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Virtual reality tourism and its impact to visitor intention in rural Bandung

Aditia Sobarna[1], Kurniawan Saefullah[2], Sapari Dwi Hadian[3]
[1]Sekolah Pascasarjana,Universitas Padjadjaran, Bandung, Indonesia
[2]Fakultas Ekonomi dan Bisnis, Universitas Padjadjaran, Bandung, Indonesia
[3]Fakultas Teknik Geologi, Universitas Padjadjaran, Bandung, Indonesia

ABSTRACT

The use of virtual reality as a marketing tool for conventional tourism has seen an increasing adoption, as it enhances the engagement between virtual tourists and the showcased destinations. This study evaluates the effectiveness of Virtual Reality (VR) in enhancing the tourism experience at Alamendah Tourism Village, Bandung. A quantitative approach was used, with data collected through structured questionnaires distributed to 385 potential tourists who had experienced the village's VR tour. Structural Equation Modeling (SEM) was employed to analyze the relationships between system quality, immersive perception, authenticity, satisfaction, and visit intention. The analysis process was supported by the SmartPLS application. The results indicate that system quality significantly influences immersive perception and authenticity, which in turn affects tourist satisfaction and visit intention. Moreover, immersive perception was found to mediate the relationship between system quality and authenticity. This study concludes that investment in high-quality VR technology and the creation of authentic immersive content is essential for tourism village managers to enhance tourist engagement and satisfaction. These findings suggest that VR can optimize the unique features of tourism villages, such as cultural authenticity and natural beauty. Additionally, VR can offer a deeper and more fulfilling experience when enjoying tourism in the village. Therefore, the implementation of VR can serve as a strategic tool to boost tourist loyalty and long-term success in the tourism village sector.

Keywords: Virtual reality; immersive experience; perceived authenticity; tourist satisfaction, visit intention

Pengaruh wisata realitas maya terhadap niat berkunjung wisatawan di kabupaten Bandung

ABSTRAK

***Penggunaan** virtual reality sebagai media pemasaran pariwisata bagi pariwisata konvensional telah mengalami peningkatan untuk diadopsi, karena mampu meningkatkan keterikatan antara wisatawan virtual dengan destinasi yang ditampilkan. Penelitian ini mengevaluasi efektivitas penggunaan Virtual Reality (VR) dalam meningkatkan pengalaman wisata di Desa Wisata Alamendah, Bandung. Pendekatan kuantitatif digunakan dengan data yang dikumpulkan melalui kuesioner terstruktur yang dibagikan kepada 385 wisatawan potensial yang telah mengalami tur VR desa tersebut. Model Persamaan Struktural (SEM) digunakan untuk menganalisis hubungan antara kualitas sistem, persepsi imersif, keaslian, kepuasan, dan niat kunjungan. Proses analisis dibantu dengan aplikasi SmartPLS. Hasil penelitian menunjukkan bahwa kualitas sistem secara signifikan memengaruhi persepsi imersif dan keaslian, yang pada gilirannya memengaruhi kepuasan wisatawan dan niat berkunjung. Selain itu, persepsi imersif ditemukan sebagai mediator antara kualitas sistem dan persepsi keaslian. Penelitian ini menyimpulkan bahwa investasi dalam teknologi VR berkualitas tinggi dan penciptaan konten imersif yang autentik sangat penting bagi pengelola desa wisata untuk meningkatkan keterlibatan dan kepuasan wisatawan. Temuan ini menunjukkan bahwa VR dapat mengoptimalkan fitur unik desa wisata seperti keaslian budaya dan keindahan alam. VR juga dapat menawarkan pengalaman yang lebih mendalam dan memuaskan dalam menikmati perjalanan wisata di desa wisata. Maka dari itu, penerapan VR dapat menjadi alat strategis untuk meningkatkan loyalitas wisatawan dan kesuksesan jangka panjang di sektor desa wisata.*

***Kata-kata kunci**: Realitas virtual; pengalaman imersif; keaslian yang dirasakan; kepuasan wisatawan; niat kunjungan*

Correspondence: Aditia Sobarna S. Tr. M, Padjadjaran University, Jl. Dipatiukur No. 35. *Email*: aditia22002@mail.unpad.ac.id

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INTRODUCTION

Tourism villages offer a variety of attractive tourism products such as ecotourism, cultural tourism, culinary tourism, and agro-tourism (Vuksanović & Bajrami, 2020). These products provide a rich tapestry of experiences that appeal to a diverse range of tourists. Ecotourism in these villages often includes activities such as guided nature walks, bird watching, and educational tours about local flora and fauna (McIntyre-Mills et al., 2019). Cultural tourism might involve participation in traditional festivals, visiting heritage sites, and learning about local customs and crafts (Martínez et al., 2019). Culinary tourism introduces visitors to local cuisines and cooking methods, often through hands-on cooking classes or food tours (Vuksanović & Bajrami, 2020). Agro-tourism can include visiting farms, participating in agricultural activities, and learning about sustainable farming practices (Zhu et al., 2023).

Despite these diverse offerings, tourism villages often face challenges in effectively marketing and promoting their destinations (Guo & Wang, 2021; Rosalina et al., 2021). One major challenge is the competition with more established urban and coastal tourist destinations which often have larger marketing budgets and better-established infrastructures (Rahimizhian et al., 2020). Furthermore, traditional promotional methods frequently fail to capture the interest of modern, tech-savvy tourists (Ananya, 2021). This demographic is increasingly looking for unique and immersive experiences that go beyond the conventional holiday (Pasaman, 2024b). They are more likely to be influenced by digital content and innovative marketing techniques (Pandey & Sahu, 2020).

Integrating VR tourism into marketing strategies can enhance the promotional appeal of tourism villages (Jung & Jeong, 2020; Nindito et al., 2020). VR technology can create virtual tours that allow potential visitors to explore a destination from the comfort of their homes, experiencing a preview of what the village has to offer (Guttentag, 2010). According to Gao et al. (2022), virtual tours can highlight the uniqueness of a location and reach a broader audience. These tours can be shared on social media platforms, incorporated into travel agency offerings, and used in digital marketing campaigns to attract a global audience (Bassano et al., 2019).

Research in VR tourism has been rapidly developing (Liberatore & Wagner, 2021; Riches et al., 2023). Previous researchers explain that VR tourism can provide an immersive experience, allowing potential tourists to feel as though they are at the destination (Dağ et al., 2023; H. Lee et al., 2020). This immersive

quality is achieved through high-resolution visuals, spatial audio, and interactive elements that mimic real-world sensations (Suhartanto et al., 2021). This can increase tourists' interest and desire to visit the place in reality (Atzeni et al., 2022; Suhartanto et al., 2021).

Additionally, VR can enhance tourists' satisfaction and expectations by providing a realistic depiction of the destination (Mandal & Bag, 2023; Melo et al., 2022). Tourists who use VR to explore destinations before visiting tend to feel more satisfied (Suhartanto et al., 2021). This pre-visit experience allows them to better plan their trip, know what to expect, and create a more personalized itinerary (Kim & Hall, 2019). This indicates that using VR in marketing strategies can attract more attention from potential tourists (Fan et al., 2022). VR can also serve as a tool for managing tourists' expectations, reducing the likelihood of disappointment and increasing overall satisfaction (Kim & Ko, 2019).

The stimulus-organism-response (SOR) model is a framework frequently used in tourist behavior research to understand how various stimuli influence individual responses through internal mechanisms (Asyraff et al., 2023; Mladenović et al., 2023). This model is widely used in VR tourism research as it provides a holistic view of tourist behavior (Kim, Lee, & Jung, 2020; Sann et al., 2023; Wu & Lai, 2022). The SOR model posits that an external stimulus (e.g., a VR tour) affects an individual's internal state (organism), which in turn influences their responses (e.g., intention to visit). Previous research shows that stimuli such as high-quality VR systems can enhance tourists' positive perceptions and their desire to visit destinations (Kim, Lee, & Jung, 2020).

In the organism stage, previous studies indicate that tourists' satisfaction with VR experiences positively influences their intention to visit destinations (Sann et al., 2023). Satisfaction can be derived from various aspects of the VR experience, including the realism of the visuals, the ease of navigation, and the quality of the interactions (Kim & Ko, 2019). Previous research found that responses such as the intention to visit and tourists' decisions are significantly influenced by high cognitive and emotional engagement (Melo et al., 2022). Studies have shown that high levels of immersion in VR can increase tourists' engagement and their desire to visit destinations physically (Bec et al., 2019; Fan et al., 2022). By applying the SOR model in VR tourism research, researchers can effectively identify and measure how various aspects of the VR experience (authenticity, immersiveness, and system quality) influence tourist satisfaction and intention to visit.

Research on VR tourism using the

SOR model reveals several gaps. Most previous studies employing the SOR model in VR tourism focus on conventional tourist destinations such as major cities, amusement parks, and historical sites (Kim, Lee, & Jung, 2020; Sann et al., 2023; Wu & Lai, 2022). This results in limited empirical research on tourism villages. Focusing specifically on tourism villages can provide unique insights into how VR experiences can affect tourists' perceptions and behavior in the context of tourism villages (see Figure 1), highlighting the need for further research in this area.

Additionally, there is limited research on how the perception of authenticity in VR tourism villages influences tourist satisfaction and intention to visit (Nam et al., 2023). Authenticity is a critical factor in tourism as it affects tourists' emotional connections to the destination and their overall satisfaction (Olsen, 2002). VR experiences need to accurately and compellingly portray the unique cultural and natural elements of tourism villages to create a sense of authenticity (Nam et al., 2023b). Understanding the relationship between these variables can aid in developing more effective and in-depth marketing strategies (Gegung, 2021). Tourism villages have unique characteristics that differ from other destinations (Aksoy & Yilmaz, 2022), so studies focusing on immersive elements and system quality optimized for tourism villages will significantly contribute to the development of VR technology.

Tourism villages, unlike urban or highly commercialized tourist destinations, often offer a more rustic and genuine experience (Park et al., 2015). These villages provide tourists with an opportunity to disconnect from the fast-paced, technology-driven world and immerse themselves in simpler, more traditional lifestyles (Yılmaz & Yılmaz, 2019). This aspect can be particularly appealing in a VR context, where the challenge lies in conveying not just the visual and auditory elements but also the atmosphere and emotional resonance of these unique destinations (Gretzel et al., 2015). Therefore, this research aims to evaluate the effectiveness of VR use in the Alamendah tourism village by examining tourists' intention to visit and their perceptions of the immersive and authentic virtual experience provided.

This research is significant as it addresses several gaps in the current literature on VR tourism. First, by focusing on tourism villages, this study provides insights into a less-explored area of tourism research. Second, it examines the role of authenticity in VR experiences, an aspect that has not been extensively studied in the context of tourism villages. Third, by using the SOR model, this research offers a comprehensive framework for understanding how VR influences tourist behavior.

Furthermore, the potential for VR to offer educational experiences cannot be overlooked. Many tourism villages are rich in history and culture, offering unique learning opportunities for visitors. VR can be used to create educational programs that allow users to explore historical sites, learn about traditional crafts, or understand agricultural practices in an immersive way (Radianti et al., 2020). These educational experiences can add value to the tourism product, attracting not just leisure tourists but also educational groups and institutions.

Moreover, the use of VR in tourism villages can also support sustainable tourism practices (Talwar et al., 2022). By providing virtual tours, tourism villages can reduce the environmental impact of physical tourism. This can help in managing tourist numbers, preserving natural and cultural sites, and promoting sustainable tourism practices. VR can be used to simulate seasonal changes in agricultural tourism, allowing visitors to experience different aspects of farming without the need for physical presence. This can reduce the strain on resources and help in the conservation of the local environment.

Additionally, VR can enhance the inclusivity of tourism villages by making them accessible to a broader audience, including those with physical disabilities or other limitations that make travel challenging (Yung & Khoo-Lattimore, 2019). Virtual tours can provide an alternative way for these individuals to experience and enjoy the unique offerings of tourism villages. This inclusivity can broaden the market reach of tourism villages and create a more diverse visitor base.

In the context of marketing, VR can be a powerful tool for storytelling. Tourism villages have rich histories and traditions that can be effectively communicated through immersive VR experiences. Storytelling in VR can engage visitors on an emotional level, creating a deeper connection with the destination (Ghaderi et al., 2023). This can be particularly effective in differentiating tourism villages from other destinations, highlighting their unique attributes and cultural significance.

Furthermore, the integration of VR in tourism villages can also lead to economic benefits for local communities (Lapuz, 2023; Nirwana et al., 2024). By attracting more tourists, both virtually and physically, local businesses and artisans can gain increased exposure and opportunities for sales. This can contribute to the economic development of the village, supporting local livelihoods and promoting the sustainability of tourism activities.

The use of VR in tourism villages offers numerous advantages, from enhancing marketing strategies and tourist experiences to supporting sustainable practices and economic

development (Vishwakarma et al., 2020). This research aims to explore these aspects in detail, providing valuable insights that can help in the effective integration of VR in tourism village marketing and management. By focusing on the unique context of tourism villages, this study seeks to contribute to the broader understanding of VR tourism and its potential to transform the tourism industry.

Another important consideration is the technological infrastructure required to implement VR in tourism villages. Developing and maintaining high-quality VR content requires substantial investment in technology and expertise. Tourism villages need to collaborate with technology providers, VR developers, and marketing professionals to create compelling VR experiences. This collaboration can also open up opportunities for innovation and the development of new VR applications tailored specifically to the needs of tourism villages.

Moreover, it is essential to consider the user experience when designing VR content for tourism villages. The VR experience should be user-friendly and accessible to a wide audience, including those who may not be familiar with VR technology. Providing clear instructions, intuitive navigation, and responsive support can enhance the overall user experience and ensure that the VR content is effective in attracting and engaging tourists.

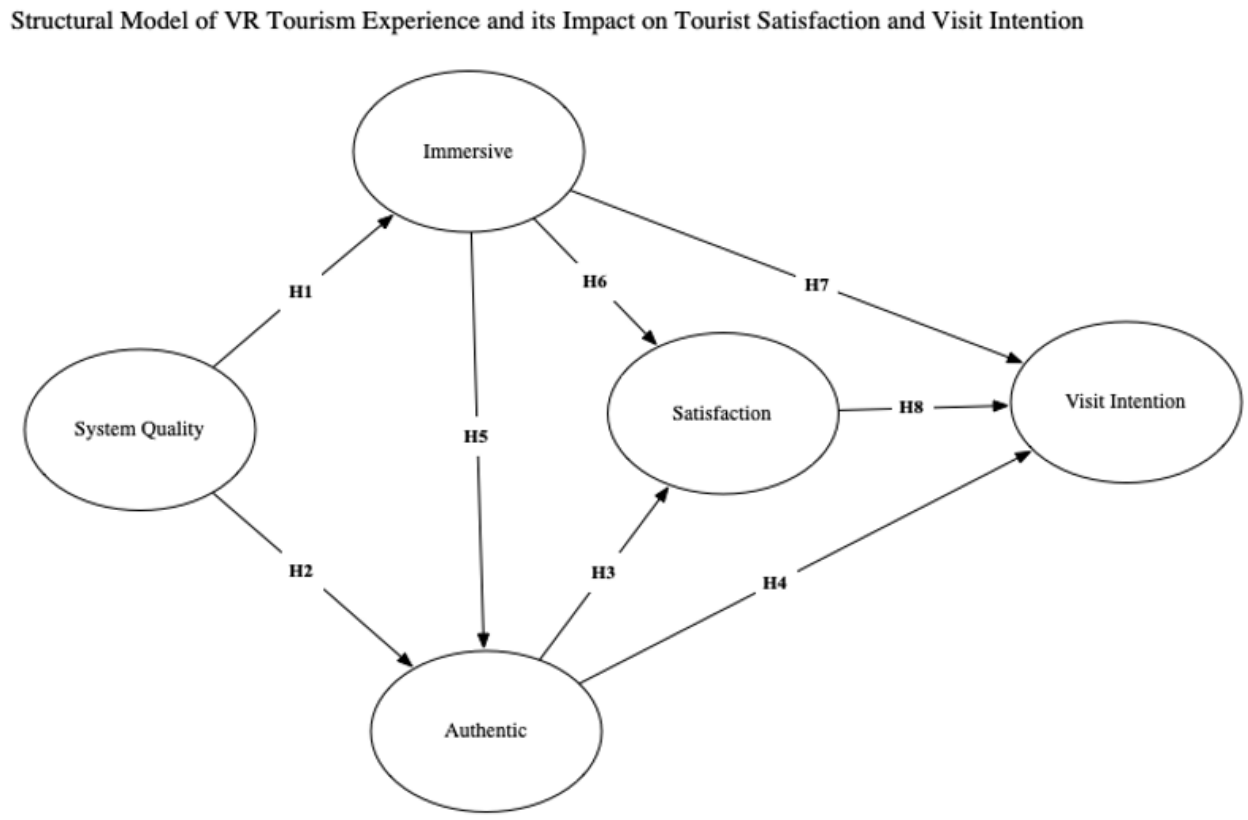
The integration of VR into the marketing strategies of tourism villages represents a promising approach to addressing the challenges they face in attracting modern tourists (Sobarna, 2023). By providing immersive and authentic virtual experiences, VR can significantly enhance the appeal of these destinations. This research aims to contribute to the growing body of literature on VR tourism by focusing on the unique context of tourism villages and examining the factors that influence tourists' intentions and satisfaction. Through a detailed exploration of the SOR model and its application in VR tourism, this study seeks to offer valuable insights for both academia and industry practitioners.

The subsequent sections will provide an in-depth explanation from methods to conclusions. The research methods will cover various essential aspects to ensure the validity and reliability of the findings. This will include a detailed description of the research design, data collection methods, and analytical techniques used. The analysis and discussion section will be presented comprehensively, including data description, statistical analysis used, and interpretation of the main findings. This section will also compare the findings with previous research, discuss their implications, and highlight any limitations of the study.

The conclusion will summarize the main findings of this study, highlighting the key points identified. The conclusion section will emphasize theoretical and managerial contributions. Theoretically, this study will contribute to the understanding of VR's impact on tourist behavior and the role of authenticity in VR experiences. Managerially, the findings can inform the development of more effective marketing strategies for tourism villages, helping them attract and satisfy tourists. With detailed and thorough explanations in each section, this research is expected to provide a comprehensive understanding of the methodology, analysis, and implications of the findings. This study not only provides new insights into the use of VR technology in the context of tourism villages but also offers a solid foundation for developing effective managerial strategies to enhance tourist experiences.

RESEARCH METHOD

Alamendah Tourism Village is located in Bandung Regency, West Java, Indonesia. The development team focuses to developing innovative products and tour packages. This focus on unique aspects successfully attracted more than 30 tourist groups, with over 2500 tourists participating in the Alamendah Trip (Jadesta, 2022). These achievements earned



Source: Author's own creation (2024)

Figure 1 Research Model

Alamendah Tourism Village recognition as one of the top 50 best tourism villages in the Indonesian Tourism Village Award (ADWI) 2021.

This study employed a quantitative approach using a descriptive research method. The descriptive method was utilized to describe and analyze the relationships between VR system quality, immersive perception, authenticity, tourist satisfaction, and visit intention (see Figure 1). The population in this study consisted of tourists who had viewed the Alamendah Tourism Village VR tour. The sampling process used non-probability sampling with a sample size of 385, as recommended by Malhotra, Nunan, and Birks (2020). This sample size met the requirements with a 95% confidence level and a 5% margin of error.

This study used a questionnaire as the data collection method. The variables tested in this study included system quality, immersive perception, authenticity perception, satisfaction, and intention to visit. System quality consisted of three items modified from previous studies (Nam et al., 2023b; Nam et al., 2023; Suhartanto et al., 2021). Immersive perception included four items adopted from previous research (Dağ et al., 2023; McIntyre-Mills et al., 2019; Melo et al., 2022; Mou et al., 2023). In this study, authenticity perception had a substantial number of items, totaling seven (Kim, Lee, & Jung, 2020; McLean & Barhorst, 2022; Mou et al., 2023; Nam et al., 2023b; Nam et al., 2023). This was necessary considering that authenticity comprises both object and activity authenticity. Finally, satisfaction consisted of three items (An et al., 2021; Atzeni et al., 2022; McLean & Barhorst, 2022; Nam et al., 2023; Suhartanto et al., 2021) and intention to visit included four items (An et al., 2021; Atzeni et al., 2022; Jorge et al., 2023; Kim, Lee, & Jung, 2020; McLean & Barhorst, 2022; Suhartanto et al., 2021). These questionnaire items were measured using a Likert scale ranging from 1=strongly disagree to 5=strongly agree. The measurement items required content validation. Therefore, a pre-test of the questionnaire was conducted with 50 tourists who had used the Alamendah Tourism VR. These tourists were given the opportunity to test and provide feedback on the items included in the questionnaire. Additionally, the survey was reviewed and refined by two academic researchers based on the pre-test results. The pre-test process aimed to enhance the quality, reliability, and validity of the questionnaire content to obtain more accurate and trustworthy results (Burns & Veeck, 2020).

Subsequently, the questionnaire was transformed into an online form, such as Google Forms. This questionnaire included filter questions to determine whether respondents had viewed the Alamendah Tourism Village

VR tour. This ensured the relevance of the data to the research objectives. The questionnaire distribution was carried out through personal social media and the Alamendah Village social media, with the VR Alamendah Village website link included, allowing respondents who had not viewed the VR tour to access it before completing the survey.

The data analysis process in this study used the Structural Equation Model (SEM) method. SEM is a technique for analyzing conceptual frameworks using a single method (Hair Jr et al., 2017). SEM helps researchers measure how well the dimensions of a variable measure the variable itself (Hair Jr et al., 2017). SEM has two testing models: the measurement model and the structural model (Hair Jr et al., 2017). The measurement model is used to explore construct validity and reliability (Hair Jr et al., 2017). Data analysis was assisted by the software applications SmartPLS 4.0 and SPSS.

RESULTS AND DISCUSSION

First, this study involved respondents with diverse demographic characteristics. In terms of gender, the respondents comprised 49.1% males and 50.9% females, indicating a relatively balanced gender composition. The majority of respondents were aged 18-25 years (93.8%), with a smaller proportion aged 26-33 years (5.5%), 34-41 years (0.5%), and over 41 years (0.3%). Regarding education, most respondents had a bachelor's degree background (55.3%), followed by high school (33.0%), diploma (8.6%), postgraduate (2.6%), and less than high school (0.5%). The respondents' occupations were predominantly students (82.1%), followed by employees (8.3%), others (7.8%), and entrepreneurs (1.8%). Most respondents had an income of less than or equal to Rp 5,600,000 (90.9%), while 6.8% earned between Rp 5,600,000 and Rp 11,200,000, and 2.3% earned more than Rp 11,200,000. Regarding their experience with virtual reality (VR), 60.8% of respondents used it for the first time, 34.8% had used VR 2-5 times, and 4.4% had used it more than 5 times. The most frequently used device for VR was a smartphone or tablet (70.9%), followed by a computer or laptop (20.5%), and a dedicated VR headset (8.6%). These demographic results indicated that the age group was the most active technology users and open to adopting innovations such as virtual reality (Pasaman, 2024a). Additionally, the predominance of students among the respondents suggested that this category was open to exploring new technologies (Pasaman, 2024b). Moreover, the demographic data indicated that students or those with lower-middle-income status had a high curiosity to seek information about the destinations they planned to visit (Mohsin et al., 2017).

Table 1 Results of the Measurement Model Analysis

Construct/Item	Loading**	CA/CR	AVE
System Quality		0,783/0,874	0,698
Easy to use and navigate	0,818		
Understandable structure and content	0,856		
Clear, detailed, and realistic display	0,831		
Immersive		0,789/0,864	0,613
Feeling of being at the tourist location	0,795		
VR experience similar to real-world experience	0,753		
Good control over movements in VR	0,757		
Presence and enjoyment in VR	0,825		
Authentic		0,852/0,888	0,533
VR makes the place look real	0,754		
Accurate duplication of actual attractions	0,742		
Identifiable original features through VR	0,754		
Real experience of attractions	0,778		
Feeling connected to the tourist place	0,767		
Immersion in the atmosphere of the attraction	0,728		
Escape from everyday life	0,566		
Satisfaction		0,783/0,874	0,698
Valuable VR experience	0,869		
Satisfaction with VR experience	0,838		
VR experience exceeds expectations	0,797		
Visit Intention		0,827/0,896	0,743
Plan to visit the place seen in VR	0,897		
Desire to visit the place soon	0,880		
Willingness to invest time and money to visit	0,806		

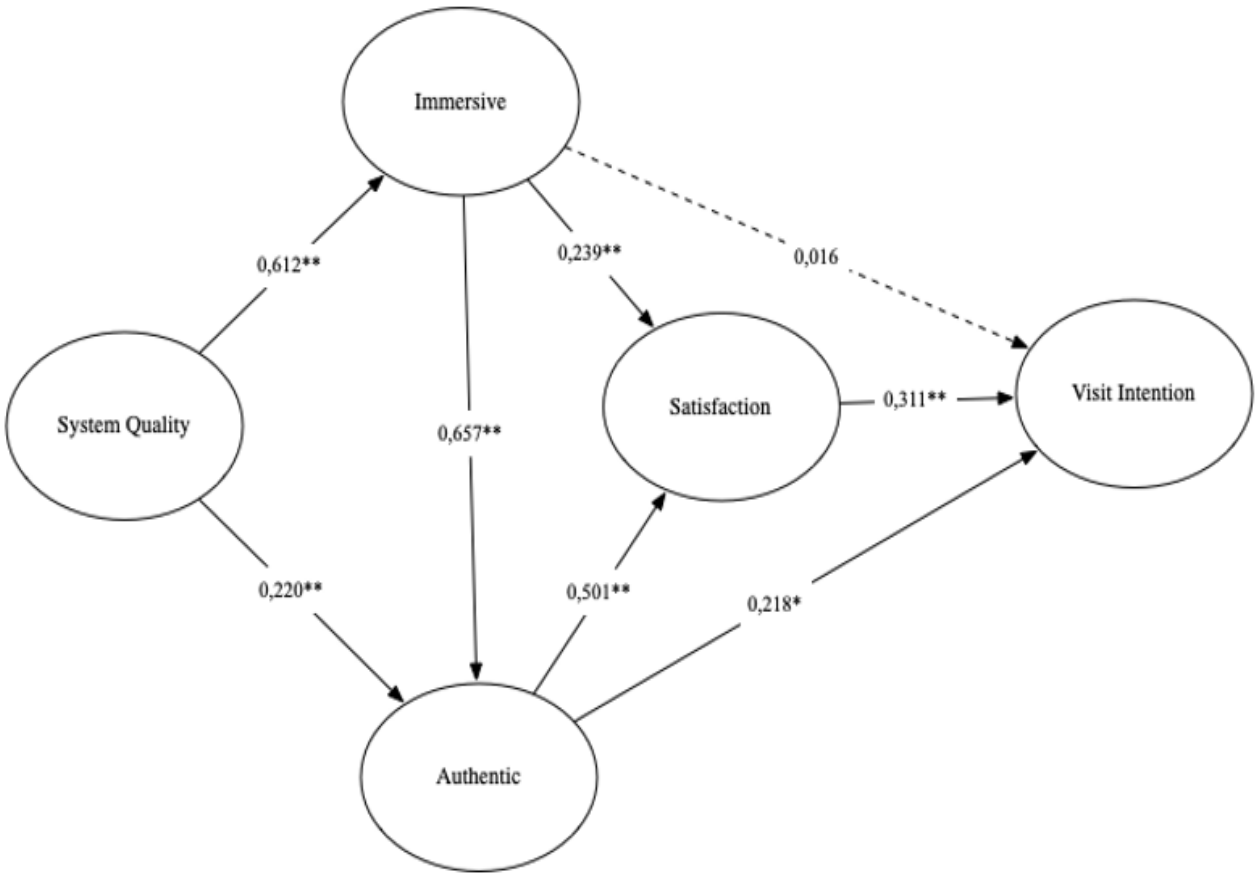
**All significant at $p < 0.01$.

Source: Research Result, 2024

Second, Table 1 presents the results of the measurement model analysis, which showed that all constructs met the criteria based on the recommendations from Hair Jr et al. (2021). System quality had high loading values with a Composite Reliability (CR) of 0.874 and an Average Variance Extracted (AVE) of 0.698, indicating excellent reliability and convergent validity. Immersive perception and authenticity had high CR values of 0.864 and 0.888, with AVEs above 0.5, indicating strong internal consistency. One item in the authenticity perception construct had an outer loading value of 0.566. This item was not removed because the conditions for internal consistency and convergent validity were met. The constructs of satisfaction and intention to visit had high outer loadings and CR and AVE values that met the criteria of 0.87 and 0.7. These results indicated that the constructs were effective measurement

tools for understanding the virtual tourism experience. Overall, these results confirmed that the measurement model used in this study met the necessary criteria for valid and reliable analysis (Hair Jr et al., 2021). Additionally, the analysis results showed that all constructs met the discriminant validity criteria based on the Fornell-Lacker criteria.

Third, in testing the structural model, the researchers followed the bootstrapping procedure recommendations from Hair Jr et al. (2021) with 5000 repetitions to robustly evaluate path coefficients and test the statistical significance of the indicators used. The researchers adopted the Standardized Root Mean Square Residual (SRMR), Normal Fit Index (NFI), and R2 metrics to assess the model fit. Hair Jr et al. (2021) and Malhotra et al. (2020) explained that an SRMR value below 0.08 indicates a good fit between the proposed model and the observed data. The SRMR value in this study was 0.064, indicating a well-fitting model. According to Burns and Veeck (2020) higher R2 values suggest that the proposed model is suitable for the analyzed data. Authenticity perception had the highest R2 value of 0.655, indicating that the constructs measuring authenticity in the proposed model explained



*Significant at p < 0.05; **Significant at p < 0.01; not significant

Source: Research Results, 2024

Figure 2 Hypothesis Test

about 65.5% of the variance in the authenticity construct, suggesting a strong explanatory power. Satisfaction had a relatively high value of 0.496, while immersive perception and intention to visit had lower values of 0.373 and 0.344, indicating that the constructs measuring these constructs explained a smaller proportion of the variance. The analysis results concluded that the proposed model fit the observed data well. Additionally, the NFI value in this study was 0.803, indicating an acceptable model fit (Hair Jr et al., 2021; Suhartanto et al., 2021).

Fourth, Figure 2 presents the analysis results of the relationships between variables. The direct effects showed that system quality had a direct and significant effect on immersive perception (β=0.612; p<0.01) and authenticity perception (β=0.220; p<0.01). Therefore, hypotheses 1 and 2 were accepted. The relationship between authenticity perception and satisfaction (β=0.501; p<0.01) and intention to visit (β=0.218; p<0.05) had a direct and significant effect, indicating that hypotheses 3 and 4 were accepted. Additionally, immersive perception had a direct and significant effect on authenticity perception (β=0.657; p<0.01) and satisfaction (β=0.239; p<0.01), but no significant effect on intention to visit (β=0.016; p>0.05). Therefore, hypothesis 7 was rejected, but hypotheses 5 and 6 were accepted. Satisfaction had a direct and significant effect on intention to visit (β=0.311; p<0.01), so hypothesis 8 was accepted.

Lastly, the findings of this study provide a new perspective in the context of VR tourism by applying the SOR model to tourist villages, revealing that the quality of VR systems is crucial in creating immersive and authentic experiences. These findings differ from previous research, which primarily focused on conventional tourism destinations (Beck et al., 2019). While earlier studies emphasized technical aspects in natural destinations, this research uncovers the mediating role of immersive perception between system quality and authenticity, and its connection to tourist satisfaction and intention to visit the village (M. Lee et al., 2020; Yersüren & Özel, 2023).

The quality of VR systems in tourist villages, encompassing ease of use, clear structure, and realistic visuals, acts as an external stimulus that influences tourists' perceptions. Previous research found that technology users primarily focused on meeting expectations, whereas this study extends the perspective by highlighting the importance of emotional engagement through immersive perception and authenticity, which enhances tourist satisfaction and, ultimately, drives the intention to visit the destination in person (Yung & Khoo-Lattimore, 2019). These findings align with previous research, which has shown that positive VR experiences encourage tourists to visit real-world destinations.

Virtual reality is a powerful storytelling tool. By showcasing the immersive history and traditions of tourist villages, destinations can distinguish themselves from others. This is consistent with earlier findings, which suggest that immersive content can increase marketing appeal and support local economic growth (Kim & Ko, 2019; Widyaswara et al., 2023). Furthermore, in line with prior research, integrating VR into broader marketing strategies can enhance visibility and attract more tourists (Kim, Lee, & Preis, 2020).

This study contributes to the SOR model by exploring how immersive perception mediates the relationship between system quality and authenticity. The novelty of this research lies in its distinct focus from previous studies by highlighting the role of VR in the context of tourist villages—an area that has been underexplored in VR tourism literature. This complements or even extends previous studies that have mainly focused on larger or urban destinations (Asyraff et al., 2023; Yung & Khoo-Lattimore, 2019).

CONCLUSION

This study aimed to evaluate the effectiveness of using VR in the Alamendah tourism village by examining tourists' intention to visit and their perceptions of the immersive and authentic virtual experience provided. Unlike previous research that has focused on conventional tourist destinations, this study highlights the importance of system quality in creating immersive and authentic experiences for village tourists. The findings show that system quality significantly affects immersive perception and authenticity, which in turn influences tourists' satisfaction and intention to visit.

The research demonstrated that immersive perception plays a crucial mediating role between system quality and authenticity perception. This offers new insights that have not been extensively explored in the context of tourism villages. Specifically, the study illustrated how unique factors of tourism villages, such as cultural authenticity and natural beauty, can be optimized through VR to create more profound and satisfying tourism experiences. These findings expand the current understanding of VR's application in tourism, particularly in under-researched areas like tourism villages.

Moreover, this study contributes to the theoretical development of the SOR model by incorporating the mediating role of immersive perception. This nuanced approach provides a deeper understanding of how VR system quality impacts tourist behavior through internal cognitive and emotional responses. The application of the SOR model in this

unique context offers a new perspective on how technological quality and user experience can drive tourist satisfaction and behavioral intentions.

The findings also suggest several recommendations for tourism village managers and policymakers. Tourism village managers should prioritize the quality and authenticity of VR experiences. This includes developing high-resolution visuals, spatial audio, and interactive elements that accurately represent the village's cultural and natural assets. Managers should collaborate with VR developers and content creators to ensure that the virtual experiences are engaging and immersive.

Tourism village managers should consider offering combined tour packages that include both VR experiences and physical visits. This approach can enhance tourists' understanding and appreciation of the village's attractions, leading to a more engaging and fulfilling experience. Developing standalone VR applications that tourists can download and explore before visiting can also be a valuable tool for increasing engagement and interest.

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