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# THE INFLUENCE OF VIRTUAL TOUR ON VISIT INTENTION IN NATIONAL MUSEUM OF INDONESIA

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#### Abstract

Ministry of Tourism and Creative Economy attempted tourism recovery after Covid-19 outbreak that rippled throughout the world by developing Virtual Tour which was implemented by travel agents and many tourism destinations in Indonesia, including the National Museum of Indonesia. In this study, the researcher aimed to identify the performance of Virtual Tour in the National Museum of Indonesia and to see whether it influences the tourists' visit intention. Using a quantitative research approach and explanatory research method, the researcher collected samples from 150 tourists within August 3rd – 16th 2021 who had previous experiences with the Virtual Tour in the National Museum of Indonesia. through online questionnaire distribution. The technique used was convenience sampling that later would be processed with simple linear regression. Samples taken through online questionnaire distribution in this study were then collected and analyzed using a classical assumption test. The results of this study indicated that the Virtual Tour to the National Museum of Indonesia is perceived as useful, entertaining, and easy to use and Virtual Tour has a 6.2% influence on Visit Intention to the National Museum of Indonesia.

Keywords: Virtual Tour; Visit Intention; Covid-19; National Museum of Indonesia

#### A. INTRODUCTION

Governor of Jakarta, Mr. Anies Baswedan, came up with a citywide status of Large-Scale Restrictions (Pembatasan Sosial Berskala Besar), followed by New Normal (Kebiasaan Baru) policies after Corona Virus Disease (COVID) was declared as a global pandemic in 2019. The Ministry of Tourism and Creative Economy innovated to develop Virtual Tour as one of the attempts to keep the tourism sector running even during the COVID-19 crisis, which persuaded travel agents as well as several tourism destinations to provide the product for their customers and visitors.

Along with the COVID-19 crisis, one of the leading tourist attractions in Jakarta, the National Museum of Indonesia, has been offering a virtual tour for promotional purposes and as a safe alternative for the visitors, especially given the fact National Museum of Indonesia has been closed for direct visitation. Hence why this study aimed to identify the performance of the Virtual Tour in the National Museum of Indonesia and to see whether the visit intention to the National Museum of Indonesia would be influenced by the existence of the Virtual Tour feature.

#### B. RESEARCH METHOD

This research used a quantitative approach with an explanatory research method. The reason for using the explanatory research method was to test the proposed hypotheses and it was expected

that this research could explain the relationship and influence between the independent and dependent variables contained in the hypotheses. The target population of this research was the tourist who had already experienced the Virtual Tour in the National Museum of Indonesia within August 3rd – 16th 2021. With the convenience sampling technique, the sample in this research was taken from 150 tourists who have experienced a Virtual Tour on the National Museum of Indonesia's official website within August 3rd - 16th 2021 by distributing an online questionnaire through Google Form with the target respondents from the followers of National Museum of Indonesia Instagram account.

Data collection techniques in this research were a study of literature and distribution of the questionnaire. The secondary data was obtained by collecting relevant data through the analysis of books, journals, and some articles, meanwhile, for secondary data, the questionnaire was distributed online through several social media platforms. In arranging the questionnaire, the researcher uses the Likert scale which is used to measure attitudes, opinions, and perceptions of an individual or a group of people about a social phenomenon. The score given on each respondent's answer with a Likert-type scale can be seen in the following table:

Likert Sca
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Definitions	Weight Values			
Strongly Agree	5			
Agree	4			
Neutral	3			
Disagree	2			
Strongly Disagree	1			
Source: Sugiyono (2010)				

The data obtained from Likert scale measurement was ordinal, hence why it needed to be transformed into interval data, using MSI (Method of Successive Interval). Before the questionnaire was distributed to the respondents, the researcher conducted Validity Test using Pearson's product formula and a Reliability Test using Alpha Cronbach Formula. To find out the validity and reliability of questionnaires, it is necessary to conduct tests on questionnaires using validity tests and reliability tests to test whether the disseminated questionnaire is valid and reliable, therefore this study conducted both of these tests on the instrument, in which the questionnaire. All question items consisting of 20 question items in total from the questionnaire have an r count (Pearson Correlation) > r table that is 0.361 and a significant rate that is below 0.05. Therefore, it could be concluded that all of the variable items were valid and could be used to measure indicator variables. As for the reliability, the value of variable X is 0.768 and variable Y is 0.806, which are greater than 0.6, variable X is categorized as Marginal and variable Y is categorized as Adequate. Therefore, it could be concluded that both variables were reliable for measurement tools in this study. The ordinal data obtained by questionnaire distribution than had to be sorted into interval data by using the Method of Successive Interval before proceeding with the Classical Assumption Test and Hypothesis Test.

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### C. RESULTS AND ANALYSIS

This research took place at the National Museum of Indonesia, an archeological, historical, ethnological, and geographical museum. After the Covid-19 pandemic occurred, the National Museum of Indonesia had to adapt to the new restrictions set up by the Governor of Jakarta that one of which is to not allow direct visitation to tourist destinations. That's why the virtual tour is carried out using the Virtual National Museum feature on the official website guided virtually by the National Museum Educator. To access the virtual tour in the National Museum of Indonesia, the tourist must visit the official website and may proceed with the feature without having to go through any registration process. The virtual tour is provided in a 360-degree view which means the tourist can take a thorough look at the area. The tourist is also able to access the entire room and listen to the automatic information delivered by the virtual tourist guide. The objects in the virtual tour feature can also be viewed in detail by clicking the red colored buttons. This feature is also completed by a voice narration delivering the explanation of the object in two languages, Indonesian and English.

To identify the performance of Virtual Tour in the National Museum of Indonesia, online distribution of a questionnaire was conducted and shared with 150 respondents with demographic profiles as seen in the table:

n	%
2	1.3
35	23.3
36	24
19	12.7
58	38.7
26	17.3
36	24
29	19.3
52	34.7
7	4.7
	2 35 36 19 58 26 36 29 52

#### Profile of Respondents (total N = 150)

Smartphone	84	50
•	31	20
Laptop		
iPad/Tablet	9	6
Others	26	17
lace of Origins		
Banten	4	2.
Special Region of	2	1.
Yogyakarta		
Special Region of Jakarta	38	25
West Java	60	40
Central Java	6	4
East Java	18	12
Outside Java Island	22	14
revious Experience		
Yes, I have experienced Virtual Tour	150	10

For educational level, 17.3% were either enrolled or had not completed high school education, 24% had completed a high school diploma, 19.3% had completed a diploma degree, 34.7% had completed a bachelor's degree, and 4.7% had completed a master degree. In terms of the device used to experience the virtual tour, about half of the respondents used a smartphone (56%), followed by a laptop (20.7%), iPad/tablet (6%), and others (17.3%). Respondents came from more than six domiciles (Banten, Special Region of Yogyakarta, Special Region of Jakarta, West Java, Central Java, East Java, outside Java Island). In terms of previous experience of experiencing a Virtual Tour in the National Museum of Indonesia, 100% or all of the respondents had experienced the virtual tour.

Out of 150 respondents, 1.3% were above 55 years old, 23.3% were between 46-55 years old, 24% were between 36-45 years old, 12.7% were between 26-35 years old, and 38.7% were between 17-25 years. After the questionnaire distribution, the results of the performance of Virtual Tour in the National Museum of Indonesia perceived by 150 respondents show that the dimension of Variable X (Virtual Tour) with the highest majority with an agreement is obtained by Perceived Usefulness, followed closely by Perceived Enjoyment. The results of how are the visit intention to the National Museum of Indonesia is that after experiencing the virtual tour, the majority of respondents reacted positively to visiting the actual site meanwhile considering Purchase has noticeably become the dimension with the least numbers of agreement.

The researcher conducted a classic assumption test consisting of a normality test to find out whether questions for each indicator on the dimensions are normally distributed, a multicollinearity test to identify if there is a perfect relationship between the variables

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and a heteroscedasticity test to identify if there is a regression model residual inequality from one variable to another variable.

		Unstandardized
		Residual
N		150
Normal	Mean	.0000000
Parameters	Std.	.68953113
	Deviation	
Most	Absolute	.070
Extreme	Positive	.070
Differences	Negative	038
Test Statistic		.070
Asymp. Sig.	(2-tailed)	0.71

### **One-Sample Kolmogorov-Smirnov Test**

Source: Researcher (2021)

The distribution of Virtual Tour and Visit Intention data by obtaining a significance value of 0.71, interprets that the significance value is greater than the probability value that is 0.05. In accordance with the test result, it can be concluded the data that has been tested in this study is normally distributed.

	Coefficients*							
Mo	del		ndardized ficients	Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta				
1	(Constant)	.513	.161		3.181	.002		
	Х	.019	.048	.034	.410	.682		
X :	X : Virtual Tour							

## **Result of Heteroscedasticity Test**

### Source: Researcher (2021)

The table shows that variable X has a significant value that is greater than 0.05, which is 0.682. Therefore, it can be concluded that the regression model does not contain any heteroscedasticity.

#### 16

	Multicollinearity Test						
	Coefficients						
Model		ndardized ficients	Standardized Coefficients	t	Sig.	Collinearity	v Statistics
	В	Std.	Beta			Tolerance	VIF

Source: Processed by Researcher (2021)

Multicollinearity is if there is a perfect or definite linear relationship between some or all of the variables that explain the regression model. To determine the occurrence of multicollinearity, the VIF (Variance Inflation Factor) and tolerance values are measured. If the tolerance value is above 0.1 and the VIF value is below 10, then the regression model does not experience multicollinearity problems. The table shows that the VIF value of variable X has a value of less than 10 and the tolerance value is less than or equal to 0.10, it can be concluded that there is no multicollinearity in the independent variable.

In order to check the correlation of both variables as stated by the two hypotheses in this research, the researcher took a hypothesis test.

		Unstandardize d Coefficients		Standardiz ed Coefficient s		
Mode 1		В	Std. Error	Beta	t	Sig
1	(Constan t)	1.94 3	.298		6.52 3	.00 0
	X	.274	.088	.249	3.12 3	.00 2

t-'	Test

Source: Processed by Researcher (2021)

To see how much the independent variable affects the dependent variable, it can be proven through a t-Test. In Table 15, it can be seen that the variable X has a significant value below 0.05. In data processing, the error rate used is 0.05. The result above shows that the significant value is below alpha 0.05, by all means, H0 is rejected and H1 is accepted. In conclusion, variable X has a significant influence on Visit Intention to the National Museum of Indonesia.

ANOVA <sup>a</sup>						
Model		Sum of	df	Mean	F	Sig.
		Squares		Square		
1	Regression	4.668	1	4.668	9.752	.002 <sup>b</sup>
	Residual	70.843	148	.479		
	Total	75.511	149			
Dependent Variable : Visit Intention						
Predictors	s : (Constant), X					

F-Test

Source: Processed by Researcher (2021)

The F-test was carried out to see the effect of the Virtual Tour variable on the Visit Intention variable together, according to the stages of data processing conducted, it can be seen in the results of the regression analysis in Table 16, it shows that the significance value of F is 0.002. This means that sig F < i.e. 0.000 < 0.05. Then the calculated F value is 9.752 and F table is 2.833 (df = n-k-1 or df = 45-3-1 = 41) indicates that F count > F table is 9.752 > 3.905. These results indicate that H0 is rejected and Ha is accepted. This means that the Virtual Tour variable (X) simultaneously has a positive and significant effect on the Visit Intention variable (Y).

**Coefficient of Determination** 

Model Summary <sup>b</sup>							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	.249 <sup>a</sup>	.062	.055	.69186			
Predictors : (Constant), X							
Depender	Dependent Variable : Y						

Source: Processed by Researcher (2021)

Regression calculation for the R-value (correlation coefficient) to see the relationship between the independent variable and the dependent variable. The value of the correlation coefficient (R) of 0.249 indicates the relationship of the independent variable which is Virtual Tour.

The value of the Coefficient of Determination (R-Square) is 0.062. This (X) to the dependent variable, Visit Intention (Y), is 0.249. If the percentage obtained is 24.9%, it shows that there is a relationship between the independent variable and the dependent variable. The

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magnitude of the influence of the independent variable on the dependent variable can be seen from the magnitude of the coefficient of determination (R2). The value of the coefficient of determination (R2) is in the interval  $0 \le R2 \le 1$ . The value of the coefficient of determination (R2) in this study of 0.062 which indicates that the effect of the independent variable, Virtual Tour (X), on the dependent variable, Visit Intention (Y), is 0.062. If the percentage obtained is 6.2%, it shows that the influence between the independent variables on the dependent variable in this study is 6.2% and the remaining 93.8% is influenced by other factors which were not explained in this study.

In summary, based on the results of simple linear regression analysis obtained through the t-Test, the result is a significant value of t >  $\alpha$  0.002 > 0.05. Then the value of the t count is 3.123 and the t table is 1.683 indicating that the t count > t table is 3.123 > 1.683. These results indicate that H0 is rejected and Ha is accepted, which means Virtual Tour has a significant effect on Visit Intention. This also means the Visit Intention is affected by the Virtual Tour. So the first hypothesis proposed by the researcher is accepted.

Through the F-Test, it was concluded that simultaneously research on Virtual Tours on Visit Intention has a significant effect. Based on the results of research conducted through correlation analysis techniques, the correlation value (R) is 0.249, which means that the strength of the correlation between each dimension of the Virtual Tour (X) variable and the Visit Intention (Y) variable is included in the weak category because it is between 0.200-0.399.

This means the Visit Intention to the National Museum of Indonesia is influenced by the dimensions of the Virtual Tour which contributes 6.2%, while the remaining 93.8% is influenced by other factors not examined by researchers. Given the results above, the effect of Virtual Tour on Visit Intention is categorized as low as it is only at the number of 6.2%. This has been supported by conducted tests which said that there was an influence between the two variables and also the hypothesis which says that there was an influence between Virtual Tour and Visit Intention is accepted.

#### D. CONCLUSION

The conclusion of this research to answer the two research objectives at the beginning is that the three dimensions tested for virtual tour variables received high numbers of agreement with a slightly insignificant difference. Perceived Usefulness received the highest score, followed closely by Perceived Enjoyment. Perceived Ease of Use with the least score to contribute to the performance of Virtual Tour is determined as a concern and should be put into consideration. And then, the influence of Virtual Tour on Visit Intention to National Museum of Indonesia with the percentage of 6.2. This indicates that the H0 is rejected and H1 is accepted, Virtual Tour has a positive influence on Visit Intention.

Following the conclusions, there are 4 recommendations concluded in total. The management, specifically the online marketing field in the National Museum of Indonesia should improve the ease of use of the Virtual Tour by enabling the feature to be conveniently accessible for people with different backgrounds and types of devices. Virtual Tours should be facilitated with a wider range of tour modes that could enable the tourists to do what they prefer. For example, unguided path or availability to access the rooms whichever way they prefer. Given the fact virtual tour only has a 6.2% influence on visit intention to the museum, the management should learn deeper about the market desires that are following the trend. Lastly, an in-depth study of factors that are not

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included in this study that may influence visit intention to the museum should be conducted.

### REFERENCES

- Babione, F. A., Maynard, H. H., & Beckman, T. N. (1947). Principles of Marketing. In *Journal of Marketing* (Vol. 12, Issue 1). https://doi.org/10.2307/1246309
- Carmo, I. S. do, Marques, S., & Dias, Á. (2022). The Influence of Experiential Marketing on Customer Satisfaction and Loyalty. *Journal of Promotion Management*, 07(01), 180–195. https://doi.org/10.1080/10496491.2022.2054903
- Chen, H. Bin, Yeh, S. S., & Huan, T. C. (2014). Nostalgic emotion, experiential value, brand image, and consumption intentions of customers of nostalgic-themed restaurants. *Journal of Business Research*, *67*(3), 354–360. https://doi.org/10.1016/j.jbusres.2013.01.003
- Chiao, H. M., Chen, Y. L., & Huang, W. H. (2018). Examining the usability of an online virtual tour-guiding platform for cultural tourism education. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 23(February), 29–38. https://doi.org/10.1016/j.jhlste.2018.05.002
- Chiao, J. Y., Harada, T., Komeda, H., Li, Z., Mano, Y., Saito, D., Parrish, T. B., Sadato, N., & Iidaka, T. (2010). Dynamic cultural influences on neural representations of the self. *Journal of Cognitive Neuroscience*, 22(1), 1–11. https://doi.org/10.1162/jocn.2009.21192
- El-Said, O., & Aziz, H. (2022). Virtual Tours a Means to an End: An Analysis of Virtual Tours' Role in Tourism Recovery Post COVID-19. *Journal of Travel Research*, 61(3), 528–548. https://doi.org/10.1177/0047287521997567
- Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1. https://doi.org/10.11648/j.ajtas.20160501.11
- Garson, G. D. (2012). Testing Statistical Assumptions. *Blue Book Series*, 1–52. http://www.statisticalassociates.com/assumptions.pdf
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of<br/>COVID-19.*Journal* of<br/>Sustainable*Tourism*,<br/>0(0),1–20.<br/>1–20.https://doi.org/10.1080/09669582.2020.1758708
- Gretzel, U., Fuchs, M., Baggio, R., Hoepken, W., Law, R., Neidhardt, J., Pesonen, J., Zanker, M., & Xiang, Z. (2020). e-Tourism beyond COVID-19: a call for transformative research. *Information Technology and Tourism, 22*(2), 187–203. https://doi.org/10.1007/s40558-020-00181-3
- Guha, S. (2020). Covid-19 pandemic and our pediatric population the challenges and outcome: an observational study from Eastern India. *Sri Lanka Journal of Child Health*, 49(4), 417–418. https://doi.org/10.4038/SLJCH.V49I4.9285
- Haloho, E., Idahwati, I., & Harefa, H. S. (2021). Pengaruh Integrated Marketing Communication (IMC) terhadap Minat Kunjung Mahasiswa di Perpustakaan STIKes Siti Hajar Medan. *Jurnal Mutiara*

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Manajemen, 6(1), 1–17.

- Hamidi. Metode penelitian kualitatif: Aplikasi praktis pembuatan proposal dan laporan penelitian/ Hamidi. Malang: UMM Press, 2004
- Ioannides, D., & Gyimóthy, S. (2020). The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path. *Tourism Geographies*, *22*(3), 624–632. https://doi.org/10.1080/14616688.2020.1763445
- Imam Ghozali. (2011). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 20 -6/E* (-.). Semarang: Badan Penerbit Universitas Diponegoro.
- Iranita, I., & Alamsyah, P. (2019). Pengaruh Citra Destinasi, Aksessibilitas Wisata Terhadap Minat Kunjung Ulang Wisatawan Ke Wisata Bahari Desa Benan. *Bahtera Inovasi, 2*(2), 102–110. https://doi.org/10.31629/bi.v2i2.1624
- Jung, T., Dieck, M. C., Lee, H., & Chung, N. (2016). Information and Communication Technologies in Tourism 2016. Information and Communication Technologies in Tourism 2016. https://doi.org/10.1007/978-3-319-28231-2
- Keni, K. (2020). How Perceived Usefulness and Perceived Ease of Use Affecting Intent to Repurchase? *Jurnal Manajemen*, *24*(3), 481. https://doi.org/10.24912/jm.v24i3.680
- Marty, P. F. (2008). Museum websites and museum visitors: Digital museum resources and their use. *Museum Management and Curatorship*, 23(1), 81–99. https://doi.org/10.1080/09647770701865410
- Muda, I., & Naibaho, R. (2018). Variables influencing allocation of capital expenditure in Indonesia. *IOP Conference Series: Earth and Environmental Science,* 126(1). https://doi.org/10.1088/1755-1315/126/1/012066
- Osman, A., Wahab, N., & Ismail, M. (2009). Development and Evaluation of an Interactive 360 Virtual Tour for Tourist Destinations. *Journal of Information Technology Impact*, 9(3), 173–182. http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Development+and+Evaluation +of+an+Interactive+360+°+Virtual+Tour+for+Tourist+Destinations#0
- Pai, C. K., Liu, Y., Kang, S., & Dai, A. (2020). The role of perceived smart tourism technology experience for tourist satisfaction, happiness and revisit intention. *Sustainability (Switzerland)*, 12(16). https://doi.org/10.3390/su12166592
- Sallent, M. (n.d.). *No Title*. Retrieved June 30, 2022, from https://www.un.org/africarenewal/web-features/coronavirus/tourism-africa-virtual-safaris-kick-countries-prepare-reopen-tourists

Sandjojo, N. (2011). Metode Analisis Jalur dan Aplikasinya.

Yamawati, S., & Indiani, N. (2019). The Influence of Brand Equity on Consumer Interest in Buying Xiaomi Smartphones. *Warmadewa Management and Business Journal (WMBJ) Agustus*, 1(2), 60–64.

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https://ejournal.warmadewa.ac.id/index.php/wmbj