# Heritage Hotel Development: How Virtual Reality Could Support the Sustainable Business Performance

## Agung Gita Subakti\*, Tiurida Lily Anita, and Ganang Aditiyo Prakoso

Department of Hotel Management, Faculty of Economics and Communication, Bina Nusantara University, Jln KH Syahdan No 9, Kemanggisan, Palmerah, Jakarta 11480, Indonesia Email: <u>agsubakti@binus.edu</u>, : <u>tiurida.anita@binus.ac.id</u>, <u>ganang.prakoso@binus.edu</u>

### Andhyka Tyaz Nugraha

Department of Industrial Engineering, Faculty of Technology Production and Industrial, Institut Teknologi Sumatera, South Lampung, Indonesia 35365 Email: andhykasriwijaya@gmail.com

### Abstract

Sustainable business performance needs company's achievement to any set goals. This achievement needed in every kind of business, including The Heritage Hotel. Therefore, Heritage Hotel must be able to show some innovative method to attract consumer to buy the product offered. One of the innovative ways is to make Virtual Reality. This Study aim to examine the effect of Virtual Reality based by user experience queries to Heritage hotel, and their impact to sustainable business performance. Data collection gained by survey with purposive sampling approach. Data was analysed using path analysis – PLS. The results showed that Virtual Reality based on attractiveness and stimulation have no significant effect to Heritage Hotel, but perspicuity, efficiency, dependability, and novelty have significant effect to Heritage Hotel. Heritage Hotel has no significant effect to social performance and economic performance, but it has significant effect to environmental performance.

### **Keywords:**

Virtual Reality, Heritage Hotel

### 1. Introduction

Business performance can be interpreted as the result of the implementation of a series of activities carried out by all elements within the company as a process of achieving goals by fulfilling several indicators (Sebestova et al. 2020). Good business performance will be seen from the level of productivity, effectiveness, and efficiency as well. A good level of productivity can be demonstrated through the company's ability to produce products or services that can meet and be in demand by consumers in the market. The level of effectiveness relates to the company's achievement of any previously set goals. Meanwhile, the company's ability to manage and utilize the resources it has to carry out business activities will affect the company's efficiency level. These three elements, namely productivity, effectiveness, and efficiency, are the main elements that reflect the performance of a company (Cornerstone 2020).

Several studies have successfully proven the relationship between certain variables and business performance. Fairoz, et al (2010) discover the influence of entrepreneurial orientation with business performance. Calantone, et al (2001) find a positive and significant influence of innovation on business performance. The dimensions for measuring business performance also vary. Some researchers use the financial dimension. Other researchers use the non-financial dimension. There are also those who combine financial and non-financial performance. Business performance must be able to defend itself from various dynamic economic, environmental, and social situations. If the company succeeds in maintaining this state, then the company is considered to meet the requirements of the sustaining company.

Business sustainability is reflected in the adoption of such strategies and activities that can address the requirements of economic entities and its current beneficiaries, while at the same time protects, supporting and improving human and natural resources for the future (Labuschagne et al. 2005). The triple Bottom Line, proposed by Elkington (1998), facilitates the application of sustainability in the investigations, as well as in the decision-making process (Asadi et al. 2020). According to this concept, the maintenance of the balance between the environmental, social, and economic parameters of the organizations is essential to move to sustainable development (Nilashi 2019).

The hotel business is one of the businesses that has been around for a long time. Hotel business is also one of the businesses whose operational activities are greatly influenced by the surrounding situation. The existing hotel business includes various types of hotels both modern and Heritage. Heritage is one of the most widespread tourist resources in the world. Many destinations use their legacy and unique cultural resources to increase their competitive advantage based on the site (Munar et al. 2012). Park (2010) stated that tourists who experience inheritance are an important means of improving a national image, which allows people to conceive, imagine and confirm their membership on the nation. However, scientists and practitioners have referred to a need to expand specific control and advertising techniques for heritage tourism (Yoo and Lee 2015). Cultural heritage will imply totally different significances to tourists, providing a mixture of tangible and intangible experiences that contribute to cultural values and new touristry resources (Gonzales 2018). With heritage's progressively necessary role in post-Fordist economics, there's currently a recognized would like "to capture the increasingly complicated and numerous desires of [tourist] demand" by providing "unique experience[s] and variety, adding high price to the business enterprise goods chain". Supported this paradigm, there are profound changes in terms of the assembly and consumption of heritage tourism. There has been a lot of stress on the buyer driven would like for unique experiences instead of merely product-driven views (Gonzales 2018).

Heritage Hotels need development to increase selling power while providing profits to the company. One way of development is to integrate the type of heritage hotel with the latest popular technology, namely displaying The Heritage Hotel through a virtual reality display. Virtual Reality will support the accessibility and tourist's experience of The Heritage Tourism (Bekele et al. 2018).

In the hotel industry, product presentation is a necessary promoting instrument (Bilgihan et al. 2015). Compared to alternative products, it's usually tough for the guest to judge the standard of travel accommodation before purchase (Zhou and Lin 2012). In addition, it's turning into progressively necessary for firms during this trade (e.g., hotels, travel agencies, booking portals) to produce new product shows so as to differentiate themselves from competitors (Bilgihan et al. 2015). Virtual reality gives a very new shape of product visualization which can considerably alternate the presentation of accommodations within side the future (Law et al. 2014). The feeling of being in a unique region makes the hotel presentation an immersive product revel in wherein the consumer merges with virtual reality (Buhalis and Law 2008). The virtual reality enterprise is already experiencing excessive double-digit annual increase rates, and the worldwide marketplace quantity is predicted to attain eighty billion dollars in 2025 (Goldmansachs 2016). This trend is being expanded through the everlasting improvement of latest virtual reality systems through international technology companies (e. g. Google, Facebook, Microsoft).

### 1,1 Objectives

Indonesia as a country rich in heritage cultural sites, including hotels, began to improve itself by participating in technology applications in heritage hotels. In the Report on Indonesian cultural heritage sites issued by the Indonesian Ministry of Education and Culture, obtained for the Heritage Hotel building that is still operating and recognized as a cultural heritage building are 7 Heritage hotels (Sistem Registrasi Nasional Cagar Budaya 2016) This development is expected to make heritage hotels appear with a sustainable performance business. This research is focused on how virtual reality can affect heritage hotel development, so heritage hotels can be a business that is able to maintain sustainable business performance.

# 2. Literature Review

# 2.1. Virtual Reality (VR) and Heritage Hotel

VR is one which provides real-time viewer-centred head-tracking perspective with a large angle of view, interactive control, and binocular display. Study by Israel et al (2018) stated that virtual reality technology allows for an entirely new way of visualizing products, which could have a significant impact on how hotels are presented in the future and the immersive product experience in which the user merges with virtual reality is made possible by the distinct feeling of being in a different place. Virtual reality's impact within the sector of commercial enterprise has been studied through six primary areas of application: education, accessibility, marketing, coming up with and management, heritage preservation, and amusement (Guttentag 2010). VR has additionally proven interest in the promoting of cultural sites as associated in destination (Marasco et al. 2016). Since selling business enterprise depends heavily on the Internet, VR could be a potential tool for provision data to tourists. In entertainment, VR will be one product for "fun" and to draw in tourists, as seen in varied theme parks (Wei et al 2018). While the effect of VR at the tourism industry is acknowledged, demanding situations rise up withinside the improvement and layout of VR packages for cultural tourism. VR related to user experiences. The ability of user to specify the feelings, impressions, and attitudes that arise once experiencing the system being investigated.

According to Derisma and Hersyah (2021) there are six scales of measurements that we will use to check the virtual reality impact to user to examine the Heritage Hotel's VR.

- a. Attractive; how big is that the attractiveness of a product? For example: sensible or bad, enticing or not attractive.
- b. Perspicuity (Clarity); how big is the clarity of a product? For example: simple to know or tough to understand.
- c. Efficiency: how much users will complete their tasks without an outsized or efficient effort. For example: quick or slow, sensible, or impractical.
- d. Dependability: how much accuracy is felt by the user through the management he has. For example: certain or unpredictable, supporting, or obstructing.
- e. Stimulation: how much motivation to use the product. For example: helpful or less useful, fascinating, or uninteresting.
- f. Novelty; how big is that the novelty of the product? For example: inventive or not creative, conservative, or innovative.

### 2.2. Heritage Hotel and Sustainable Business Performance

Based on previous research, it is defined as the meeting point of the three dimensions of economics, environment, and society in the Triple Bottom Line (TBL) model by Asadi et al (2020). All three dimensions are also used in this study, namely in the Heritage Hotel industry because heritage hotels cannot build real sustainable innovation or attract customers without determining the operational dimensions needed to measure the sustainability of each business. The importance of the three dimensions refers to economic profitability, social welfare, and environmental quality as the main elements that can promote human well-being in general so that humans and companies can jointly benefit (Shen et al. 2017). Typically, the industry will take the economic aspect of sustainability more seriously compared to the other two aspects. The balance must be determined between economic and environmental goals on the one hand, and economic and social goals on the other (Haffar and Searcy, 2017). Thus, sustainable business performance in a company can be observed from a social, environmental, and economic perspective.

Organizations that emphasize economic interests more than other aspects will not be able to achieve permanent business sustainability, as their economic success only applies in the short term (Lozano 2015). There needs to be a development of criteria that can jointly improve social and environmental aspects of performance (Henri and Journeault, 2009). Different companies may have various priorities regarding the three aspects mentioned, when implementing technology field development practices, although all of these elements have an influence on the success of business operations (Fernando 2019). In relation to heritage tourism and Heritage Hotel, the company will reap the benefits of dealing with social issues. Technology applications will increase visitor satisfaction so that socially, Heritage Hotel will be increasingly preferred. For this study, social performance indicators such as, visitor acceptance of the latest technology applications and visitor satisfaction, better communication between employees and visitors, as well as higher brand acceptance will be used (Kang et al. 2010).

In terms of the environment, various industries are now trying to adopt strategic environmental performance programs in achieving competitive benefits (Rodríguez-Antón et al. 2012). Also supported by the existence of laws related to the environment causing greater awareness of industry players regarding environmental performance (DiPietro et al. 2013), Environmental performance will provide a good opportunity towards increasing an organization's competitive advantage, because the combination of environmental performance, business strategy, and green innovation is a single unit of organizational prospects that is very strategic (Dangelico and Pujari 2010). On the other hand, the overarching implementation of environmental performance will help many industry players reduce their greenhouse gas emissions and other hazardous and solid wastes (Daily et al. 2012). Industry hotel is included in industry players who try to apply environmental performance in hotel business to reduce environmental problems (Mensah 2006). In line with this trend, the hotel industry has concentrated on attracting more attention to programs related to technology support, one of which is by creating virtual reality (Pai et al. 2020). With factors supporting the performance of the technology-based environment such as saving operational costs, improving the company's image, complying with rules, and increasing competitive advantage. Previous literature has shown that better production processes along with higher productivity supported by advanced technologies, will lead to more opportunities to promote environmental performance (Montabon 2007).

This aspect is related to the economic situation of companies and the economic system in which they operate. These effects include also in the company's relationship with other entities in the business context, including governments, customers, suppliers, financial entities, and staff (Asadi et al. 2020). Economic progress can also result from the adoption of technology in helping smooth the company's operations. It should be emphasized that the practice of technology adoption can positively affect organizational costs. In this way, the cost of energy

consumption will decrease, along with the reduction of waste treatment and use costs, while penalties can also be avoided if there is an environmental incident (Jiang, 2011). On the other hand, the organization's image and competitive advantage will be enhanced through the adoption of green innovation practices, which will also result in better performance. Based on the literature review, we proposed research framework as on Figure 1 and hypotheses as follows.

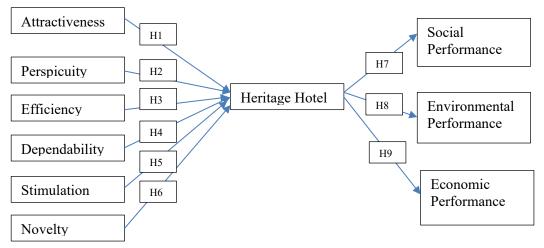


Figure 1. Research Framework

The Hypotheses are.

- H1: Attractiveness has positive affect to Heritage Hotel
- H2: Perspicuity has positive affect to Heritage Hotel
- H3: Efficiency has positive affect to Heritage Hotel
- H4: Dependability has positive affect to Heritage Hotel
- H5: Stimulation has positive affect to Heritage Hotel
- H6: Novelty has positive affect to Heritage Hotel
- H7: Heritage Hotel has positive affect to Social Performance
- H8: Heritage Hotel has positive affect to Environmental Performance
- H9: Heritage Hotel has positive affect to Economic Performance

# 3. Method

SEM with PLS is an alternative technique in SEM analysis where the data used does not have to be multivariate normal distribution. In SEM with PLS latent variable values can be estimated according to the linear combination of manifest variables associated with a latent variable and treated to replace manifest variables (Ghozali and Latan 2015). There are two stages to assessing a fit model from a study. These stages include the analysis or evaluation of structural model measurement and analysis models

### 4. Data Collection

### Data Collection and Samples

Data Collection taken by delivering survey. The survey was conducted online and distributed questionnaires to 130 respondents that consider as tourist that has experienced the Heritage Hotel Virtual Reality. Sampling techniques are done using purposive sampling techniques. The number of questionnaires returned was 115 questionnaires. This is sufficient considering that according to Heir, that the minimum sample required can be calculated by multiplying the total number of relationship lanes in the study multiplied by 10, this means that 5 lanes of relationship multiplied by 10, i.e., 50 samples (Hair et al. 2018).

### Measurements of variables

To measure the constructs involved in this study, which are Virtual Reality, Heritage Hotel and Sustainable Business Performance, we are using User Experience Questionnaires (UEQ) with attractiveness, Perspicuity, Efficiency, Dependability, Stimulation and Novelty as dimensions. For Attractiveness, there are 5 indicators: annoying, good, unlikable, unpleasant, attractive, friendly. For Perspicuity, there are 4 indicators; not understandable, easy to learn, complicated, clear. For Efficiency, there are 4 indicators; fast, inefficient, impractical, organized. For Dependability, there are 4 indicators; unpredictable, obstructive, secure, meets expectation. For Stimulation, there are 4 indicators: valuable, boring, not interesting, motivating. And, for Novelty, there are 4 indicators: creative, inventive, usual, conservative (Derisma and Hersyah 2021).

Heritage hotel measurements taken from Heritage Hotel classification guide with six indicators, namely: Hotels have scarcity value, Hotels have historical value, Hotels have aesthetic value, Hotels have superlatively value, Hotels have cruel value, and Hotels have an influence on the surroundings (Subakti et al. 2017). Sustainable Business performance with environmental performance has 5 indicators; Company has achieved important environment-related certifications, overall environmental performance, The resource consumption decreased, Improvement of environmental compliance, and complying with environmental regulations. Social performance has 4 indicators; The customers' satisfaction has increased during the last 3 years, Our hotel industry serving more beneficiaries (disadvantaged people) or solving environmental issues and Our hotel industry provides more social or environmentally friendly services in the community. Economic performance has 4 indicators; decrease of cost for energy consumption, improved capacity utilization, decrease of fee for waste treatment, and decrease of penalty costs for environmental accident (Asadi et al. 2020). All of the items of the proposed questionnaire were based on a 5-point Likert scale, from 1 "strongly disagree" to 5 "strongly agree".

# 5. Results and Discussion

### Measurement model testing

There are three standards for assessing validity and reliability (Outer Model) while using data analysis techniques with Smart-PLS: convergent validity (>0,7), average variance derived (AVE value is  $\geq 0.5$ .) with discriminant validity (Fornell Lacker Criterion and Cross Loadings, and the other one is composite reliability (Cronbach Alpha >0,7) [40]. Tables 2 and 3 indicate the results of the measurement model (reliability, validity, correlations, and factor loading). Following Hair et al. (2016), for constructs of Attractiveness (ATT), Perspicuity (PER), Efficiency (EFI), Dependability (DEP), Stimulation (STI), Novelty (NVL), Heritage Hotel (HER), Social Performance (SP), Environmental Performance (EP) and Economic Performance (ECP), Cronbach's alpha and composite reliability test were applied to assess internal consistency. The Table showed all the indicators that meet the requirements. Other indicators like DEP2, ECP1, ECP3, ECP4, ECP5, EP1, EP2, EP3, EP5, HER3, HER4, HER5, HER6, NVL1, NVL2, NVL3, SP1, and ST11 were deleted because they didn't meet the requirements.

Demographic	Sum	percentage
Gender		
• Male	63	54,78%
• Female	52	45,22%
Total	115	100.0%
Age		
• 20 – 30 yo	30	26,08%
• 31 - 40 yo	21	18,26%
• 41 - 50 yo	38	33,04%
• > 50 yo	26	22,60%
Total	115	100.0%
Occupation		
Private Company	48	41,73%
Civil Servants	4	3,47%
<ul> <li>Entrepreneurial</li> </ul>	32	27,82%
• Other	31	26,95%
Total	115	100.0%
Frequency of visiting		
Virtual Heritage Hotel		
• 1 time per month	62	53,91%
• 2 times per month	23	20%
• 3 times per month	8	6,95%
• 4 times per month	12	10,43%
• >4 times per month	10	8,69%
Total	115	100.0%

### 5.1 Numerical Results

Table 1. Demographic Respondent

	Cronbach's Alpha	Convergent Validity	Composite Reliability	Average Variance Extracted (AVE)
Attractiveness	0.854		0.895	0.631
ATT1		0.823		
ATT2		0.831		
ATT3		0.754		
ATT4		0.760		
ATT5		0.803		
Dependability	0.772		0.868	0.687
DEP2		0.821		
DEP3		0.839		
DEP4		0.827		
Economic Performance	1.000		1.000	1.000
ECP2		1.000		
Efficiency	0.865		0.908	0.711
EFI1		0.783		
EFI2		0.829		
EFI3		0.864		
EFI4		0.893		
Environmental Performance	1.000		1.000	1.000
EP4		1.000		
Heritage Hotel	0.650		0.851	0.74
HER1		0.865		
HER2		0.857		
Novelty	1.000		1.000	1.000
NVL4		1.000		
Perspicuity	0.806		0.873	0.632
PER1		0.785		
PER2		0.833		
PER3		0.815		
PER4		0.745		
Social Performance	0.782		0.873	0.690
SP2		0.832		
SP3		0.860		
SP4		0.809		
Stimulation	0.839		0.898	0.747
STI2		0.753		
STI3		0.919		
STI4		0.910		

Table 2. Constructs' reliability and convergent validity.

The score for each construct indicator meets the required convergent validity of 0.7. The score for each construct indicator ranges from 0.753 to 1.000. Thus, the indicators used have adequately described each construct or variable to be measured. The score for Average Variance Extracted (AVE) from each indicators meets the requirement of 0.5. Attractiveness has 0.631 > 0.5. Perspicuity has 0.632 > 0.5. Efficiency has 0.711 > 0.5.

Dependability has 0.687 > 0.5. Stimulation has 0.747 > 0.5. Novelty has 1.000 > 0.5. Heritage Hotel has 0.741 > 0.5. Social Performance has 0.696 > 0.5. Environmental Performance has 1.000 > 0.5. Economic Performance has 1.000 > 0.5.

The Composite reliability's scores for each value also meet the requirements of 0,7. Attractiveness has 0.895 > 0,7. Perspicuity has 0.873 > 0,7. Efficiency has 0.908 > 0,7. Dependability has 0.868 > 0,7. Stimulation has 0.898 > 0,7. Novelty has 1.000 > 0,7. Heritage Hotel has 0.851 > 0,7. Social Performance has 0.873 > 0,7. Environmental Performance has 1.000 > 0,7. Economic Performance has 1.000 > 0,7.

	ATT	DEP	ЕСР	EFI	EP	HER	NVL	PER	SP	STI
Attractiveness	0.795									
Dependability	0.597	0.829								
Economic Performance	0.117	0.214	1.000							
Eficiency	0.036	0.028	- 0.041	0.843						
Environmental Performance	- 0.070	0.203	0.116	-0.040	1.000					
Heritage Hotel	0.645	0.810	0.216	0.161	-0.094	0.861				
Novelty	0.362	0.124	0.081	0.076	0.200	0.245	1.000			
Perpicuity	0.583	0.543	0.137	0.026	-0.089	0.618	0.156	0.795		
Social Performance	0.791	0.754	0.185	0.129	-0.097	0.803	0.302	0.701	0.834	
Stimulation	0.041	0.111	0.010	-0.041	0.036	0.155	0.066	0.065	0.116	0.864

Table 3. Fornell-Lacker Criterion

Based on the Table 3, the Fornel-Lacker Criterion values and Cross Loadings of each construct are higher than the values of each other. Thus, judging from the differentiating validity value, each construct is a unique variable, and different from other constructs or variables because it has a higher value when faced with other variables. The results of the Variance Inflation Factor (VIF) applied to the relationships between the observed variables show values below 10, indicating non-presence of multicollinearity. From Table 4 we present VIF scores of the constructs.

Table 4. VIF Val	ue
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	VIF
ATT1	2.129
ATT2	2.207
ATT3	1.857
ATT4	1.800
ATT5	1.834
DEP2	1.536
DEP3	1.647
DEP4	1.581
ECP2	1.000
EFI1	1.817
EFI2	1.961
EFI3	2.219
EFI4	2.665
EP4	1.000

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HER1	1.302
HER2	1.302
NVL4	1.000
PER1	1.613
PER2	1.840
PER3	1.661
PER4	1.527
SP2	1.600
SP3	1.701
SP4	1.584
STI2	1.711
STI3	2.396
STI4	2.152

### 5.1. Structural model assessment

The model was validated through the bootstrap method, simulating 500 subsamples to determine, in the first measure, the significance of the correlations between the dimensions (for a t > 1.96 product of a two-tailed test and confidence level of 95 %). The model proposes nine significant relationships between Virtual Reality practices (Attractiveness, Perspicuity, Efficiency, Dependability, Stimulation, Novelty) to Heritage Hotel, and between Heritage Hotel to Sustainable Business Performance (Social Performance, Environmental Performance, Economic Performance). From Table 5, the result showed confirms the correlations between Perspicuity to Heritage Hotel (8.655>1,96), Efficiency to Heritage Hotel (2.792>1,96), Dependability to Heritage Hotel (2.020 > 1,96), Novelty to Heritage Hotel (27.130 > 1,96), and Heritage Hotel to Environmental Performance (2.984 > 1,96). There is no correlations on attractiveness to Heritage Hotel (1.813 < 1,96), Stimulation to Heritage Hotel (1.088 < 1,96) and Heritage Hotel to Economic performance (1.275 < 1,96).

Hypotheses	Path Coefficient	t-Value	p-Value	Results
H1:Attractiveness -> Heritage Hotel	0.140	1.813	0.070	Rejected
H2:Perspicuity -> Heritage Hotel	0.603	8.655	0.000	Accepted
H3:Eficiency -> Heritage Hotel	0.131	2.792	0.005	Accepted
H4:Dependability -> Heritage Hotel	0.216	2.020	0.044	Accepted
H5:Stimulation -> Heritage Hotel	-0.094	1.088	0.277	Rejected
H6:Novelty -> Heritage Hotel	0.803	27.130	0.000	Accepted
H7:Heritage Hotel -> Social Performance	0.075	1.449	0.148	Rejected
H8:Heritage Hotel -> Environmental Performance	0.189	2.984	0.003	Accepted
H9:Heritage Hotel -> Economic Performance	0.070	1.275	0.203	Rejected

The effect of attractiveness to Heritage hotel (t value 1.813 and p value 0,070), Stimulation to Heritage Hotel (t value 1.088 and p value 0.277), and the effect of Heritage Hotel to Social Performance (t value 1.449 and p value 0.148) were not significant. The Effect of perspicuity (t value 8.655 and p value 0.000), efficiency (t value 2.792 and p value 0.005), Dependability (t value 2.020 and p value 0.044), Novelty (t value 27.130 and p value 0.000) to Heritage Hotel were all significant. The effect of Heritage hotel to environmental performance (t value 2.984 and p value 0.003) was significant.

### 6. Conclusion

The adoption of technology in operational activities in the hospitality industry has begun, especially the adoption of technology aimed at promoting hotels. Forms of technology such as room booking services through websites, standalone applications, and third-party service applications are carried out to adjust to the latest technological trends including adjusting to the wishes of guests. Heritage-type hotels also perform this service, namely by creating a Virtual Reality that describes the state of the hotel, showing all the facilities offered by the hotel and the services that will be provided to guests. The study aims to examine the effects that Virtual Reality may have

with attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty that can affect Heritage Hotels, as well as the effect Heritage Hotels have on sustainable business performance. Virtual reality in this study as a whole was able to explain the effect of 74% on Heritage Hotel, and Heritage hotel can explain its effect on sustainable business performance with a social performance influence value of 64.4%, Environmental performance by 0.9% and economic performance by 4.7%. In addition, as the results show, visitors' assessment of virtual reality in terms of perspicuity, efficiency, dependability, and novelty has a significant effect on heritage hotels. This shows that virtual reality is quite capable of displaying Heritage Hotel with all the products offered and making visitors feel comfortable, easy to operate virtual reality independently, and love the programs offered. However, visitors find this program less attractive, because it does not feel friendly or has not displayed the hospitality of Heritage Hotel services that are usually received if they come directly to the hotel. Virtual reality programs are also considered insignificant in terms of stimulation because most visitors do not feel stimulated to access the program back. The visitor's assessment of the influence of Heritage Hotel on Sustainable business performance with social performance factors is not significant, because visitor satisfaction is not met. Visitors still prefer to come directly to the Heritage Hotel location as opposed to accessing virtual reality programs. The influence of heritage hotels on economic performance is also not significant. This is because visitors feel that they do not use the facilities offered by Heritage Hotel directly, nor do they feel it costs anything to improve the economic side of the Heritage hotel, by accessing heritage hotel through virtual reality. As far as the authors know, this study is one of the first experimental studies conducted to examine the impact of Virtual Reality on Heritage Hotels in Indonesia, and their relationship to sustainable business performance. The findings obtained here play an important role in understanding how virtual reality can be done in the hotel industry. Advice for further research, so that the research is carried out again in non-heritage hotels, so that it can be compared to the results so that the hotel industry has new insights when developing virtual reality programs in hotels.

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