



The Effects of Virtual Reality Use On Millennials' On Intention to Visit Travel Destination

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ABSTRACT

Virtual Reality (VR) technology in tourism is a rapidly growing product of collaboration between technology and tourism. The benefits of VR during the Covid-19 pandemic allow the technology to survive. However, previously, VR had already seen usage in various profitable aspects of tourism. For that reason, it is important to examine how VR affects an individual's—among Indonesian millennials—interest in visiting travel destinations. This study aims to analyze the effects of using VR by observing the content quality, system quality, presence, enjoyment and satisfaction in motivating visits among millennials. A total of 371 samples were collected in this study, obtained from respondents via online-distributed questionnaires. The data were processed using the structural equation modeling (SEM) method. The results indicated that out of seven hypotheses proposed, six were accepted and one was rejected. Content quality and system quality affected satisfaction, while presence affected enjoyment and satisfaction; satisfaction and enjoyment affected intention to visit. Enjoyment does not affect satisfaction. This study also shows that content quality, system quality, presence, enjoyment indirectly affect millennials' interest to visit travel destinations. The quality of the VR system played an important role in creating satisfaction and intention to visit among millennials, so travel destination managers need to consider this.

Keywords: Virtual Reality; Content Quality; System Quality; Presence; Enjoyment; Satisfaction; Intention to Visit; Millennials.

1. Introduction

The Covid-19 pandemic has devastated tourism sectors around the world. To prevent the spread of the virus, several countries have implemented physical and social distancing which has an impact on the sluggishness of tourist travel (GNFI, 2020). In order to adapt to these new changes,

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various technology-based solutions have emerged to compensate for the limitations in the hospitality industry and the tourism sector. The use of virtual reality (VR) in tourism will be an appropriate and long-term contributor to transformation (Schiopu et al., 2021a). In addition to VR, potential technologies that have recently attracted attention include augmented reality (AR) and mixed reality (MR) (Beck et al., 2019). A number of countries had utilized VR in tourism not only during the current pandemic, but long before the pandemic occurred, VR has long seen usage as well in Indonesia. Even today, with the pandemic still affecting people's lives, VR can be used for various purposes. VR and AR are increasingly being adopted and implemented in various sectors of tourism and hospitality such as theme parks, cruise ships, museums, and destination marketing.

The Global Digital Traveler Survey (2019) suggested that out of 20 countries, including Indonesia, 75% of Indonesian tourists have high expectations of travel experiences using AR or VR. They believed that AR and VR would be very helpful in travel planning. Research by Tussyadiah et al, (2018) suggested that VR could shape consumers' attitudes and behaviors, as if they are present in a virtual environment, thus enhancing their comfort and enjoyment as well as increase the chance of potential tourists to visit. Research conducted by Ally et al. (2021), asserted that technological features in VR, including clarity and interactivity, have a positive effect on how users process information. An et al. (2021a) stated that the presence and quality of information as two important attributes of VR travel content have positive effects on tourists and contribute to shaping destination marketing strategies. Marketing can generate interests in visitations (Hartini et al., 2020; Subawa et al., 2021) and VR is an innovative medium for marketing that has been proven to take tourism to another level (Wei, 2019).

VR, in Indonesia, especially in tourism, has been used to develop activities pertaining to tourism. Pakpahan (2020) stated that there are no legal provisions governing virtual tourism so it is still difficult to achieve general adoption of the use of VR in tourism in Indonesia. The ability of virtual reality to create a realistic and navigable virtual environment and its potential to become a new tourism service is very effective in influencing tourists' interest. Idris et al (2020) emphasized that the limited use of digital technology, especially VR, to promote tourism, was also an obstacle in several studies. The limitations of VR in Indonesia need to be overcome so that the benefits of VR can be maximized. For this purpose, various efforts need to be made. Millennials, who grew up with technology and have lived their entire life in a digital environment with the have specific characteristics i.e they tend to be tolerant of engaging in new cultures, and have no trouble receiving information, are strong arguments for why this group will potentially take advantage of VR. The Alvara Research Center (2020) states that millennials are a "rising market" because they currently dominate the market. This is expected to last until 2035.

Virtual reality makes the information-seeking experience a faster, more interactive and detailed process, making it perfectly suited for tourism purposes (Rainoldi et al., 2018). The importance of implementing VR and its benefits in tourism provides long-term benefits and can increase potential visits to travel destinations; it is worth studying more in depth, especially for the millennial generation. This study aims to analyze the effect of using VR towards millennial tourists' interest in visiting travel destinations by paying attention to the elements within VR. This study concludes with a recommendation as future references for stakeholders of tourism, especially destination managers, to utilize VR into their strategic plans both as a promotional medium and as a tourist attraction.

2. Literature Review

2.1. Tourism Virtual Reality

In the context of tourism, VR can be described as a digitally generated interactive medium that allows participants to create a simulated experience of an unreal environment using a head-mounted display (HMD) of a VR device (Perry Hobson & Williams, 1995). According to (Pestek

& Sarvan, 2020)VR affects the tourism and hospitality industry through three main points, namely future tourism planning and management, technology-based tourism destination marketing, and the potential of VR in changing consumer needs. Apart from functioning as a tourism marketing tool, VR is believed to contribute to value the creation for tourism businesses and visitors (Jung & Tom Dieck, 2017). VR can enhance the interactive and immersive experience of customers in the tourism industry (Kim et al., 2018).

2.2. Content Quality and System Quality

The information system success model has been applied to a variety of contexts, including websites, online shopping, online learning, Augmented Reality, and Virtual Reality (Yuce et al., 2020). Factors that determine the success of information systems include system quality, information quality (content), usage, user satisfaction, individual influence along with organizational influence. User satisfaction is affected by system and information quality, which, in turn, affects individuals and organizations.

In VR, quality information or content in the form of images and descriptions is essential. DeLone and McLean (2014) emphasized the importance and relevance of content quality in a research on information systems success. Content quality refers to the quality of information provided by cyberspace. In this case, it describes content accuracy, completeness, and content presentation format. The information within the tourism content of VR is in the form of descriptions of travel destinations (Lee et al., 2020). Accurate, relevant and reliable information can be beneficial for its users (Zheng et al., 2012a) and quality information can convince someone to actually visit a travel destination. VR triggers its users to be interested in visiting travel destinations (Hagen et al., 2021).

System quality can be described as a digital information medium's ease of use (Elci et al., 2017). System quality refers to how far the goals i.e. convenience, consistency, usability, accessibility, and responsiveness are able to be achieved during the user experience associated with the presented media, such as a virtual reality environment and a virtual reality system, which should be easy to implement by individuals of all skill levels. According to Zheng et al., (2012b), other aspects that are worthy of considering are navigation, security, aesthetics, and interactivity of the system. VR provides a pleasant and satisfying experience to its users regarding the system quality (Chiu et al., 2007), and is an effective communication platform with the purpose of persuading users to visit travel destinations (Lin et al., 2020). In VR, satisfaction will be achieved when the information displayed is friendly and fulfill its users' needs (Kim et al., 2020). Based on the previous explanation, the hypotheses in this study are as follows:

H1: Content Quality Affects Satisfaction

H2: System Quality Affects Satisfaction

2.3. Presence

Presence is generally described as a psychological sensation of "being there" in a mediated virtual environment while physically being somewhere else. According to Yung et al., (2021) when the level of presence in the virtual environment (VE) is high enough, the user achieves the illusion of non-mediation perception, which means the user begins experiencing the VE as an actual physical place. The main result of high level of presence, especially within the context of tourism, is that users perceive VE as a place rather than as a collection of images. Tussyadiah et al. (2018) stated that the sense of presence is very important because the key to the VR experience is the level of presence, which contributes to the level of enjoyment of VR participation. To assess the relative contribution of VR experiences in encouraging better attitudes towards VR stimuli i.e. travel destinations, it is very important to measure change in attitude before and after using VR. Wirth et al., (2007) associated spatial presence with two aspects: self-location, the feeling of being

in a mediated environment (self-presence in a virtual environment), and perceived probability of action. Based on the previous explanation, the hypotheses in this study are as follows:

H3: Presence Affects Satisfaction

H4: Presence Affects Enjoyment

2.4. Enjoyment

Enjoyment is a condition and an activity in which using a certain system is considered pleasant. Enjoyment is possible when someone is fully immersed in the activity. Garfield et al., (2001) defines perceived enjoyment as "the degree to which a system or service is perceived as pleasant." This pleasant feeling comes from enthusiasm and delight in using a technology regardless of the consequences of its use. Virtual experience using technological interventions such as VR can also be considered a pleasant activity because it offers consumers a unique way to experience a destination they have never experienced before. Vishwakarma et al., (2020). For tourists, the expected enjoyment of VR is to provide fun and satisfaction, so that tourists with higher enjoyment will have a higher chance of visiting the travel destination (Li & Chen, 2019). Based on the previous explanation, the hypotheses in this study are as follows:

H5: Enjoyment Affects Satisfaction

H6: Enjoyment Affects Intention to Visit Destination

2.5. Satisfaction

Satisfaction is described as a measure of how far a service or a product's actual experience meets customers' expectations (Li et al., 2021). Consumers feel satisfaction based on their personal experience of cognitive and affective evaluation of a service or product. Consumers will have a positive or negative emotional response depending on their prior expectations (Wu et al., 2014). Digitalization in tourism is closely related to providing information about travel destinations that can provide satisfaction to consumers or tourists (Sobarna, 2021). In literature about tourism, overall tourist satisfaction is usually proportional with the rate of returning visits to a travel destination, loyalty, and retention of tourists (Alegre & Garau, 2010). Bai et al., (2008) argued that increasing consumer satisfaction in an online environment is crucial for generating interests in the purchase of products related to tourism. Satisfaction in using VR in tourism has a positive effect on the users' intention to visit travel destinations (An et al., 2021b). User satisfaction refers to the success rate of the information required by the user through the designed system or device. Satisfied users are those who are more likely to be interested in the described goals (Yuce et al., 2020). Based on the previous explanation, the hypothesis in this study is as follows:

H7: Satisfaction Affects Intention to Visit Destination

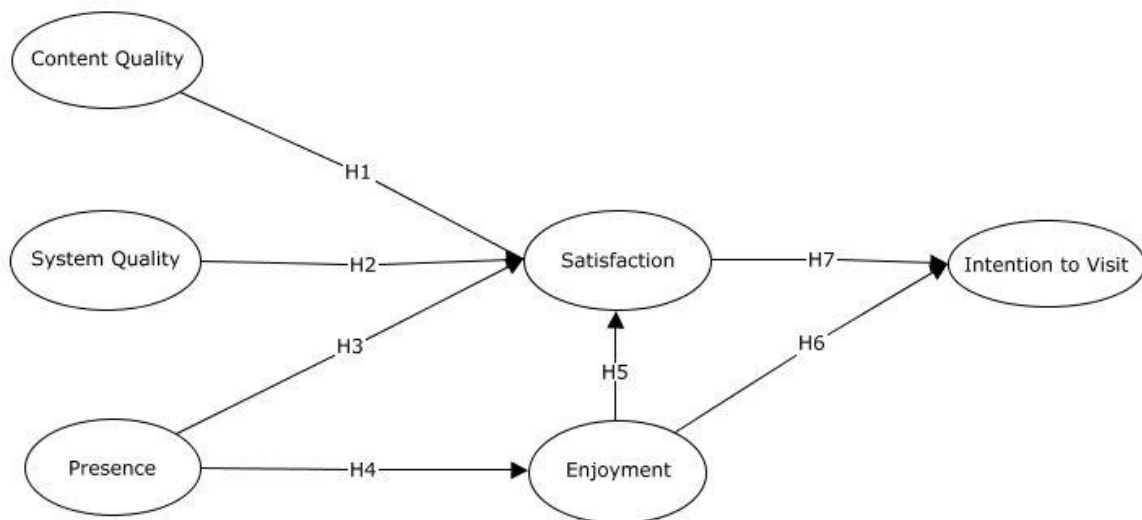
2.6. Intention to Visit

The concept of intention to visit (travel destinations) comes from behavioral intention. Behavioral intention is seen as a factor that determines the popularity of a destination. Younus (2015) described intention to visit as the motivation felt by tourists in making decisions that generates interest in visiting a travel destination after making an assessment of the service or the product. More advanced technological devices such as VR have a positive impact on behavioral intentions, namely interest in visiting, leading to actual visits (Flavián et al., 2019). VR can provide a "discover before visiting" experience, which creates an image of the destination in the minds of potential visitors, leading to positive behavior (Marasco et al., 2019).

In the context of VR, positive attitudes toward use of VR include engaging in experiential activities, which in turn influence interests in future visitation (Jung et al., 2017). Confirmed by (Tussyadiah et al., 2018), the shift in VR attitudes have been shown to positively affect intention to visit travel destinations. According to Kim et al. (2020), the shift in attitudes of people

experiencing VR tourist activities refers to re-experiencing, recommending to others, and visiting the places depicted in VR activities. Schiopu et al. (2021b) concluded that when using VR technology, there would be benefits and facilities for its users so that it shows a strong effect towards the interest in adopting VR for use in travel planning. If the designed VR can allure its users and create adequate satisfaction, it can be expected that there will be a significant change in interest in visiting travel destinations, which in the end will compel them to actually go to the destinations. Based on the previous literature review, the conceptual framework of the research is depicted in Figure 1.

Figure1. The Conceptual Model



Source: Researcher (2022)

3. Method

3.1. Sampling and Data Collection

The population studied in this research is the Indonesians belonging to the millennial generation, ranging in age between 20 to 40 years. The questionnaires were distributed starting from April to May 2022, to which 410 people responded. The data were cleansed at this point, therefore only a total of 371 respondents were obtained. This study complies with the SEM analysis criteria, since there are 200-400 samples. A questionnaire was distributed online via Twitter, Instagram, Telegram, WhatsApp, LinkedIn, and Kudata for this research. The questionnaire was created in the Google Form format and completed by the respondents independently. Respondents would access one of these Virtual Reality provider services prior to completing the questionnaire:

1. http://kekulturan.kemdikbud.go.id/virtualmuseum/sangiran_EN/index.html

VR on Sangiran Museum can be accessed via the website. Its use is quite easy, at the beginning of access will be shown an introductory video related to Sangiran Museum. Furthermore, the user can travel according to the instructions that have been provided. The user will be directed to enter the museum, there will be an asterisk that will direct the user to see the collection of the museum that has been equipped with a more detailed explanation of the objects seen.

2. <https://tour.indonesiavirtualtour.com/dkijakarta/planetarium>

VR on the Planetarium can be accessed using the website. This VR is quite easy to use because of its simple display and navigation. The Planetarium features extraterrestrial content such as stars, planets and more. The features in this VR can be navigated to explore the content separately according to the name of the object want to explore with a 360 degree system.

3. <https://tour.indonesiavirtualtour.com/palembang/jelajah-sungai-musi>

Cruising the Musi River is a VR service in the form of 360-degree video. Unlike the previous 2 types of tours that use the website. Users will only see videos that can be navigated 360 degrees. The user will be taken to explore the Musi River which is equipped with a brief description of an object that is visible.

3.2. Measuring Instrument

The questions in the questionnaire were designed based on the literature review and the specific characteristics of previous studies. The questionnaire is divided into 2 parts, the first part is about respondent information including area of origin, age, gender, occupation and their experience with VR. The second part measures the variables affecting VR as many as 30 statement items. All measurement constructs are operationalized with multi-items on a 5-point Likert-type scale, ranging from 1, strongly disagree to 5, strongly agree. Several research instruments are described in Table 1.

Table 1. Research Instruments

No.	Variable	Instruments	Reference
1	Content Quality	KK1.VR presents information through various means, including sound, image, video, and expression. KK2.VR provides reliable and useful information. KK3.In addition to verbal and content information, other types of communication are also provided in VR. KK4.VR accurately provides information I require. KK5.VR gives me more insights about tourist attractions.	(Lee et al, 2020; Zheng et al, 2012)
2	System Quality	KS1.VR is user friendly KS2.VR shows information and images unambiguously. KS3.VR is easy to maneuver and navigate in. KS4.VR is simple to use. KS5.VR can be used to find information on travel destinations.	(Elci et al., 2017; Zheng et al., 2012)
3	Presence	PRE1.I feel as if I am physically present in a VR environment PRE2.I feel I can interact with the displayed environment PRE3.I feel physically involved (in the environment) PRE4.I receive the impression I can do whatever I want in a VR environment PRE5.I feel like the displayed content is more lifelike than a normal picture or video	(Tussyadiah et al., 2018; Wirth et al., 2007; Schubert et al., 2001)
4	Enjoyment	JOY1.I enjoy using VR technology JOY2.My VR content viewing experience was pleasant JOY3.Using VR does not disinterest me JOY4.VR is very interesting to use JOY5.Using VR to plan trips to travel destinations makes it easy for me	(Garfield et al., 2001; Li & Chen.,2019; Vishawakarma et al., 2020)
5	Satisfaction	SAT1.Overall, I am satisfied with my virtual trip SAT2.Using VR will help me choose my destination in a better and more comfortable way SAT3.The use of VR in planning future travel is very useful SAT4.The virtual travel experience meets my expectations SAT5.VR provides a valuable experience	(Li et al., 2020; Sobarna, 2020; Yuce et al., 2021; An et al., 2020; Kim & Ko., 2019)
6	Intention to Visit	INT1.I'm interested in using VR to plan trips in the future INT2.I am interested in visiting places that appeared on my virtual trip in the near future INT3.I would visit the places that appeared in my future virtual trip INT4.I would recommend to VR to others INT5.I want to know more about new travel destinations	(Jung et al., 2016; Kim et al., 2020; Sobarna, 2020; Tussyadiah et al., 2018)

Source: Researcher (2022)

3.3. Data Analysis

In this study, Structural Equation Modeling (SEM) analysis was used. SEM analysis in this study employed the use of *AMOS 20* software with the maximum likelihood estimation method. Path diagrams and research hypotheses would be analyzed based on the primary data collected.

Confirmatory factor analysis (CFA) and average variance extracted (AVE) were used to assess the measurement model, and structural equation modeling (SEM) was used to test the proposed research model.

4. Results and Discussion

4.1. Characteristics of Indonesian Millennial Tourists

The respondents came from a variety of regions in Indonesia, including Aceh, Bali, Banten, Bengkulu, Special Region of Yogyakarta, DKI Jakarta, Jambi, West Java, Central Java, East Java, West Kalimantan, South Kalimantan, East Kalimantan, Riau Islands, Lampung, Riau, West Nusa Tenggara, Papua, West Papua, South Sulawesi, North Sulawesi. The respondents were dominated by women totaling 312 individuals, or 84%, and men totaling 59 individuals, or 16%. The majority of the respondents in this study belonged to the 20 to 30 years old age group, 76%, while ones in the 31 to 40 years old age group consisted of 24%. That is, the majority of millennial in this study focused on the age of 20 to 30 years. The level of education among respondents was dominated by high school level, followed by D4/S1 (BA) level and finally S2 (MA). The occupations of the millennial respondents were found to be quite diverse, such as private sector employees, students, housewives, entrepreneurs, freelancers and other professions, such as civil servants, teachers, lecturers, employees, etc. The respondents' knowledge about VR showed that a total of 342 respondents or 92% had prior knowledge of VR and a total of 29 respondents or 8% did not know about VR. Descriptive statistics were utilized to get the respondents' profile (see Table 2).

Table 2. Profile of Respondents

No.	Characteristics	Frequency	Percentage
	Gender		
1	Male	59	16%
	Female	312	84%
	Age		
2	20 – 30 years old	218	76%
	31 – 40 years old	90	24%
	Education		
3	Senior High School	230	62%
	DIV/S1	134	36%
	S2	7	2%
	Occupation		
	Private Sector Employee	133	36%
	Student	81	22%
4	Housewife	73	20%
	Entrepreneur	54	15%
	Freelance	10	3%
	Others	20	5%
	Have you heard about VR?		
5	Yes	342	92%
	No	29	8%
	Have you ever used VR?		
6	Yes	260	70%
	No	111	30%

Source: Primary Data (2022)

4.2. Measurement Model

The models and hypotheses presented were tested using the SEM procedures. In addition, construct validity was analyzed using convergent validity, composite reliability, and variance extracted scores (Ghozali, 2017). The standardized loading factor was required to be equal or more than 0.5 and, as shown in Table 3, with the composite reliability having a value of more than 0.5. Subsequently, all value of the composite reliability was more than 0.7. This indicated internal consistency, meaning that all measurements consistently represent the same latent concept. The average variance extracted estimates were used to measure the amount of variance

captured by the construct versus the variance due to random measurement error. The variance extracted from the construct score was more than 0.5.

Table 3. The Measurement Model Properties

Variables/Indicators	Standardized Loading Factor	Composite Reliability	Average Variance Extracted
Content Quality		0.94	0.78
KK1	0.653		
KK2	0.717		
KK3	0.670		
KK4	0.703		
KK5	0.663		
System Quality		0.92	0.70
KS1	0.688		
KS2	0.644		
KS3	0.611		
KS4	0.610		
KS5	0.549		
Presence		0.94	0.77
PRE1	0.646		
PRE2	0.766		
PRE3	0.745		
PRE4	0.768		
PRE5	0.585		
Enjoyment		0.95	0.81
JOY1	0.712		
JOY2	0.636		
JOY3	0.657		
JOY4	0.719		
JOY5	0.713		
Satisfaction		0.96	0.83
SAT1	0.684		
SAT2	0.696		
SAT3	0.715		
SAT4	0.719		
SAT5	0.696		
Intention to Visit		0.93	0.75
INT1	0.605		
INT2	0.643		
INT3	0.601		
INT4	0.693		
INT5	0.652		

Source: Primary Data (2022)

The results of the measurement model supported the validity of the measurements, with acceptable loadings for all observed variables. After validity measures, the next step was overall model fit. Goodness of fit testing, namely Chi-square = 610.385, Probability = 0.000 (> 0.05), CMIN/DF = 1.654 (< 2.00), RMSEA = 0.042 (< 0.08), GFI = 0.906 (0.90), AGFI = 0.882 (> 0.90), TLI = 0.945 (0.90), CFI = 0.953 (0.90). Based on the model, results that complied with the goodness of fit criteria were obtained, although there were values that do not meet the assumptions, the model can still be said to be feasible since one of these criteria is met (Junaidi, 2021).

The next step was testing the hypothesis; as seen from the regression weight with CR criteria greater than 1.96 and having a p-value with a significance level below 0.05, it is stated that exogenous variables affect endogenous variables. However, if it has a CR value of less than 1.96 and a p-value with a significance level above 0.05, the exogenous variables have no effect on the endogenous variable and if there is (***) it means that the value is very low or below 0.001. The results of hypothesis testing can be found in Table 4.

Table 4. The Result of Hypothesis Test

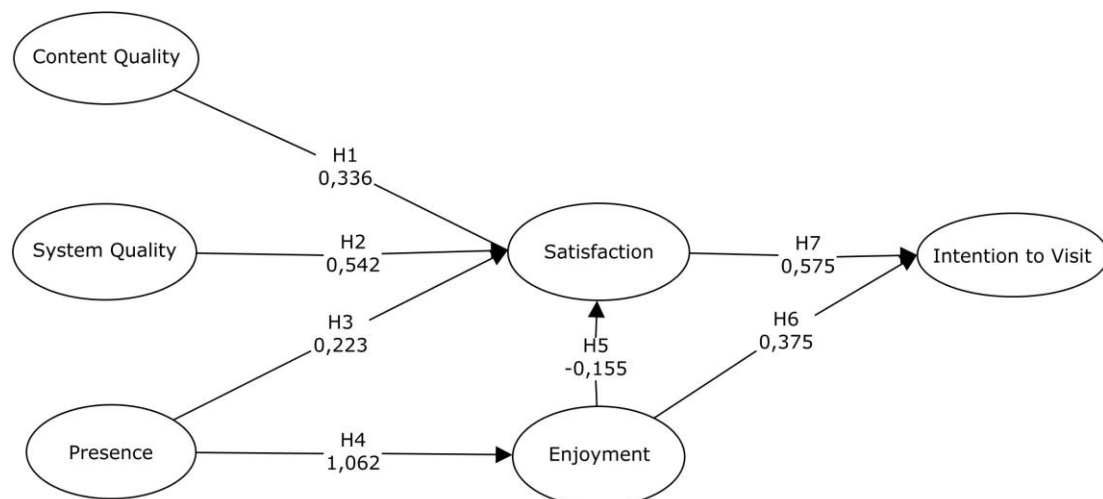
Structural Paths	Standardized regression weights	SE	CR	p-value	Conclusion
H1: Content Quality → Satisfaction	0.336	0.138	2,523	0.012	Supported
H2: System Quality → Satisfaction	0.542	0.242	2,671	0.008	Supported
H3: Presence → Satisfaction	0.223	0.093	2,302	0.021	Supported
H4: Presence → Enjoyment	1.062	0.134	9,092	***	Supported
H5: Enjoyment → Satisfaction	-0.155	0.106	-1,228	0.220	Not Supported
H6: Enjoyment → Intention to Visit	0.375	0.088	4,280	***	Supported
H7: Satisfaction → Intention to Visit	0.575	0.115	5,998	***	Supported

Source: Primary Data (2022)

5. Discussion

Figure 2 shows the path diagram as the final measurement model; of the seven hypotheses proposed, six were accepted and one was rejected. Table 4, the estimated value from hypothesis 1, the quality of content on satisfaction had a direct positive effect with a value of 0.336 and an indirect positive effect with a value of 0.194. This can be interpreted to mean that VR potentially provides reliable and useful information to its users. Virtual reality also helps give additional insights on travel destinations in order to increase the positive attitude of its users by providing satisfaction that leads to interest in visiting travel destinations. This significant test backs up previous studies (Zheng et al., 2012; Lee et al., 2020; Hagen et al., 2021).

Figure 2. Structural Model Results



Source: Primary Data (2022)

Hypothesis 2, the direct effect of system quality on satisfaction had a path analysis value of 0.542 and the indirect effect of system quality on intention to visit was 0.311. VR is user-friendly, which means that the VR system provides convenience for its users so that satisfactory interactivity occurs. This significant test supports previous studies (Elci et al., 2017; Zheng et al., 2012; Lin et al., 2020; Sobarna, 2021; Kim et al., 2020; Chiu et al., 2007) which explained that

the quality of the system is responsible for creating positive behavior because VR develops an interactive system and provides convenience to its users. The interest in tourist visits is influenced not only by the content displayed, but also by the system that creates interaction for its users.

Hypothesis 3, there was a positive influence of the presence towards satisfaction (0.223) and the value of indirect influence towards intention to visit was 0.432; the users got the impression that they can do whatever they want in the displayed VR environment. Hypothesis 4, the positive effect of the presence toward enjoyment had a value of 1.062. This significant test supports previous studies (Yung et al., 2021; Tussyadiah et al., 2018; Wirth et al., 2007) which explained that a sense of presence in VR provides experiences that contribute to the enjoyment of VR participation and encourage more positive shift in attitude leading to actual actions, namely interest in visiting travel destinations.

Hypothesis 5, there was a negative effect of enjoyment on satisfaction with a path analysis value of -0.155, therefore it can be interpreted that respondents in this study did not experience a pleasant feeling from using VR, which ought to provide satisfaction they wanted. However, hypothesis 6, the effect of enjoyment on intention to visit, proved to be positive with a path analysis value of 0.375; Hartini et al., 2020; Vishawakarma et al., 2020; Li & Chen., 2019 stated that the enjoyment expected from using VR is pleasure and satisfaction.

Hypothesis 7, the effect of satisfaction on intention to visit was proven to be positive with a path analysis value of 0.575 implying that users are willing to recommend VR to others so that interest in visiting travel destinations they see through VR is higher. Satisfaction from using VR affects interest in visiting tourist destinations because satisfaction refers to the success rate of information obtained through a system or device (An et al., 2021; Yuce et al., 2021; Li et al., 2021; Kim & Ko., 2019; Flavian et al., 2019; Jung et al., 2020; Kim et al., 2020; Tussyadiah et al., 2018; Sobarna, 2021).

This study cements the effect of VR on tourism which is particularly focused on the Indonesian millennial generation and identifies the influential elements or factors and empirically confirms the effectiveness of the use of VR in tourism.

First, the findings of this study prove that there is a significant positive effect between content quality on millennial satisfaction in using VR. The findings from the research indicators explain that the quality of content from VR provides information related to tourist destinations accurately and includes other methods so as to meet millennial knowledge regarding tourist destinations that positively provide satisfaction. Second, the quality of the system to millennial satisfaction in using VR indicate that VR system creates positive behavior due to the interactive capabilities of VR, providing complete and clear information and friendly to use so as to make users feel satisfied using VR.

Third, the presence of enjoyment also has a positive influence and has a strong connection, the more presence a person has in VR, the more enjoyable it is. The feeling of enjoyment that arises because of presence in the use of VR will make the consumer have a positive attitude towards VR. Content quality, system quality, presence, enjoyment, and satisfaction have a positive effect on creating interest in visiting travel destinations even though they have a significant level of contribution.

The findings in this study showed that system quality has a stronger influence when compared to content quality, a study (Mohaghegh et al., 2022) stated that younger people or millennials tend to pay attention to the system because they are used to seeing and using various digital technologies. It can thus be inferred that millennials tend to attach great importance to the quality of the VR system.

Satisfaction from using VR significantly affects intention to visit. This finding means that the higher the perceived satisfaction, the stronger the intention to visit. Satisfaction will drive the

users to recommend VR or even visit travel destinations and the level of user satisfaction with VR is crucial (Jung et al., 2017).

VR can attract users attention and create adequate satisfaction, it is expected to make significant changes such as interest in experiencing it again, recommending others to be interested in visiting tourist destinations that will eventually actually go to the destination (actually to visit). Millennials perceive satisfaction from the experience of using VR which positively provides a reference to eliminate curiosity about the purpose they see in VR, the perceived functional and emotional value also affects user satisfaction.

6. Conclusions and Suggestions

Virtual reality has a positive and significant impact on Indonesian millennials interest in visiting travel destinations. According to the results of the analysis, all the variables used to measure the intention to visit i.e. quality of the content, quality of the system, presence, enjoyment and satisfaction, have a positive impact on the interest of visit among millennials.

The quality of the content and the quality of the system indicated that it has a positive influence towards satisfaction. System quality is a factor that plays an important role in creating satisfaction among millennials when using VR and contributes more to increasing interest in visiting travel destinations compared to content quality. Furthermore, the enjoyment of using VR has a significant direct effect on increasing interest in visiting travel destinations without mediation from satisfaction.

The satisfaction obtained from using VR significantly affects the interest in visiting travel destinations. Satisfaction of millennials from the results of using VR is a very important factor because satisfaction refers to the level of information success from using a product—or service—which is usually in line with the level of return visits to travel destinations, loyalty and motivation to visit travel destinations. Overall, the satisfaction of the experience of using VR helps in planning travel trips in the future.

This research is expected to be a reference for tourism practitioners, especially related to the management of travel destinations, because the object of this study i.e. VR, has several advantages that the current conventional technology does not possess for promotions of travel destinations.

This study has several limitations. The first limitation is that the current study only presents 2 types of tourist sites; city tours and museums. Thus, these findings cannot be generalized to all types of travel destinations due to different environmental representations. Future research may consider examining VR with different types of tourism. Secondly, the factors influencing satisfaction with using VR among millennials, such as enjoyment, have weaknesses because the VR performance used in the study was not able to provide sufficient enjoyment, so future use of VR should pay attention to this. Thirdly, this study focused on the millennial generation. Future research may consider a more diverse sample of respondents in order to have more representative results. It would be interesting to see the difference in results with a wider demographic.

Finally, this study only examined the technical and emotional factors that affected the VR experience. There are yet other possible factors that might affect the VR experience as the technology continues to mature.

7. Funding

This research received no external funding.

8. Conflicts of Interest

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