

ANALYSIS OF USER EXPERIENCE OF THE M-TIX APPLICATION IN MANOKWARI REGENCY USING THE UEQ AND TAM METHODS

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Abstract: Digital technology has expanded the usage of mobile apps like M-Tix for movie ticket booking. The success of an app depends on its features, user experience, and technical acceptability. The User Experience Questionnaire (UEQ) and Technology acceptability Model (TAM) will be used to examine how user experience affects technology acceptability and M-Tix application usage in Manokwari Regency. Quantitative methods were used with 149 respondents. SmartPLS 4 was used to analyse data using PLS-SEM. Researchers found that Hedonic Quality positively impacts Perceived Usefulness ($\beta=0.288$; $p=0.005$). Pragmatic Quality significantly impacts Perceived Ease of Use ($\beta=0.651$; $p<0.001$) and Usefulness ($\beta=0.372$; $p=0.002$). Additionally, Perceived Ease of Use ($\beta=0.180$; $p=0.043$) and Usefulness ($\beta=0.453$; $p<0.001$) favourably impact Behavioural Intention. However, Perceived Ease of Use does not substantially impact Perceived Usefulness ($\beta=0.105$; $p=0.265$). These data show that user experience is crucial to technological adoption and M-Tix application usage.

Keywords: m-tix; PLS-SEM; technology acceptance model (TAM); user experience; user experience questionnaire (UEQ).

Abstrak: Teknologi digital telah memperluas penggunaan aplikasi seluler seperti M-Tix untuk pemesanan tiket film. Keberhasilan suatu aplikasi bergantung pada fitur-fiturnya, pengalaman pengguna, dan penerimaan teknis. Kuesioner Pengalaman Pengguna (UEQ) dan Model Penerimaan Teknologi (TAM) akan digunakan untuk meneliti bagaimana pengalaman pengguna memengaruhi penerimaan teknologi dan penggunaan aplikasi M-Tix di Kabupaten Manokwari. Metode kuantitatif digunakan dengan 149 responden. SmartPLS 4 digunakan untuk menganalisis data menggunakan PLS-SEM. Peneliti menemukan bahwa Kualitas Hedonik berdampak positif pada Kegunaan yang Dirasakan ($\beta=0,288$; $p=0,005$). Kualitas Pragmatis berdampak signifikan pada Kemudahan Penggunaan yang Dirasakan ($\beta=0,651$; $p<0,001$) dan Kegunaan ($\beta=0,372$; $p=0,002$). Selain itu, Kemudahan Penggunaan yang Dirasakan ($\beta=0,180$; $p=0,043$) dan Kegunaan ($\beta=0,453$; $p<0,001$) berdampak positif terhadap Niat Perilaku. Namun, Kemudahan Penggunaan yang Dirasakan tidak berdampak signifikan terhadap Kegunaan yang Dirasakan ($\beta=0,105$; $p=0,265$). Data ini menunjukkan bahwa pengalaman pengguna sangat penting untuk adopsi teknologi dan penggunaan aplikasi M-Tix.

Kata kunci: m-tix; PLS-SEM; technology acceptance model (TAM); user experience; user experience questionnaire (UEQ).



INTRODUCTION

The development of digital technology has driven the increasing use of mobile applications in various service sectors, including cinema ticket booking services. One widely used application is M-Tix, which allows users to book tickets, select seats, and make payments online. An app's success depends on its features and user experience. A positive user experience is known to increase satisfaction, perceived service quality, and encourage continued application use [1], [2].

User experience is crucial to assessing digital app quality. The UEQ assesses pragmatic and hedonic user experience. The convenience, efficiency, and effectiveness of using an app is pragmatic quality, whereas hedonic quality is the beauty, enjoyment, and innovation users feel [3], [4]. Many studies have shown that UEQ can measure mobile app user experience and service quality [3], [4], [5].

The Technology Adoption Model (TAM) states that PEOU and PU are the main factors influencing technology adoption [6]. Previous research shows that perceived ease of use and usefulness affect technology adoption and digital service usage [1], [2], [6]. User experience and technological acceptability must be integrated to understand what drives application usage.

Although extensive research has been conducted on user experience and technology acceptance, most studies still examine these two aspects separately. UEQ-based research generally focuses on evaluating the quality of user experience [3], [4], [5], while TAM-based research focuses more on factors influencing technology acceptance [6]. Furthermore, research on the M-Tix application is still

relatively limited compared to other digital applications such as mobile banking, e-wallets, and online transportation. Based on these gaps, this study integrates the Hedonic Quality and Pragmatic Quality dimensions from UEQ with the Perceived Ease of Use, Perceived Usefulness, and Behavioral Intention constructs from TAM to analyze the use of the M-Tix application in Manokwari Regency. The novelty of this study lies in examining the relationship between the quality of user experience and technology acceptance in one integrated model, thus providing a more comprehensive understanding of the factors that influence the continued use of the M-Tix application.

METHOD

The research went through several stages as shown in the figure.

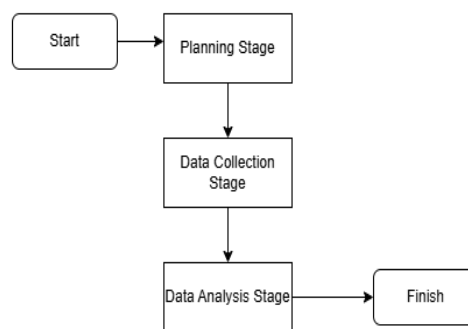


Figure 1. Research Stages

This quantitative research used a questionnaire to obtain data from M-Tix customers in Manokwari Regency [7]. The data was then analyzed using PLS-SEM to test the relationship between Hedonic Quality, Pragmatic Quality, Perceived Ease of Use, Perceived Usefulness, and Behavioral Intention.

Planning Stage

This research uses UEQ and TAM, where pragmatic and hedonic quality affect perceived ease and usefulness, respectively. PEOU and PU act as intermediaries connecting user experience quality with behavioral intention, which is a variable used to measure the desire to use the M-Tix application in Manokwari Regency.

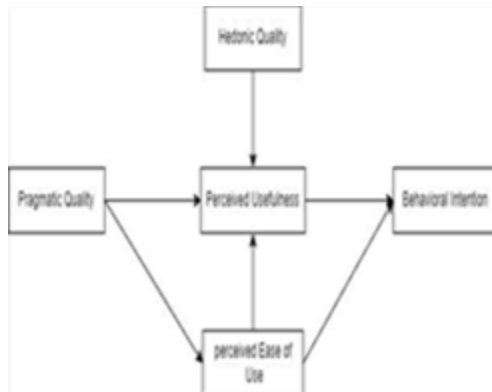


Figure 2. Research Model

There are five hypotheses in this study:

- H1: Pragmatic Quality has a positive effect on Perceived Ease of Use of the M-Tix application.
- H2: Pragmatic Quality has a positive effect on Perceived Usefulness of the M-Tix application.
- H3: Hedonic Quality has a positive effect on Perceived Usefulness of the M-Tix application.
- H4: Perceived Ease of Use has a positive effect on Perceived Usefulness of the M-Tix application.
- H5: Perceived Ease of Use has a positive effect on Behavioral Intention of the M-Tix application.
- H6: Perceived Usefulness has a positive effect on Behavioral Intention of the M-Tix application.

Data Collection Stage

Table 1. Likert Scale

Symbol	Research Criteria	Weight
STS	Strongly Disagree	1
TN	Don't agree	2
N	Neutral	3
S	Agree	4
SS	strongly agree	5

The research population comprised Manokwari Regency M-Tix app was piloted to check readability an users who had bought tickets online. Purposive sampling was employed to choose the sample based on Manokwari residency, M-Tix consumption, and age 18. This research collected 149 responders despite the 10-fold rule [7] requiring 30. A Google Form questionnaire was sent over WhatsApp, Instagram, and Telegram to gather data. Before distribution, the questionnaire d suitability.

In Table 2, the research instrument is structured based on constructs derived from the UEQ and TAM, with indicators relevant to the use of the M-Tix application. A 5-point Likert scale ranged from 1 = Strongly Disagree to 5 = Strongly Agree. The instrument has data.

The instrument consists of demographic information, instructions for completing the questionnaire, and statements measuring the variables Hedonic Quality, Pragmatic Quality, Perceived Ease of Use, Perceived Usefulness, and Behavioral Intention.

Table 2. Research Instruments

Construct	Code and Questions	Reference
Hedonic Quality (HQ)	HQ1: The M-Tix app provides a pleasant user experience for me.	[8]
	HQ2: The design and appearance of the M-Tix app are attractive when used.	
	HQ3: Using the M-Tix app feels innovative and not boring.	
Pragmatic Quality (PQ)	PQ1: The M-Tix app makes it easy for me to order movie tickets.	[9]
	PQ2: The features in the M-Tix app help me complete the ticket purchasing process quickly.	
	PQ3: The M-Tix app can be used efficiently without any difficulties.	
Perceived Usefulness (PU)	PU1: The M-Tix app helps me buy movie tickets faster.	[6]
	PU2: The M-Tix app improves my ticket ordering efficiency.	
	PU3: Overall, the M-Tix app is helpful for me in buying movie tickets.	
Perceived Ease of Use (PEOU)	PEOU1: The M-Tix app is easy to learn when first used.	[6]
	PEOU2: The menus and features in the M-Tix app are easy to understand.	
	PEOU3: The M-Tix app is easy to use in a variety of situations.	
Behavioral Intention (BI)	BI1: I intend to continue using the M-Tix app in the future.	[6]
	BI2: I will use the M-Tix app every time I want to buy movie tickets.	
	BI3: I am willing to recommend the M-Tix app to others.	

This study uses PLS-SEM to test the relationship between latent variables because the method in the study is predictive and explanatory [7]. Convergent validity, discriminant validity (HTMT), and reliability tests (Composite Reliability and Cronbach's Alpha) evaluate the measurement model (outer model). The structural model is assessed using path coefficients, R-Square values, and hypothesis testing using bootstrapping on 5,000 subsamples or $\alpha = 0.05$. All analyses were conducted using SmartPLS.

RESULTS AND DISCUSSION

Respondent Analysis

In the study, researchers selected 149 people who used the M-TIX app as participants. They were asked to select their preferred answer to statements about Age and Gender.

Table 3. Respondent Data

Category	classification	Total
Gender	Woman	106 (57,3%)
	Man	79 (42,7%)
Age	<20 year	44 (23,8%)
	20-35 year	136 (73,5%)
	>35 year	5 (2,7%)

Data analysis

The measurement model is tested for convergent validity, discriminant validity (HTMT), Composite Reliability, and Cronbach's Alpha. Use path coefficients and R-Square values to assess the structural or internal model.

Data Analysis Stage

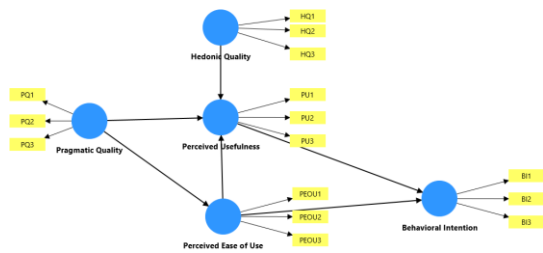


Figure 3. Path Diagram

Measurement Model (Outer Model)

Model evaluation involves testing construct validity and reliability. This testing includes convergent validity, consisting of external loadings and AVE, discriminant validity using HTMT, and reliability calculated using Composite Reliability and Cronbach's Alpha.

Convergent Validity

To determine whether the indicators in the questionnaire are accurate and cover all required aspects, we can conduct a validity test. The results of this test will serve as the basis for examining each variable used. Examine the outer loading value to see convergence. The outer loading value measures the correlation between the indicators and the construct values. Using SmartPLS 4.0, a value of 0.7, or 70%, is considered sufficient, and can be considered valid.

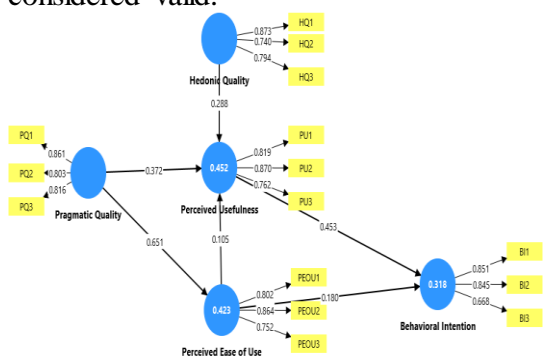


Figure 4. Convergent Validity Test Diagram

According to the convergent validity test, all indicators have outer

loading values between 0.668 and 0.873. Most indicators score over 0.70, however BI3 scores 0.668. but it can still be maintained. Therefore, all indicators are considered valid and meet the convergent validity criteria [7], [10].

Average Variance Extracted (AVE)

All constructs have an AVE value of more than 0.50, indicating that the construct meets convergent validity standards and is able to explain more than 50% of the variation in each indicator [7], [10].

Table 5. Average Variance Extracted Results

NO	Variabel	AVE
1	Behavioral Intention	0.628
2	Hedoniq Quality	0.646
3	Perceived Ease of Use	0.652
4	Pragmatic Quality	0.684
5	Perceived Usefulness	0.669

Discriminant Validity

Table 6. Results of Discriminant Validity – Heterotrait-monotrait ratio (HTMT)

	BI1	HQ1	PEOU1	PQ1	PU1
BI1					
HQ1	0.766				
PEOU1	0.554	0.688			
PQ1	0.633	0.864	0.847		
PU1	0.730	0.757	0.645	0.810	

All HTMT values are below 0.90, meaning that each construct has fairly good discriminant validity [11].

Construct Reliability

Table 7. Result of cronbach’s alpha dan composite reliability

No	Variabel	Cronbach’s Alpha	Composite Reliability
1	BI1	0.702	0.735
2	PEOU1	0.732	0.742
3	HQ1	0.729	0.760
4	PU1	0.753	0.770
5	PQ1	0.770	0.779

The Cronbach's Alpha and Composite Reliability values for all constructs are > 0.70, which means that all constructs are considered reliable [7], [12].

Structural Model (Inner Model)

The next step is to perform the R2 test.

Table 8. Result of R-Square

Variabel	R-Square
BI1	0.318
PEOU1	0.423
PU1	0.452

The model test indicated R-Square values of 0.318 for BI, 0.423 for PEOU, and 0.452 for PU. This shows that the model explains 31.8%, 42.3%, and 45.2% of each construct, while other variables impact the rest. Based on criteria [7], these values are weak to moderate.

Hypothesis Testing

Hypothesis testing uses SmartPLS bootstrapping to evaluate the relationship between constructs. If the T-statistic

value is more than 1.96 or the P value is <0.05 at the 5% significance level, the hypothesis is accepted [7].

Table 9. Result of Path Coefficient

	Original Sample	T Statistic	P Values	Result
HQ - PU	0.288	2.807	0.005	Accepted
PEOU - BI	0.180	2.023	0.043	Accepted
PEOU - PU	0.105	1.115	0.265	Rejected
PQ - PEOU	0.651	13.343	0.000	Accepted
PQ - PU	0.372	3.133	0.002	Accepted
PU - BI	0.453	4.743	0.000	Accepted

The findings revealed that Hedonic and Pragmatic Quality improved application utility and usability. Usefulness and convenience of use enhanced behavioural intention, but ease of use did not affect usefulness. We found no correlation between ease of use and usefulness. This suggests that customers prefer M-Tix's functionality and efficiency above the app's usability.

CONCLUSION

User experience affects technological acceptability and M-Tix app usage, according to the research. Pragmatic Quality and Hedonic Quality favourably increase Perceived Ease of Use and Usefulness, which positively improves Behavioural Intention, although the association is not significant.

Theoretically, this study demonstrates that the user experience dimensions of the UEQ, namely Hedonic Quality and Pragmatic Quality, can act as factors influencing the technology

acceptance construct in the TAM. This finding broadens the understanding that technology acceptance is influenced not only by perceived ease and usefulness, but also by the quality of the user experience. Practically, the research results can provide input for M-Tix managers to improve service quality and user experience. This study was limited to M-Tix users in Manokwari Regency. Therefore, future research is recommended to expand the coverage area and add other variables to improve the model's ability to explain user behavior.

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