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Analysis Of The Effect Of Gamelan Metaverse On Acceptance Of Music Education Methods Using Technology Acceptance Model 2

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Abstrak: Metaverse Gamelan adalah representasi virtual reality dari gamelan tradisional Yogyakarta. Perkembangan VR masih tergolong baru, sehingga belum teridentifikasi batasannya. Tujuan penelitian ini adalah untuk mengidentifikasi serta mencari tahu faktor-faktor yang mempengaruhi penerimaan permainan metaverse gamelan dalam lingkungan pembelajaran pendidikan musik dengan teknik penelitian atau metode teori Technology Acceptance Model 2 (TAM 2). Dasar permasalahan penelitian ini adalah belum diketahui faktor atau elemen yang menyebabkan metaverse pendidikan musik gamelan sulit diterima sebagai alat pembelajaran musik. Metodologi atau metode yang digunakan untuk penulisan penelitian ini adalah metode penelitian deduktif dengan kajian data kuantitaf. Penelitian ini berfokus pada angka sebagai data kuantitatif yang disusun dengan metode analisis statistik menggunakan software SPSS 26 dan AMOS. Faktor-faktor atau variabel yang digunakan meliputi, *perceived usefulness* (Persepsi Kemanfaatan), *intention to use* (Niat Penggunaan), *usage behavior* (Perilaku Penggunaan), *perceived ease of use* (Persepsi Kemudahan), dan *mobility* (Mobilitas). Data sampel yang tercatat adalah 35 responden yang diantaranya mahasiswa aktif UAJY dan ISI. Kesimpulan yang diperoleh dalam penelitian ini adalah metaverse Gamelan belum efektif untuk menjadi alternatif pembelajaran pendidikan musik karena belum belum memenuhi kriteria dalam hipotesis.

Kata kunci: Metaverse, SEM, TAM, Hipotesis Signifikasi.

Abstract: *Gamelan Metaverse traditional gamelan musical instruments originating from Yogyakarta in virtual reality. The development of this VR is still relatively new, so limitations need to be identified. This research using the technology acceptance model 2 (TAM 2) method to identify factor-factor that influence acceptance of the gamelan metaverse in music classroom learning. The issue unknown factors hindering the Gamelan Metaverse towards music education as a music learning medium. The method used a deductive research method with quantitative research methods. This study focused on numbers such as quantitative data compiled using statistical analysis methods with SPSS 26 and AMOS software. The factors or variables used included perceived usefulness, intention to use, usage behavior,*

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perceived ease of use, and mobility. The sample data recorded were 35 respondents, including active students from UAJY and ISI. The conclusion revealed that the Gamelan Metaverse has not been effective as an alternative to music education learning because it has not met the criteria in the hypothesis.

Keywords: *Metaverse, SEM, TAM, Significance, Hypothesis.*

I. PENDAHULUAN

Technological innovation has effectively facilitated human life. From an end-user perspective, he sees three main waves of innovation, PC, internet, and mobile devices [1]. Technologies like VR (virtual reality) and AR (argumented reality) are examples of technologies driving the fourth of computing innovation today [2]. Next innovation will include metaverse technology. Gamelan is he one of the most popular musical instruments in Indonesia. Created from the Javanese word 'game' which means 'to hit' or 'hit' and 'to' which is used to form nouns. A gamelan is a collection of multiple musical instruments played by striking [3].

The Metaverse combines the word "meta" (meaning afterlife) with the universe, several different virtual spaces (virtual reality and mixed reality) and uses avatars to represent real life [4]. While the metaverse is not yet universal, various platforms using the VR concept include game mobile like Pubg and Fortnite, a Second Life game that allows user to create avatars in-game to build a virtual economy. With this technology, developers pushed the boundaries of gaming [5]. As new technology is adopted, users must test acceptance and research changes that may affect adoption of the latest technology. Metaverse is virtual world comunity that every users can connect to over the Internet. Unlike public Internet websites, the Metaverse employs the concept of using 3D models to connect users and create environments that resemble the real world [2].

Technology acceptance model or TAM (Davis, 1989; Davis et al., 1989) has become model for testing user acceptance factors. Although important articles in this area were written nearly twenty years ago, this topic is still reliable. Several reasons can be identified for dedicated involvement, trustworthy information technology, speed, and its overall research culture [5]. In particular, this research focuses to examine or identify developments, expansion, application of TAM to identify research gaps and suggest areas for future research [5]. This supplement provides information systems instructors with a foundation to guide students through the TAM literature and explore emerging technologies for classroom adoption [6]. It is a useful reference guide for technology adoption [7].

Yavuz Toraman of Nisantasi University in Turkey conducted a study entitled Metaverse User Acceptance. He shares findings from technology acceptance model (TAM) and planned behavior theory (PBT) [1]. Author found that the factors influencing intention to use the metaverse of those who participated in the study were consistent with the literature [1]. Moreover, the perception of subjective normative variables had a significant impact on behavior control and use attitudes. This situation revealed a positive outlook on the immediate environment of his potential Metaverse users, despite his new Metaverse technology. Finally, behavioral control variables do not significantly affect spending attitudes [1]. This situation is in accordance with the facts of renewable technological advances Pervasive nature of the metaverse means that humans have limited control technology. Lack of knowledge about the use of the relevant technology is a key factor.

Nikolaos Misirlis and Harris Bin Munawar, in a study titled Analyzing Technology Acceptance Models to Understand Behavioral Intentions of College Students Using Metaverse Technologies, found that Dutch university students are still well aware of Metaverse technologies or their potential. I explained that I didn't. Applications in higher education. Her 55.4% of students believe that their social lives are generally dependent on technology (n:158/285), 60.4% (n:171) and 50% (n:142) disagreed that their well-being or well-being depended in any way on technology [2]. This final result contradicted the next development, showing that 66.1% (n:187) of students activate digital to unwind. Regarding MetaEducation technology, 76.7% (n:217) believed that education depends on it, although in general, there are skeptics of Metaverse and MetaEducation. Regarding Metaverse associations and relationships with family and friends, the results showed an equal distribution between those who believed technology could strengthen relationships (41%, n:117) and those who disagreed (39.6%, n:112) [2].

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Fangfang Yang, Longfei Ren, and Chao Gu conducted research in college students intentions to use metaverse technology for basketball learning based on UTAUT2 in 2022. The results showed students willingness to learn and use metaverse technology to learn subjects such as basketball and the factors that may influence Metaverse technology [8]. Statistical results supported the hypothetical predictive validity of the model. In particular, habits, attitudes, and behavioral intentions are important prediction of user behavior. Habits and attitudes are also considered important components of attitude intentions. Hedonistic motivators, supportive conditions, and performance expectations greatly influence attitudes [8]. Behavioral is an important variable and a major predictor of user behavior and behavioral intentions for basketball students using metaverse technology. This result is useful for a better understanding of UTAUT2 [8].

Metaverse Gamelan implements gamelan musical instruments in the virtual world or Metaverse developed by apprentice students, Arutala mentors, UAJY Lecturers, and ISI Lecturers. The gamelan metaverse is the main environment or object in writing this research.

This research raises the issue of how Gamelan Metaverse can become the newest learning method for music education in today's students and modern society. By submitting this problem, the author seeks to analyze what factors can influence Gamelan Metaverse as a method of learning music education. The Gamelan Metaverse application testing is a series of several gamelan applications based on musical instruments. Versions of the Gamelan Metaverse musical instrument application include bonang sarong V6.0, slenthem v.3.0, kenong V.3.0, peking v5.2, saron v.1.0, bonang penerus V1.5, gong V1.2, demung beta 1.0.

This study aims to identify obstacles, analyze potentials and provide solutions to the gamelan metaverse as an alternative tool for interactive music education in modern society.

II. METODE DAN MATERI.

2.1. Fundamental Theory

2.1.1. Acceptance Model Theory

Tecnology acceptance model (Davis, 1989) borrows it is structure from Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) and equates perceived utility with technology. A third component, attitude, is included as an intermediary between her two determinants of behavioral intentions. Additionally, actual usage can be predicted based on behavioral intent. Davis defined perceived usefulness as "the degree to which a person believes that using a particular technology or system can improve their performance in activities " (p. 320). Two studies were performed to test this hypothesis. First round was completed with 120 of his IBM employee users. Technologies include PROFS, an e-mail system, and XEDIT, a general-purpose editor. The second was conducted with 40 of his MBA students using two of his charting tools, ChartMaster and Pendraw.

Venkatesh and Davis (2000) proposed an extension model called TAM 2. This model attempts to identify external variables that influence perceived utility. These variables include subjective criteria and the behavior of people towards a potential user's decision to use a technology or not. First of all, user can desire to maintain a good image and reputation. The skill level at professional relevance applies. output quality. How well does technology do the jobs that require it: Traceability of results and generation of actual results. Experience and spontaneity are viewed as calibrating factors for subjective norms.

2.1.2. Research Framework and Hypothesis

Technology acceptance model (TAM) study conducted by Davis provides a framework for evaluating information technology with exogenous latent variables: intrinsic and moderator variables [8]. The characteristic structure of the mobile payment system is an exogenous latent variable, and trust is a moderator variable [9].

1. The Positive Effect of Mobility on Perceived Usefulness

   According to Davis [10], perceived usefulness is a person's understanding of the trust in information technology that can improve job performance. Meanwhile, according to Mallat et al. [8], mobility means a situation where a person can access service more easily in a time and place that is free to use.

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Kim et al. [9] wrote that an information technology that could be accessed anytime and anywhere would increase the perceived usefulness of someone in using technology.

2. The Positive Effect of Perceived Ease of Use on Perceived Usefulness
   According to Davis [10], mobility is an individual's understanding of the belief that method use of information technology can improve job. According to Venkatesh and Davis [8], perceiving ease of use is an individual's understanding of information technology and the feeling that using it saves additional effort. Kimetto Al. He wrote that ease of use of information technology can increase people's awareness of the use of information technology [7]. Davis also writes in his research that easy-to-use information technology can benefit users [9].
3. The Positive Effect of Perceived Usefulness on Intention to Use
   Davis [10] stated that people's understanding of beliefs about information technology that can improve work performance is useful. Once again, intention to use is the stage where people have a desire that arises within them to do something. In this case, they want to continue using or change their willingness to use technology information. Kim et al. [8] stated that one's perception of use when using information technology could increase one's desire to use or change one's desire to use information technology [9].
4. The Positive Effect of Perceived Ease of Use on Intention to Use
   According to Venkatesh and Davis [10], perceived ease of use is one's understanding of information technology which, if used, will create a sense of independence from other efforts. Once again, intention to use is the stage where people have a desire that arises within them to do something. In this case, they want to continue using or change their willingness to use technology information. In their research, Gardner and Amoroso [9] wrote that when information technology has the benefit of supporting human activities, employees will be more interested in using information technology [9].
5. The Effect of Intention to Use on Usage Behavior
   According to Davis [10], intention to use is a phase where a person has a desire that arises from himself to take action, which in this case, wants to continue to use or change the desire to use computer technology. On the other hand, according to Venkatesh and Davis [8], user behavior is a belief in actual user behavior in front of computer technology. He also wrote that when a person has a desire to act, which in this case, wants to continue to use or change the desire to use computer technology [9].

2.2. Research Stages

This section contains the stages the author worked on in the research, which began with literacy studies or collecting basic theoretical information to make a report. Figure 1 represents the research stages designed by the author.

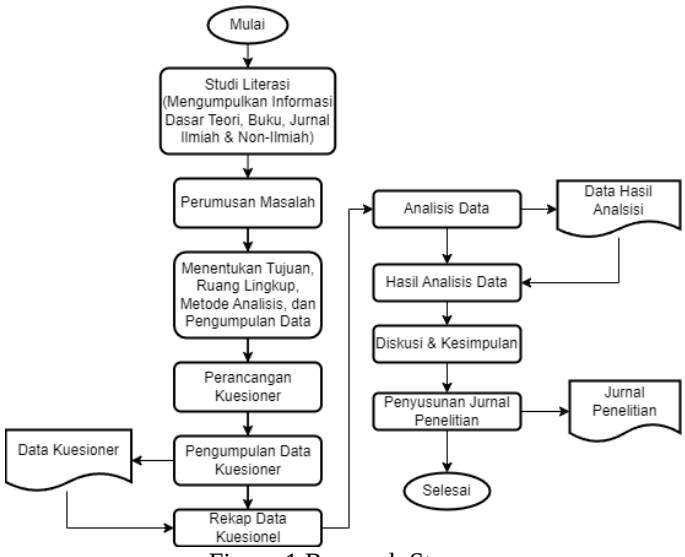

Figure 1 Research Stages

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2.3. Research Method

This research is deductive research with quantitative research methods. This research focused on numbers such as quantitative data, compiled using statistical analysis methods as written by Icep et al. in [9]. They used technology acceptance 2 (TAM 2) to determine how system users can accept information technology.

2.3.1. Data Collection Techniques [11][12]

The authors used a questionnaire technique to collect the samples and collect the data required for the research. Data source for this research was primary data collected by the authors themselves using a questionnaire technique, which is relevant to the study variables. Data samples were obtained from active students at Atma Jaya University, Yogyakarta and Seni Institute, Indonesia, conducting experiments in the Gamelan Metaverse.

In this research, the author used 6 indicators, or 5 variables multiplied by 6, and the number of samples of data collected was 35 samples.

2.3.2. Data Collection Technique

This research, the author collected data using a questionnaire. Questionnaires are one way to collect respondent data in the field. After the questionnaire design was complete, respondents whose data had been collected would be processed so that the author could find out why respondents accepted Gamelan Metaverse as an alternative to learning music education. Respondents would provide answers to each question with a range of points on the scale "Strongly Disagree (1)" to "Strongly Agree (5)" [9].

2.3.3. Data Analysis Technique

Instrument Quality Test, when conducting research using a questionnaire, Researchers must conduct validity and reliability tests to measure whether the data collected and the variables used meet the requirements [3]. The validity test was carried to determine the quality of the questionnaire used as an instrument or measure in research. The author used the Pearson Product Moment Correlation through SPSS Statistics 26.0 software in this study. Validity testing combined item values with a set of item values. The resulting correlation value (calculated r) was then compared with the correlation value. If rCount > r Table (degrees of freedom), then the instrument used as an example can be stated as a valid measuring instrument, but conversely, if rCount < r Table, then the instrument is declared invalid [13] [9]. A reliability test is a test to show whether a device or application can achieve the same results if repeated tests are performed on the same subject. Reliability testing can only be done for existing instruments using the (alpha) or Cronbach's alpha method. The reliability value using Cronbach's Alpha is between 0 and 1. If Cronbach's Alpha value is > 0.80, then the instrument in question can be said to be reliable, and vice versa. If Cronbach's Alpha is <0.80, then the instrument is not reliable [13] [9].

Instrument Quality Testing: When conducting research using questionnaires, researchers perform validity and reliability tests to measure whether the data collected and the variables used meet the requirements. [13]. Validity tests were conducted to determine the quality of the questionnaire as a tool or measure in research. The author used his Pearson Product Moment Correlation via SPSS Statistics 26.0 software in this study. Validation of combined member values against a set of member values. The obtained correlation value (computed r) was then compared with the correlation value. If rCount > r Table (degrees of freedom), then the instrument used as an example is a valid measuring instrument, but if rCount < r > 0.80, then the instrument can be said to be reliable. reverse. If Cronbach's alpha is <0.80, the device is unreliable [13] [14] [9].

SEM Analysis, When organizing data in SEM analysis, the author tested the SEM hypothesis before entering into the process of testing the model used in this study. Hypothesis tests must be carried out, including linearity tests, normality tests, outliers tests, and model suitability tests [3][15]. After testing the ideas and meeting some criteria or requirements, next step was to test model created by the author and evaluate it against the appropriate quality at the time of assistance for the IBM AMOS 26.0. The model was well seen using the Chi-Square values [16] [9].

III. PEMBAHASA DAN HASIL

3.1. Instrument Quality Test

3.1.1. Validity Test

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N = 35, then df = N (35) – 2 = 33, so df 33 = 0.349. The number 0.349 is taken from the Pearson product-moment table [https://wikielektronika.com/r-tabel-uji-validitas/2/]. The basis for decision-making is r Count > r Table, then the indicator on the variable is valid or invalid if the opposite occurs. Another name for calculating r in statistics is Corrected Item-Total Correlation. In this study, the author used IBM SPSS version 26.0. Results of the validity test can be seen in Table 1.

Table 1 Validity Test Results

Variable Indicator	*r Count*	*Description*
x1	0,819	Valid
x2	0,671	Valid
x3	0,697	Valid
x4	0,510	Valid
x5	0,735	Valid
x6	0,581	Valid
y1	0,851	Valid
y2	0,715	Valid
y3	0,764	Valid
y4	0,839	Valid
y5	0,662	Valid
y6	0,812	Valid
z1	0,741	Valid
z2	0,747	Valid
z3	0,785	Valid
z4	0,726	Valid
z5	0,825	Valid
z6	0,803	Valid
p1	0,879	Valid
p2	0,895	Valid
p3	0,693	Valid
p4	0,817	Valid
p5	0,838	Valid
p6	0,799	Valid
q1	0,620	Valid
q2	0,457	Valid
q3	0,828	Valid

Based on Table 1, the symbol x is a variable for Perceived Usefulness. Symbol y is a variable for perceived ease of use. Symbol z is a variable for intention to use. Symbol p is a variable for Usage Behavior, symbol z is a variable for characteristics (Mobility), and each number in front of the symbol represents a question from 1 to 6.

3.1.2. Reliability Test

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In this reasearch, reliability testing was performed by a single measurement combining all variables and reliability was tested using IBM SPSS software version 26.0. The rationale for this decision is that Cronbach's alpha values > 0.80 and all variables in the questionnaire are reliable (2010:27). The reliability test results are Table 3.1.2.

Table 2 Reliability Test Result

Overall Test Score	*Cronbach's Alpha*	*Description*
0,974	0,70	Reliable

3.2. SEM Assumption Test

Data analysis for this reasearch used Structural Equation Modeling (SEM) analysis. with IBM AMOS software. In conducting modeling, there are several requirements, including linearity tests, normality tests, and outliers' tests.

3.2.1. Linearity Test

After testing the quality of the instrument and the data have been declared valid and reliable, a linearity test would decide whether the two variables had a significant linear relationship. The error rate (α) was 5% or 0.05. If the DFL (Deviation from Linearity) value was > 0.05, the relationship between the two variables could be significantly linear, and vice versa. If the DFL is <0.05, the relations between the two variable is not linear. Following are the results of the linearity test.

1. Linearity between Variable Mobility (MO) and Perceived Usefulness (PU) Variables
   Based on the SPSS software test results, the deviation from the linearity value is 0.042, which is greater than α = 0.05, implying the relations between mobility variable and perceived usefulness is fairly linear.
2. Linearity between the Variable Perceived Ease of Use (PEU) and the Variable Perceived Usefulness (PU)
   Based on the test results on the SPSS software, the Deviation from the Linearity value is 0.117, greater than α = 0.05, meaning that the relations between the Mobility variable and the Perceived Usefulness variable is significantly linear.
3. Linearity between Perceived Usefulness (PU) Variables and Intention to Use (ITU) Variables
   Based on the test results on the SPSS software, the Deviation from the Linearity value is 0.080, greater than α = 0.05, meaning that the relations between the Perceived Usefulness variable and the Intention to Use variable is significantly linear.
4. Linearity between the Perceived Ease of Use (PEU) Variable and the Intention to Use (ITU) Variable
   Based on the SPSS software test results, the value of deviation from linearity is 0.014 greater than α = 0.05, indicating that the relations between the variables Perceived Ease of Use and Intent to Use is significant. is linear to .
5. Linearity between the Variable Intention to Use (ITU) and the Variable Usage Behavior (UB)
   Based on the test results on the SPSS software, the Deviation from the Linearity value is 0.021 greater than α = 0.05, meaning that the relations between the Intention to Use variable and the Usage Behavior variable is significantly linear.

3.2.2. Normality Test

In this research, the results of normality testing can be seen from the values in the skewness column and kurtosis column with IBM AMOS version 26.0 software seen in Table 3.

Table 3 Normality Test Results

Variable	*Skewness*	*c.r.*	*Kurtosis*	*c.r.*
x1	-1,047	-2,529	0,304	0,367
x2	-0,587	-1,417	-0,576	-0,696
x3	-0,338	-0,817	-0,712	-0,859
x4	-0,791	-1,91	-0,055	-0,066
x5	-0,877	-2,118	0,034	0,041
x6	-0,451	-1,09	-0,646	-0,78
y1	-0,93	-2,247	0,178	0,215
y2	-0,706	-1,706	0,234	0,283

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y3	-0,525	-1,268	-0,645	-0,779
y4	-0,406	-0,98	-0,238	-0,288
y5	-0,967	-2,336	0,729	0,88
y6	-1,399	-3,379	1,56	1,884
z1	-1,292	-3,12	1,204	1,453
z2	-0,712	-1,719	0,081	0,097
z3	-0,33	-0,796	-0,392	-0,474
z4	-0,466	-1,126	-0,191	-0,231
z5	-0,286	-0,691	-1,138	-1,374
z6	-0,597	-1,442	-0,1	-0,12
p1	-1,03	-2,488	0,337	0,407
p2	-1,159	-2,8	1,233	1,488
p3	-0,935	-2,257	0,316	0,382
p4	-0,785	-1,896	-0,146	-0,176
p5	-0,468	-1,131	-0,558	-0,674
p6	-0,383	-0,925	-0,807	-0,974
z1	-0,759	-1,832	-0,604	-0,729
z2	-0,83	-2,006	-0,295	-0,356
z3	-0,388	-0,936	-1,109	-1,339
z4	-0,297	-0,718	-0,859	-1,037
z5	-0,419	-1,013	-0,485	-0,586
z6	-0,182	-0,439	-0,958	-1,156

Table 3.2.2 shows that in the skewness column, there are no values that exceed the limit of ± 2.58, and in the kurtosis column, there are no values that exceed the limit of ± 2.58, meaning no data that is not normal because it has fulfilled the requirements.

3.2.3. Outliers Test

The outliers test can be identified by looking at the Mahalanobis distance value. In this study, df = 33 with a significance level of 0.001.

Table 4 Outliers Test Results

Mahalanobis d-squared
33,611
33,454
33,264
33,185
33,002
32,619
32,606
32,579
32,517
32,436
32,251
32,203
32,123
32,092
31,992
31,755
31,315
31,081
30,923
30,837
30,806

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29,936
29,913
29,397
28,781
28,246
27,624
27,369
27,083
26,71
25,757
22,492
21,24
15,151
33,611

After testing the outliers in the SPSS 26.0 software, the CHI-SQUARE value is 59.70306. From the tables shown, there are no data outliers. So the author deleted data that exceeded the Mahalanobis Distance limit.

3.3. SEM Analysis

3.3.1. Model Testing

In this section, the feasibility test can be carried out on the hypothetical model. However, a feasibility test was conducted on the moderator variable before testing the model. The moderator variables used in this test are perceived usefulness (x), perceived rase of use (y), and intention to use (z). The following is an overview of the feasibility model designed from the moderator variable model.

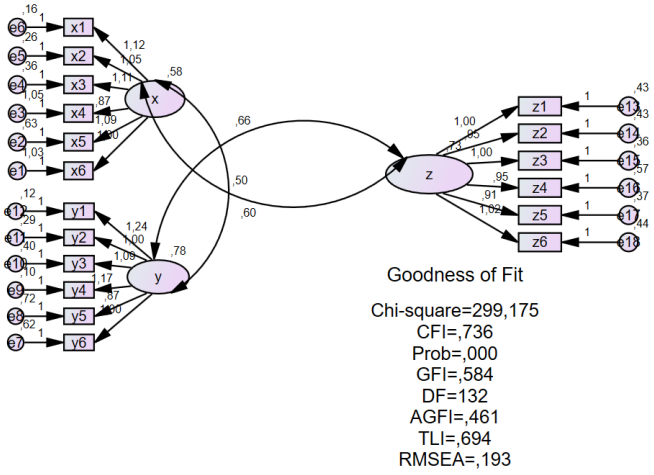

Figure 2 Moderator Variable Test Results

As a result, one metric falls within the fit, or significance, of the cutoff value (0.005). Additional measures for each cutoff value are Chi-square (59.70306), GFI (0.90), RMSEA (0.08), TLI (0.90), and CFI (0.90), AGFI (0.90).

After evaluating the goodness of fit indices on the feasibility of a good moderator variable, the next step is to test the overall model for the variables tested in this study. The following is an overview of the feasibility model of the hypothetical model.

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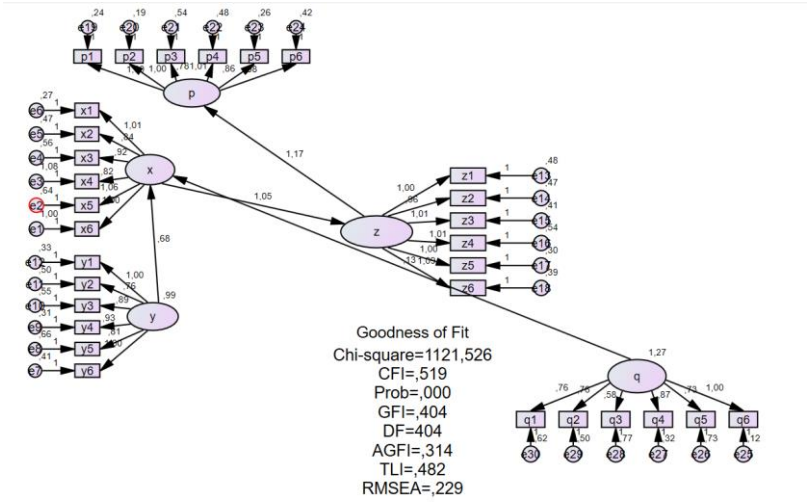

Figure 3 Test Results for All Variables

The designed hypothetical model is feasible after comparing the Cut-off Value at ChiSquare, RMSEA, RMR, CMIN/DF, GFI, AGFI, TLI, and CFI with the specified range of values. The following are results of model test.

Table 5 Model Fit Test Results

The Goodness of Fit Index	***Cut-off Value***	***Result***	***Model Evaluation***
Chi-Square	1927,348	1121,526	UnFit
Significant Probability	≥ 0,05	,000	UnFit
DF		404	
RMSEA	≤ 0,08	,229	Bad Fit
GFI	≥ 0,90	,404	Bad Fit
AGFI	≥ 0,90	,314	Bad Fit
TLI	≥ 0,90	,482	Bad Fit
CFI	≥ 0,90	,519	Bad Fit

Based on Table 4.1.1, the 8 (eight) criteria of goodness of fit evaluated, none meets the Fit criteria, meaning that the conceptual model developed using TAM 2 theory must follow research data fully. This model requires modification so the goodness of fit produced can meet the cut-off value.

The modification made by the author is by looking at the relationship between the Modification Indices value indicators, which have the potential to produce goodness of fit indices values that can meet the specified cut-off value. The following is the value of the generated modification indices and can potentially improve the value of the goodness of fit indices to make them better or fit.

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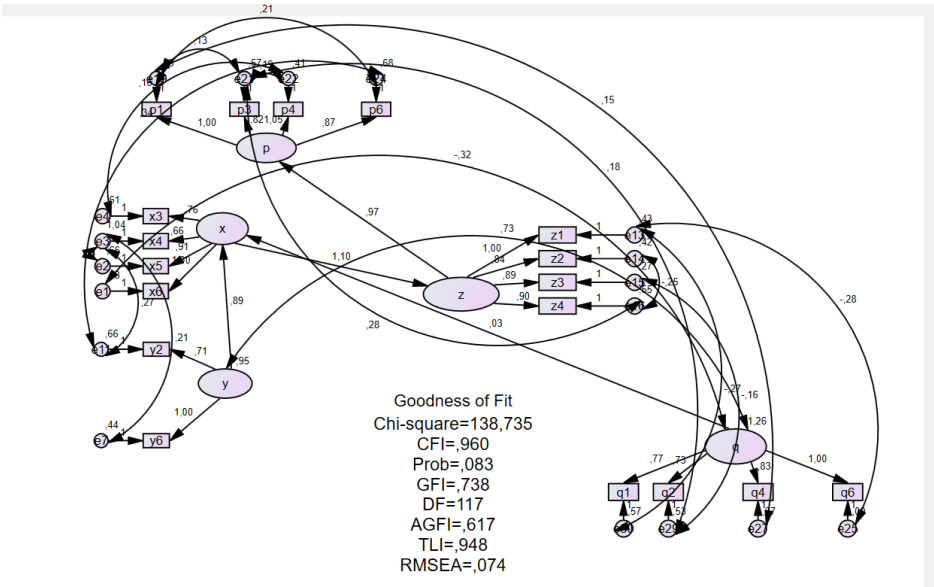

Figure 4 View of the SEM Model after Modification

Table 6 SEM Model Test Results after Modification

The Goodness of Fit Index	*Cut-off Value*	*Result*	*Model Evaluation*
Chi-Square	1927,348	138,735	Fit
Significant Probability	≥ 0,05	0,083	Fit
DF		117	
RMSEA	≤ 0,08	0,074	Fit
GFI	≥ 0,9	0,738	UnFit
AGFI	≥ 0,9	0,617	UnFit
TLI	≥ 0,9	0,948	Fit
CFI	≥ 0,9	0,960	Fit

Figure 4 illustrates the Significant Probability value, which is at value 0.083. The data is valid because it has passed the cuf-off value. Two indicators are in a range of values that are not yet close to the cuf-off value.

The model modification performed in this study by examining the change index is based on Arbuckle's theory, which describes how to modify the model by examining the generated change index. Arbuckle explained that the modification index provides some recommendations for adding compounds that can reduce the chi-square value and fit the model [17].

Fit is a condition where the measurement model is at the absolute fit or incremental fit criteria because it has a value that exceeds the good fit size so that the analysis process can be continued.

4.1.2. Hypothesis Test

From the measurement results of the model test on the goodness of fit criteria, the hypothesis will be tested using the SEM method by looking at the CR (Critical Ratio) value contained in the Regression Weights table. The hypothesis is accepted or considered significant if the p-value <0.05. The hypotheses put forward in this research include the following:

H1: The positive Influence of Mobility (q) on Perceived Usefulness (x)
H2: The positive Influence of Perceived Ease of Use (y) on Perceived Usefulness (x)
H3: The positive Influence of Perceived Usefulness (x) on Intention to Use (z)
H4: The positive Influence of Perceived Ease of Use (y) on Intention to Use (z)
H5: The influence of Intention to Use (z) on Usage Behavior (p)

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Table 7 reveals the hypothesis test results.

Table 7 Hypothesis Test Results

Hypothesis	*Effect*	*Estimation*	*SE.*	*CR.*	*P*	*Description*
H1	q -> x	0,033	0,089	0,369	0,712	Rejected
H2	y -> x	0,893	0,195	4,579	***	Accepted
H3	x -> z	1,096	0,225	4,863	***	Accepted
H4	y -> z	0,965	0,146	6,59	***	Accepted
H5	z -> p	0,033	0,089	0,369	0,712	Rejected

Description: *** = Significance < 0,001
Table 7 shows the results using AMOS with the following descriptions.
1. There is no positive effect of Mobility on Perceived Usefulness
2. There is a positive effect of Perceived Ease of Use on Perceived Usefulness [1]
3. There is a positive effect of Perceived Usefulness on the Intention to Use [7]
4. There is a positive effect of Perceived Ease of Use on Intention to Use [7]
5. There is no positive effect of Intention to Use on Usage Behavior [7]

IV. KESIMPULAN

This study has a few limitations. There were no errors in the sample data in testing the validity and normality. Of the five hypotheses obtained based on the theoretical basis, 3 were accepted, while 2 were rejected as influencing factors in this study.

The accepted hypothesis included the positive influence of Perceived Ease of Use on Perceived Usefulness, Perceived Usefulness on Intention to Use, and Perceived Ease of Use on Intention to Use. The reason for accepting this hypothesis is that after testing using AMOS software, the significance value of the two hypotheses was below 0.01, which formed the basis of the theory of accepting an idea. In contrast, the other 2 hypotheses were rejected because the significance value was more than 0.01.

Thus, the Gamelan Metaverse still has limitations regarding ease of use and mobility, causing a lack of effectiveness as a music-learning medium. That way, the author and the development team can develop further, especially the factors that affect usability, ease of use, requests for help, usage behavior, and mobility.

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