a positive influence on satisfaction.*

Contribution — *The academic contribution of this study lies in its meticulous replication undertaken within a unique contextual setting featuring variations in subjects, objects, and research environments. This deliberate approach not only serves to reinforce the existing knowledge base but also elevates its applicability across diverse scenarios. The study's core scholarly merit emerges from its comprehensive exposition of the intricate mechanisms through which the augmented reality experience economy influences customer satisfaction, all situated within the distinctive socio-cultural and economic landscape of Indonesia.*

Keywords: *augmented reality, experience economy, customer satisfaction*



INTRODUCTION

Technology has rapidly developed up to the present day, enabling humans to maximize their activities. One of the most prominent technological advancements today is augmented reality. This technology gained widespread recognition with the launch of the Pokémon Go game in 2016. This application entices users to collect Pokémon monster characters through augmented reality technology, utilizing cameras and locations ([Wingfield and Isaac, 2016](#)). This is what propelled the game's popularity, and the concept of augmented reality technology has drawn people to participate enthusiastically. According to [Weinersmith and Weinersmith \(2017\)](#), this technology resembles a magic show, allowing us to superimpose virtual elements onto the real world.

Concurrent with technological progress, businesses today continue to expand, and marketing trends evolve in tandem with technological shifts. The conventional face-to-face interactions solely between sellers and buyers have transformed, as the marketing process has shifted towards digital platforms like e-commerce, Google Ads, and e-mail ([Wibowo, 2020](#)). Skillful utilization of information technology can amplify productivity, enhance reliability, and mitigate the risk of human errors. [Marcouse et al. \(2014\)](#) even assert that the utilization of a computer system is indispensable for contemporary businesses to thrive. This reality stems from technology's integration into every facet of human activity, encompassing entertainment, shopping, sports, and more, consequently reshaping the dynamics of the relationship between companies and consumers ([Fuentes & Sörum, 2019](#)).

Despite the shift in marketing activities towards the digital realm, marketers must persist in cultivating robust and sustainable relationships with consumers by offering experiential engagements. Marketing is no longer viewed merely as a mechanism for disseminating goods and services. Experience emerges as a pivotal driver of economic value, owing to the recognition by both consumers and businesses that experience constitutes a pivotal facet of economic endeavors ([Pine and Gilmore, 1998](#)). In a separate publication, [Pine and Gilmore \(2013\)](#) articulate that experience entails unforgettable events intrinsically involving each individual, encompassing activities like attending music concerts, theater performances, museum visits, savoring coffee in cafes, and partaking in other indelible experiences. This conceptualization subdivides experience into four distinct categories: aesthetics, entertainment, learning, and escapism ([Pine and Gilmore, 2011](#)).

As a visually appealing technology, augmented reality is gaining traction within marketing. This technology is believed to enhance various behavioral intentions, including purchase intentions, engagement, and the fostering of shared social

experiences ([Sung, 2021](#); [tom Dieck et al., 2018](#); [Park et al., 2010](#)). This belief stems from the profound influence of experience on customer satisfaction, subsequently contributing to the cultivation of enduring relationships ([Baron et al., 2010](#)). This notion aligns with the findings of the Touchstone Research survey, which indicate that 77 percent of buyers express a desire to leverage augmented reality technology to discern product distinctions in terms of color or shape ([Burch, 2016](#)).

While still in its nascent stages of adoption, augmented reality has already emerged as a pivotal component of the shopping experience ([Sokolovsky, 2020](#)). Prominent brands like IKEA, Amazon, Sephora, Ray-ban, Mini, and others have begun harnessing this technology to facilitate more interactive marketing endeavors. According to [Kite-Powell \(2020\)](#), the augmented reality market is projected to exceed \$198 billion by 2025. The rapid growth of this technology transcends the realm of marketing and extends to various other domains, including education, health, military, sports, tourism, and architecture. Notably, Facebook, recognized as the marketing medium yielding the highest return on investment, presently holds several augmented reality patents, suggesting that augmented reality is poised to become a pivotal digital asset ([Hubspot, 2020](#); [DeVries, 2020](#)).

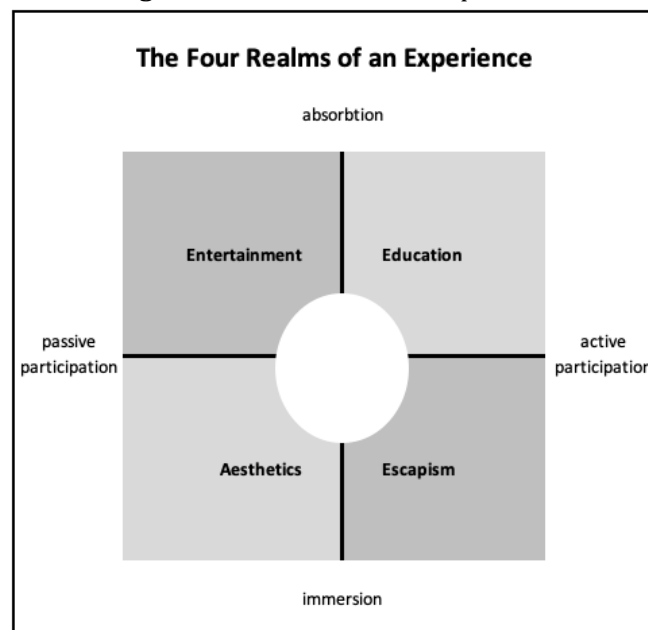
Indonesia exhibits substantial potential as a digital market, attributed to its extensive internet user base which has reached 210 million users, accounting for approximately 77 percent of the total population ([Asosiasi Penyelenggara Jasa Internet Indonesia, 2022](#)). However, based on data compiled by Data Reportal, Indonesia stands at the 6th position among Southeast Asian countries, trailing behind Vietnam ([Kemp, 2022](#)). When examining usage patterns, it becomes apparent that social media (89.1%) and shopping applications (21.3%) constitute the applications with the highest traffic volume in Indonesia ([Asosiasi Penyelenggara Jasa Internet Indonesia, 2022](#)).

Despite its promising digital market potential, the utilization of augmented reality in Indonesia remains relatively limited. The scope for augmented reality within developing countries is not as extensive as the endeavors undertaken by more developed nations ([Amanta, 2020](#)). The adoption of this technology encounters obstacles, largely due to a lack of familiarity with augmented reality technology itself among a significant portion of the population. Research conducted by [Hartanti & Nurviana \(2019\)](#) underscores that this technology remains novel to consumers, producers, and the government in Indonesia, being primarily feasible for implementation within major urban centers boasting a youthful demographic. It is worth noting that augmented reality marketing is

intimately linked to consumer experiences, a pivotal aspect in cultivating satisfaction.

The concept of the consumer experience, known as the experience economy, was initially introduced by [Pine and Gilmore \(1998\)](#). This theory classifies experiences into four distinct realms: aesthetics, entertainment, education, and escapism ([Pine and Gilmore, 1998](#)). The realm of experience is bifurcated into horizontal and vertical dimensions. The horizontal dimension is further categorized into passive and active participants, while the vertical dimension is divided into absorption and involvement ([Pine and Gilmore, 2011](#)). The determination of these dimensions elucidates the characteristics of each experiential component. Divergent perspectives exist regarding the positioning of the four realms; some studies posit aesthetics as a precursor to the other three realms ([Sung, 2021; and tom Dieck et al., 2018](#)), while others position escapism as a variable influenced by the other three realms ([Park et al., 2010](#)).

Figure 1. Four realms of an experience



Source: Pine and Gilmore (1998)

Research pertaining to augmented reality in marketing remains relatively infrequent, particularly studies employing the experience economy theory framework. The initial research endeavor was undertaken by [Dieck et al. \(2018\)](#), who scrutinized the utilization of augmented reality within science festivals. The study carried out in Manchester explored the influence of the experience economy on satisfaction, memory retention, and visitor engagement. Subsequently, another study was conducted by [Sung \(2021\)](#), investigating the

integration of augmented reality within the Heineken application. This American study comprised two distinct investigations. The first study examined the impact of the experience economy on satisfaction, purchase intention, and shared social experiences. Meanwhile, the second study extended its scope by introducing new variables, encompassing brand experience and authenticity.

This research replicates a prior article authored by [Sung \(2021\)](#). This replication endeavor seeks to corroborate prior research applied within the same model but involving distinct subjects, objects, and research environments. The primary objective of this research is to furnish an outline elucidating how the augmented reality experience economy will impact customer satisfaction in the context of Indonesia.

The aim of this research is to investigate the economic experience, with aesthetics considered as a precursor to education, entertainment, and escapism. The study will assess the impact of aesthetics on education, entertainment, and escapism. Subsequently, the researchers will analyze the effects of education, entertainment, and escapism on satisfaction in augmented reality marketing.

METHOD

The research strategy employed in this study follows a quantitative approach, utilizing survey methods. This approach has been selected due to its capacity to provide precise and accurate numerical data for addressing the research inquiries. The questionnaire encompasses a total of 16 questions, each of which corresponds to specific variables that will be evaluated using a five-point Likert scale.

The methodology employed in this research adheres to non-probability sampling, specifically utilizing a purposive sampling technique. This approach entails the selection of samples based on predetermined criteria established by the researcher ([Schindler, 2019](#)). The sample criteria for this study will be defined by the age groups of smartphone users in Indonesia, encompassing baby boomers (1946-1964), generation X (1965-1976), generation Y (1977-1995), and generation Z (1996-2010). These smartphone users are also required to download and engage with augmented reality-based applications. Respondents will have the option to choose from five applications: Shopee, Sephora, IKEA Place, Dulux Visualizer, and Kinder Joy Applaydu.

Based on the questionnaire, a total of 230 out of 239 respondents met the criteria and were eligible for further analysis. The primary data was analyzed using PLS-SEM (Partial Least Squares Structural Equation Modeling). PLS-SEM utilizes two crucial components: measurement models and structural models. The

measurement model establishes the relationship between latent variables and observed variables, while the structural model describes the relationships between latent variables.

This study uses a one-tailed test with t-statistics. The hypothesis testing procedure examines the significance by determining the direction and impact of the independent variable on the dependent variable. When the t-statistic falls into the rejection region of the null hypothesis (H_0), H_0 is rejected, and the alternative hypothesis (H_a) is accepted. The decision is based on the significance level ($\alpha = 0.05$). Therefore, if the significance level is greater than 0.05, H_0 is accepted, and if the significance level is less than 0.05, H_0 is rejected.

Hypothesis development

Aesthetics and entertainment

Research indicates that aesthetics represent the most pivotal criterion in interface technology development, determining whether consumers will embrace or dismiss new technology (Pallud & Straub, 2014). Aesthetics also significantly influences the economic experience (Hosany & Witham, 2010; Mykletun and Rumba, 2014). Augmented reality, with its captivating visual presentation, is anticipated to enhance experiences by facilitating the transmission of enjoyable encounters (Romano et al., 2021). Initial feelings and impressions rooted in aesthetic aspects can positively impact users' assessments of the product's usefulness and pleasure (Jung et al., 2018). The process of engaging with various 3D products can evoke joy in consumers (Kim et al., 2007; Yim et al., 2012). Taking the literature review into account, the ensuing hypotheses are tested:

H1: Aesthetics positively influence entertainment

Aesthetics and education

In order to truly inform and enhance someone's knowledge and skills, an activity must be designed to involve active thinking (Pine and Gilmore, 2011). As a technology capable of generating visual representations of a product and enabling consumers to engage their imagination, augmented reality is believed to enhance consumer curiosity (McLean & Wilson, 2019; Yang et al., 2020). In line with Lee et al. (2015), a well-designed augmented reality application can help convey information accurately and clearly. This is because augmented reality is able to provide interesting information virtually through images or

videos that are connected to the real world ([Azuma, 1997](#)). Overall, based on the literature review above, the following hypothesis is tested:

H2: Aesthetics positively influence education

Aesthetics and escapism

As one component of the experience economy, escapism requires high consumer engagement ([Pine and Gilmore, 2011](#)). Based on [Song et al. \(2015\)](#), the motivation behind escapism is generally rooted in the desire to momentarily forget the world. Escapism is closely related to the visual experience, as consumers often assess the escapism value of an application based on its aesthetic experience ([Dieck et al., 2018](#)). The initial impression that comes from the aesthetic aspect can encourage users to judge the usefulness or pleasure of something ([Lee et al., 2015](#)). The experience of escapism will never occur if an application is poorly designed ([Jung et al., 2018](#)). Overall, based on the literature review above, the following hypothesis is tested:

H3: Aesthetics positively influence escapism

Entertainment and satisfaction

Satisfaction is an important driver in marketing that leads to customer loyalty. An individual's assessment (consumer) of product and service quality reflects satisfaction, which is why many companies invest in improving it ([Kotler and Keller, 2016](#); [Mothersbaugh and Hawkins, 2016](#)). Experience has a significant influence on customer satisfaction, which in turn leads to sustained relationships ([Baron et al., 2010](#)). When augmented reality is designed to create meaningful experiences for customers, it leads to customer satisfaction and perceptions of the brand, product, and service ([Barhorst et al., 2021](#); [Mehmetoglu & Engen, 2011](#)). As a component of the experience, entertainment plays an important role in economic activity. In the book "The Entertainment Economy" by Michael Wolf, a product will likely not survive in the future without an entertainment component ([Mehmetoglu & Engen, 2011](#)). Thus, based on the literature review above, the following hypothesis is tested:

H4: Entertainment positively influences customer satisfaction

Education and satisfaction

[Mehmetoglu & Engen \(2011\)](#) argue that individual experience is very important for consumer views and satisfaction with products and services. One component

of the economic experience is education. Usually, consumers who are involved in educational experiences will gain an increase in knowledge and skills, leading to the impression of "I feel I have learned something" (Hosany & Witham, 2010). Regarding augmented reality, Barhorst et al. (2021) assess that this technology has the ability to improve consumer abilities such as learning, information benefits, convenience, and satisfaction. Thus, based on the literature review above, the following hypothesis is tested:

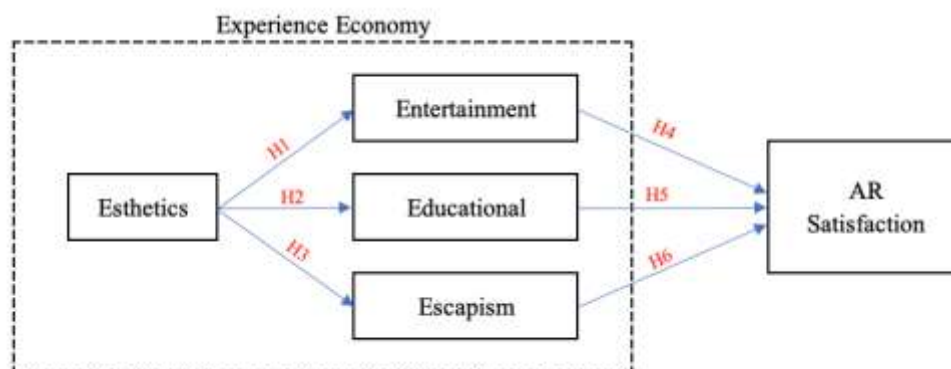
H5: Education positively influences customer satisfaction

Escapism and satisfaction

Generally, escapism is best known in the world of tourism. Escapism is believed to be the primary motivation for someone to take a vacation, which can serve as a means for individuals to escape from their daily lives (Hosany & Witham, 2010). Not only in the context of tourism, but shopping is also a part of escapism (Babin et al., 1994). Park et al. (2010) also assessed escapism as a key construct in predicting intentions to revisit in the future and providing insights into the decision-making process. Thus, based on the literature review above, the following hypothesis is tested:

H6: Escapism positively influences customer satisfaction

Figure 2. Research model



Source: Sung (2021)

RESULT AND DISCUSSION

Respondent profile

Based on the questionnaire results in Table 1, the number of male and female respondents is nearly balanced, with 120 males and 110 females. In terms of age

grouping, it is predominantly dominated by Generation Y and Generation Z, in comparison to Baby Boomers and Gen X. The uneven distribution of age is due to the difficulty faced by the researcher in obtaining respondents from the Baby Boomer and Gen X age groups.

Table 1. Respondent profile

Characteristics	N	%	Characteristics	N	%
Gender			Occupation		
Male	120	52,2%	Student	75	32,6%
Female	110	47,8%	Operational	43	18,7%
Ages			Managerial	41	17,8%
Boomers (1946 – 1964)	12	5,2%	Professional	17	7,4%
Gen X (1965 – 1976)	9	3,9%	Entrepreneur	11	4,8%
Gen Y (1977 – 1995)	95	41,3%	Farmer	1	0,4%
Gen Z (1996 – 2010)	114	49,6%	House Wife	13	5,7%
Education			Others	28	12,2%
Elementary School	1	0,4%	AR apps		
Junior High School	0	0%	Shopee (Beauty Cam)	109	47,4%
Senior High School	48	20,9%	Sephora (Virtual Artist)	26	11,3%
Undergraduate	156	67,8%	IKEA Place	52	22,6%
Postgraduate	14	6,1%	Dulux (Visualizer)	38	16,5%
Doctoral	0	0%	Kinder Joy (Applaydu)	3	1,3%
			Others	2	0,9%

Source: processed data (2023)

For the educational background, the majority of respondents hold a Bachelor's degree (S1) with 156 respondents. Then, 48 respondents had a high school education (SMA), 14 respondents had a Master's degree (S2), 11 respondents had a diploma, and only 1 respondent had an elementary school education (SD). In terms of occupation, the largest group consists of students with 75 respondents, followed by operational workers with 43 respondents, and managerial workers with 41 respondents.

Meanwhile, the most frequently used augmented reality-based application is Shopee, with a total of 109 users. It is followed by IKEA Place with 52 users, Dulux with 38 users, Kinder Joy with 3 users, and 2 users for other applications. The disparity in these numbers is due to the fact that some applications are still unfamiliar among society, and Shopee is particularly popular as one of the most widely used marketplaces in Indonesia.

Validity and reliability test

This validity test uses the SEM PLS method, where the construct validity indicators are obtained from the loading factor values. The numbers in Table 2

indicate that all indicators have loading factor values greater than 0.5. Therefore, it can be concluded that all the indicators used in this study are valid.

Table 2. Measurement items

Measurement items	Loading factor	Composite reliability	Cronbach alpha
<i>Aesthetics</i>			
The AR app experience was very attractive	0,801	0,872	0,694
The AR app experience was very pleasant	0,860		
I felt a real sense of harmony from the AR app experience	0,836		
<i>Entertainment</i>			
The AR app experience was amusing	0,773	0,883	0,717
The AR app experience was entertaining	0,896		
The AR app experience was fun	0,866		
<i>Education</i>			
I learned new product information while using AR app	0,865	0,851	0,656
I have more product knowledge while using AR apps	0,759		
The AR app stimulated my curiosity to learn about new product	0,803		
<i>Escapism</i>			
I felt I can forget the daily routine while using AR app	0,858	0,907	0,710
I felt I can get rid of boredom while using AR apps	0,868		
I felt I am immersed in a virtual world while using AR app	0,821		
I felt I get a different experience from my daily routine while using AR app	0,823		
<i>AR App Satisfaction</i>			
I was satisfied with the overall AR app experience	0,866	0,905	0,761
I was content with the overall AR app experience	0,887		
I was delighted with the overall AR app experience	0,863		

Source: processed data (2023)

As for the reliability test, the analysis utilizes Cronbach's alpha, with expected values of more than 0.6 for all constructs (Ghozali & Latan, 2015). The numbers in Table 2 show that all variables have reliability values higher than 0.6, and Cronbach's Alpha values are also higher than 0.6. Thus, it can be concluded that all variables in this study have good reliability.

Table 3. Correlations

Construct	Mean	SD	1	2	3	4	5
Aesthetics	4,24	0,74	0,833				
AR App Satisfaction	4,17	0,72	0,648	0,872			
Education	4,22	0,78	0,528	0,570	0,810		
Entertainment	4,29	0,72	0,655	0,608	0,552	0,847	

Escapism	3,79	1,04	0,450	0,601	0,525	0,412	0,843
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Source: processed data (2023)

The Fornell-Larcker criterion is used to assess discriminant validity by comparing the square root of the Average Variance Extracted (AVE) for each construct with the correlation values between the constructs (Henseler et al., 2015). In Table 3 (see list of table), it can be observed that the square root of AVE is larger than the correlation values between constructs. This indicates that the requirement for discriminant validity in this model has been fulfilled.

Hypothesis testing

H1 is accepted; aesthetics have a significant influence on entertainment. This hypothesis is supported based on the original sample (β) estimated value of +0.655, a t-statistic value of 13.511, and p-value of 0.000. H2 is accepted; aesthetics have a significant influence on education. This hypothesis is supported based on the original sample (β) estimated value of +0.528, a t-statistic value of 7.658, and a p-value of 0.000. H3 is accepted; aesthetics have a significant influence on escapism. This hypothesis is supported based on the original sample (β) estimate value of +0.450, a t-statistic value of 7.967, and a p-value of 0.000.

H4 is accepted; entertainment has a significant effect on AR app satisfaction. This hypothesis is supported based on the original sample (β) estimated value of +0.359, a t-statistic value of 5.520, and a p-value of 0.000. H5 is accepted; education has a significant effect on AR app satisfaction. This hypothesis is supported based on the original sample (β) estimated value of +0.185, a t-statistic value of 2.242, and a p-value of 0.013. H6 is supported; escapism has a significant effect on AR app satisfaction. This hypothesis is supported based on the original sample (β) estimated value of +0.356, a t-statistic value of 5.434, and a p-value of 0.000.

Table 4. Hypothesis testing

Hypothesis	Original sample	T-stat	P-value	
Aesthetics - Entertainment	0,655	13,511	0,000	accepted
Aesthetics - Education	0,528	7,658	0,000	accepted
Aesthetics - Escapism	0,450	7,967	0,000	accepted
Entertainment - AR App Satisfaction	0,359	5,520	0,000	accepted
Education - AR App Satisfaction	0,185	2,242	0,013	accepted
Escapism - AR App Satisfaction	0,356	5,434	0,000	accepted

Source: processed data (2023)

Discussion

Aesthetics and entertainment

The first hypothesis explores the relationship between aesthetic experience and entertainment. This hypothesis is supported by the data in Table 4, indicating a positive original sample estimated value. Furthermore, the t-statistic value surpasses a critical threshold. This suggests that aesthetic experience indeed influences entertainment. Higher levels of aesthetic experience correspond to enhanced entertainment experiences. As a result, H0 is rejected, and H1 is accepted.

In marketing strategy, aesthetics, or visual appeal, plays a pivotal role in enhancing overall satisfaction and quality (Oh et al., 2007). Therefore, this study aligns with Sung's (2021) findings that, in the context of augmented reality, aesthetics exert a positive impact on entertainment. Similarly, research by Dieck et al. (2018) demonstrates augmented reality's constructive effect on entertainment. Concerning augmented reality applications, defined as digitally presented images, text, and sound, integrated into the real world through three-dimensional (3D) visuals (Faust et al., 2012; Azuma, 1997), Jung et al. (2018) assert that a product's aesthetic aspects steer users toward positively evaluating its pleasure and utility.

Aesthetic and education

The second hypothesis examines the relationship between aesthetic experience and education. This hypothesis is supported by the data in Table 4, displaying a positive original sample estimated value. Furthermore, the t-statistic value exceeds a critical threshold. This suggests that aesthetic experience significantly influences education. Higher aesthetic experience levels correspond to enhanced educational experiences. Therefore, H0 is rejected, and H2 is accepted.

As a technology capable of producing visual representations of products and enabling consumers to engage their imaginations, augmented reality can heighten consumer curiosity (McLean & Wilson, 2019; Yang et al., 2020). According to Barhorst et al. (2021), augmented reality possesses the capability to present new information to consumers clearly. Aligned with Lee et al.'s (2015) findings, well-designed augmented reality applications effectively convey information accurately and comprehensibly. Reinforcing the aesthetic aspects of augmented reality technology constitutes a facet of good design. These findings are also reinforced by research by Dieck et al. (2018) and Sung (2021), both of which establish a positive relationship between aesthetics and education.

Entertainment and escapism

The third hypothesis investigates the correlation between aesthetic experience and escapism. This hypothesis gains support from the data presented in Table 4, revealing a positive original sample estimated value. Furthermore, the t-statistic value surpasses a critical threshold. This indicates that aesthetic experience significantly impacts escapism. Higher levels of aesthetic experience correspond to elevated escapism experiences. Consequently, H0 is rejected, and H3 is accepted.

Among various activities, shopping is considered a part of escapism (Babin et al., 1994). Initial impressions arising from aesthetic aspects can prompt users to assess the utility or pleasure of something (Lee et al., 2015). This underscores the necessity for marketers to meticulously address the overall appearance of the augmented reality application, which consumers use as a shopping medium. The application must deliver visually compelling aesthetics, as aesthetics exert a positive influence on escapism (Sung, 2021; Dieck et al., 2018). This aligns with Jung et al.'s (2018) assertion that a poorly designed application would undermine the potential for an experience of escapism.

Entertainment and satisfaction

The fourth hypothesis examines the correlation between entertainment experience and AR marketing satisfaction. This hypothesis finds support in the data presented in Table 4, indicating a positive original sample estimated value. Furthermore, the t-statistic value exceeds a critical threshold. This indicates that entertainment significantly impacts AR marketing satisfaction. Elevated levels of entertainment correspond to enhanced AR marketing satisfaction. As a result, H0 is rejected, and H4 is accepted.

A consumer's evaluation of product and service quality reflects their satisfaction, leading many companies to invest in its improvement (Kotler & Keller, 2016; Mothersbaugh & Hawkins, 2016). Satisfaction holds great influence over the intention to adopt technology, especially in the context of augmented reality (Quadri-Felitti & Fiore, 2013; Dieck et al., 2018). As a marketing strategy tool, integrating entertainment elements—experiences for consumers—into augmented reality can elevate consumer satisfaction. Supported by multiple previous studies, it's evident that augmented reality experiences are positively linked to satisfaction (Poushneh & Vasquez-Parraga, 2017; Barhorst et al., 2021; Sung, 2021; Dieck et al., 2018; Park et al., 2010).

Education and satisfaction

The first hypothesis examines the connection between education experience and AR marketing satisfaction. This hypothesis finds support in the data presented in Table 4, indicating a positive original sample estimated value. Furthermore, the t-statistic value exceeds a critical threshold. This signifies that the education experience significantly influences AR marketing satisfaction. Greater education experiences correspond to enhanced AR marketing satisfaction. As a result, H0 is rejected, and H5 is accepted.

Consumers who engage in educational experiences typically gain increased knowledge and skills, leaving them with the impression of "I feel I have learned something" (Hosany & Witham, 2010). This signifies that positive learning aspects within the consumer experience can impact consumer satisfaction. Sung (2021) affirms that curiosity, as part of the knowledge variable, positively affects satisfaction. This assumption is validated by a growing desire to learn more about the product described in the feature (Yang et al., 2020).

Escapism and satisfaction

The first hypothesis test explores the relationship between the experience of escapism and AR marketing satisfaction. This hypothesis gains support from the data presented in Table 4, showing a positive original sample estimated value. Furthermore, the t-statistic value exceeds a critical threshold. This indicates that the experience of escapism significantly affects AR marketing satisfaction. Enhanced escapism experiences correspond to elevated AR marketing satisfaction. Consequently, H0 is rejected, and H6 is accepted.

The sixth hypothesis in this study aligns with the findings of prior research conducted by Sung (2021), but solely in the second study. Escapism manifests as a positive factor influencing AR marketing satisfaction. However, in the first study, which was dominated by students, contrasting results emerge, showcasing insignificant outcomes in the relationship between escapism and AR satisfaction. Research by tom Dieck et al. (2018) also unveils insignificant outcomes due to a subset of respondents falling within the 18-24 age range. The data underscores that the impact of escapism on satisfaction remains age-dependent, with young consumers not perceiving cutting-edge technology as a facet of escapism. This can be attributed to their early-age familiarity with technology, thus not viewing it as an escapism avenue.

CONCLUSION

Information technology is developing very rapidly and is able to provide good benefits for business development. Many renewable technologies can support marketing activities, one of which is augmented reality. Technology that combines virtual elements with the real world is able to assist consumers in determining their shopping decisions. In addition, by adding this technology to its business, companies can also improve the experience for their customers which will then lead to increased customer satisfaction.

In conclusion, aesthetics in augmented reality-based applications have a positive influence on entertainment, learning, and escapism, which in turn have a positive impact on satisfaction. The findings of this study can provide valuable insights for various stakeholders (companies, consumers, and governments) that the use of technology in marketing applications can create satisfaction. The components of the economic experience also need to be considered when designing an augmented reality-based marketing application.

This research is expected to provide suggestions and benefits to practitioners through managerial implications. Marketers need to develop AR applications seriously by ensuring that aesthetic, entertainment, education, and escapism aspects in it can affect consumer satisfaction. Then consumer satisfaction can increase the tendency of consumers to share their experiences with AR applications and can lead to purchase intentions.

This study still has several limitations. Firstly, there is a lack of representation among respondents in terms of age groups, with a majority being dominated by Generation Y and Generation Z. This limitation arises due to the difficulty in reaching out to the Baby Boomer and Generation X age groups. Additionally, smartphone usage among these generations is relatively low compared to Generation Y and Generation Z. Moreover, the distribution of application usage is still dominated by one major application, namely Shopee. This is difficult to avoid considering that Shopee is a well-known application in Indonesia.

In the future, it is hoped that this research can pay more attention to the proportion of respondents to ensure a balanced representation of each age group. The distribution of usage of augmented reality-based applications should also be taken into consideration. Furthermore, this study can be further developed by incorporating additional variables such as purchase intention and social sharing experiences.

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